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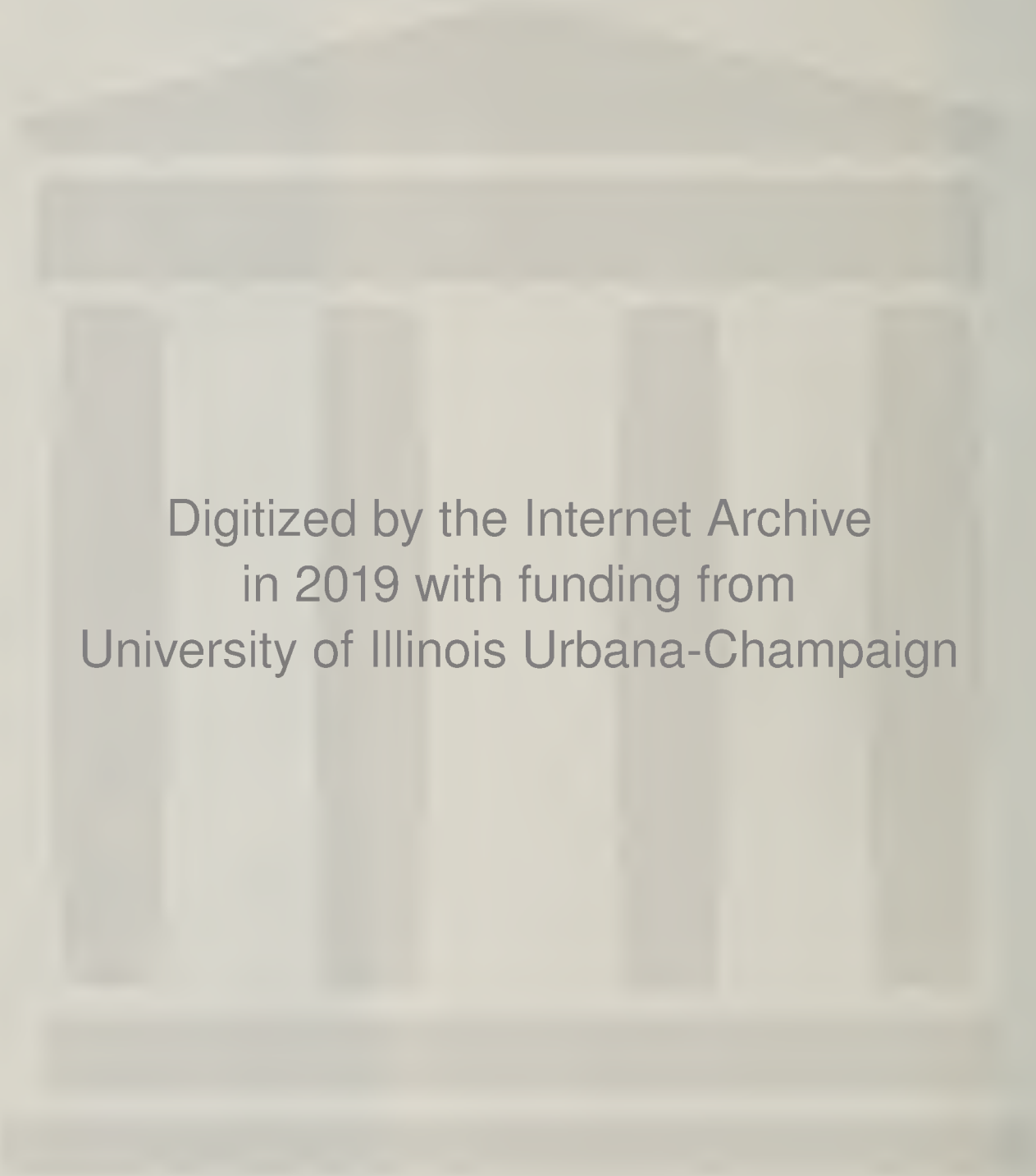
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THE

BRITISH MEDICAL

JOURNAL:

BEING THE

JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

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EDITED FOR THE ASSOCIATION BY

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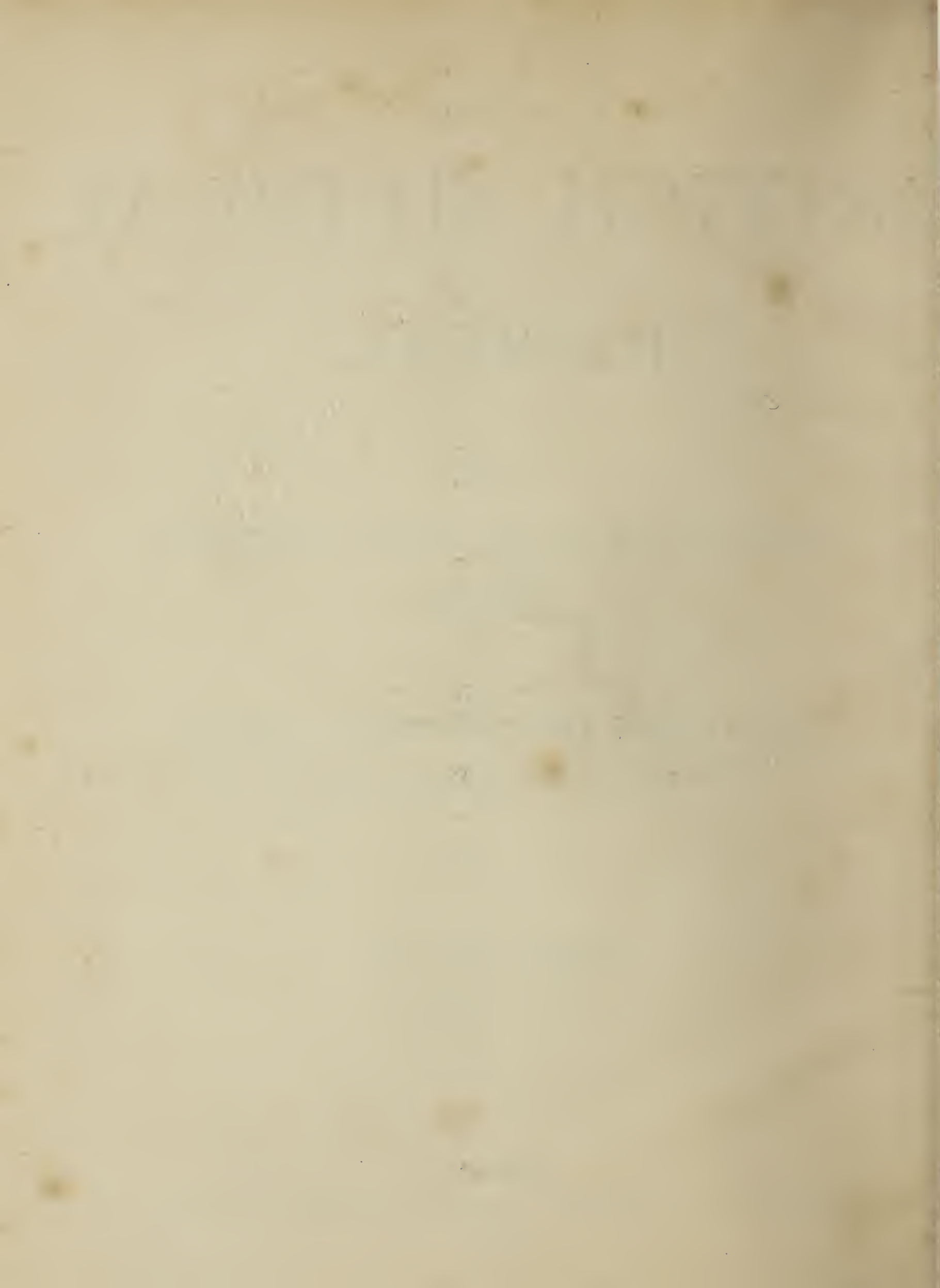
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BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

LONDON: SATURDAY, JULY 3, 1869.

LECTURES

ON

THE HISTOLOGY OF THE EYE:

(BEING THE ARRIS AND GALE ANATOMICAL LECTURES.)

Delivered at the Royal College of Surgeons of England, June 1869.

BY

JOHN WHITAKER HULKE, F.R.S., F.R.C.S.,

Assistant-Surgeon to the Middlesex Hospital, and Surgeon to the Royal London Ophthalmic Hospital.

LECTURE I.

MR. PRESIDENT, COUNCILLORS, AND GENTLEMEN,—In selecting the Histology of the Eye for the Arris and Gale Anatomical Lectures, which, by your commands, I have the honour to deliver in this theatre, I believe we should find I am strictly fulfilling the desires of the founders, could they speak to us this day. All that we know of them is embodied in a few lines in the Archive of College Benefactors, which tell us that in 1653 Ed. Arris, and in 1689 John Gale, two barber-surgeons, gave annuities to their joint corporations, to provide for "the dissection of a body yearly, and reading on the muscles;" and "for a course of three lectures on anatomy, to be given between Whitsuntide and Christmas." These gifts, afterwards transferred to the "Corporation of the Surgeons of London", when the union of the barbers and surgeons was annulled, tell us of times when opportunities of acquiring an exact knowledge of the structure of the human body by dissection were rare, and accessible only to the few, and when the majority of those engaged in the healing art were necessarily ill informed in anatomy. They show us these two old truth-loving chirurgians desirous of promoting the study of the only true basis of medicine and surgery. Their anatomy was of the sort which we now technically call "descriptive and surgical"; for *histology* could hardly be said to have come into existence. The microscope, in a very simple form, was only just beginning to be applied by Leuwenhoeck to the detection of the *Arcana Nature*; and none could have then foreseen the marvellous perfection this instrument would one day attain, or have foretold the wonderful insight it would give us into the finer structure of those organs, the coarser features alone of which were familiar to the anatomists of those times. But, since Arris and Gale lived, all kinds of knowledge have advanced with giant strides; nor has the science of anatomy, in its several branches, remained stationary. The coarse anthropotomy of the dissecting-room has been wrought out to its furthest limits; so that the second year's student, who now offers himself for examination here, has (if he have used his time and opportunities aright) a better acquaintance with it than was possessed by the master surgeon of former days.

Histology, however, still has many penetralia worthy of engaging the close and intelligent observation of any number of honest inquirers. All facts that can be regarded as positive in this branch of anatomy, and secure against reversal by future discoveries, are but fragments, seemingly large when viewed alone—small, however, when considered with reference to the whole, but yet sufficient to encourage the earnest student to ever onward labour.

No advocacy on my part can be necessary to commend to you the subject of my choice—the *normal and morbid histology of the eyeball*; for in its specialty there is an ulterior comprehensiveness, which not only gives it a peculiar interest to the small circle of those few who are exclusively engaged in the treatment of eye-disease, but has also useful lessons for all who practise any branch of surgery.

The eye is a *microcosm*—a very compendium of all the tissues. True *cell-tissues*, *connective tissue* in several forms, *muscular*, *vascular*, and *nervous tissue*, are all represented here; and there is not another part of the whole human body which offers such facilities for direct clinical observation, and for the anatomical investigation of the minute tissue-changes produced by disease.

As it is not possible within the limits of three lectures to describe, with any approach to completeness, the histology of all the parts of the eyeball, I have been obliged to make a selection; and I propose to devote this lecture to the *normal and morbid histology of the cornea and vitreous humour*, next Tuesday to the *tunica uvea*, and the following Tuesday to the *retina*.

Cornea.—The cornea is composed of three distinct structures: an *outer* or conjunctival layer, which, at the circumference, passes into the loose conjunctiva covering the sclerotic; a *middle* layer, the proper or lamellated cornea, which is uninterruptedly continued into the sclerotic; and a very delicate *inner* layer, having complex peripheral relations with the sclerotic, ciliary muscle, and iris.

The *conjunctival layer* consists of an *epithelium*, underlaid by a *homogeneous stratum*, known as "Bowman's membrane", or the "anterior elastic lamina".

The *epithelium* is composed of four or five superposed rows of cells, the aggregate thickness of which averages 1-430th of an inch. The deepest cells are subcolumnar. Their inner ends are straight, and they rest directly on Bowman's membrane. Their outer ends are convex; and they form generally a crenated line, which interlocks with the cells immediately external to it. These intermediate cells have a jagged inner border, and a convex outer contour. The outermost cells are large flat scales.

The structural and chemical distinctions which so sharply separate the horny from the mucous stratum of the epidermis are wholly absent from this epithelium, all the cells of which, the outermost as also the deepest, are nucleated, and are capable of manifesting every endowment of cell-life proper to them; and this alone would be enough to throw great doubt on the commonly assumed parallelism between the manner of the renewal of the corneal epithelium and that of the epidermis. The common idea, that the deepest epithelial cells constitute a sort of matrix, from which there is a constant progression of nascent cells towards the outer surface to replace the loss by exfoliation, has been lately challenged by Dr. Cleland, who, from a study of the corneal epithelium in the ox, concludes that not merely the external waste, but also the internal decay of the deepest cells, is made good by new cells evolved out of those of the middle tier. My own observations lead me to believe that an outward progression of cells from the innermost tier really does take place, but that all the superficial cells are not directly referable to this source, since proofs of cell-multiplication are met with at every depth in the epithelium.

Under normal circumstances, the corneal epithelium is probably not the seat of very active tissue-changes; yet that it possesses great formative energy, is evident from its rapid restoration in two or three days when it has been detached in its whole thickness, as occasionally happens in removing a foreign body impacted in the lamellated tissue. We have also evidence of the existence of great formative power in the accumulations of epithelium in and around the scars of wounds and ulcers, where it manifests itself both by the inordinate multiplication of cells not differing individually from the normal standard, as also by the production of large and irregular cells. Both simple *hyperplasia* and *hypertrophy* are not incompatible with considerable transparency; but there is a third condition, in which overgrowth is associated with textural changes in the cells, which transform what should be transparent epithelium into opaque dry cuticle closely resembling that of the external tegument. This condition, in its completest phase, constitutes *xerophthalmos*, which is usually a sequel of a suppurative ophthalmia. Obliteration of the ducts of the lacrymal gland, to which it is sometimes ascribed, is not alone enough to produce this cuticular state, since complete extirpation of this gland is not followed by any diminution of the brightness of the cornea.

But the formative energy may take another direction, and produce

from the epithelium a progeny unlike the parent. Wounds and ulcers, again, afford us abundant illustrations of this perversion. Around these we find the epithelial cells enlarging; their nuclei, or masses of germinal matter, dividing and subdividing until the parent cell is filled with a brood which we cannot optically distinguish from the corpuscles of granulation, or lymph, or pus, and which, when set free by the deliquescence of the parent capsule, we recognise as the formed elementary constituents of granulation-tissue, of lymph, or of pus. (Fig. 1.) Some-



Fig. 1.

times the process of proliferation is arrested before this stage; and, the brood becoming incorporated by fresh accretions to the parent cell-wall, and finally withering, leaves a large structureless vacuole.

Bowman's Membrane: Anterior Elastic Lamina.—Beneath the anterior epithelium, between it and the lamellated cornea, is the structureless stratum first particularly described by Mr. Bowman, and named by him the *anterior elastic lamina*. In several early human foetal eyes (which had, unfortunately, all been placed in one bottle, so that I could not identify their ages), I found that this stratum was not yet differentiated; but in the human foetus at full term it is very distinct. In the adult cornea, in which its average thickness is about 1-1500th of an inch, it is always remarkably conspicuous by its transparent structurelessness, which marks it off from the epithelium in front and the lamellated corneal tissue behind it. I do not entertain any doubt of its reality; nor can I for one moment agree with a late writer, that it is simply an illusory appearance, the expression of the different refractive indices of the epithelium and the lamellated tissue. The front of the lamina bearing the epithelium is perfectly even; while the posterior surface is slightly irregular, owing to the production of fibres which pass slantingly from it into the lamellated tissue, and tie the lamina to this so closely that it is inseparable from it by dissection, except in very minute pieces. These *tie-fibres*, originally described by Mr. Bowman, are, I believe with him, of the same nature as the lamina—a modified connective substance; and they are perfectly distinct from the nerve-fibres, the tracks of which a recent author supposes them to be.

The peripheral relations of the anterior elastic lamina are very simple. It becomes suddenly thinned at a short distance in front of the foremost conjunctival vessels, and thence runs backwards over the loose submucous tissue as the basement-membrane of the conjunctiva bulbi. Chemically, it has an intermediate place between the lamellated cornea and the posterior elastic lamina. Its resistance to acids and alkalis is greater than that of the lamellated tissue, but much less than that of Dëmours' membrane. It is readily disintegrated by ulceration; and it is, I believe, never restored, a dense scar-tissue being substituted for it. It bears transplantation well; for I have sometimes found detached portions of it imbedded at some depth in the scars of perforating wounds, quite unaltered in their optical characters, many years after the date of the injury.

The next structure is the *lamellated cornea*; one of the group of con-

nective substances. It is mainly composed of two elementary tissues—one cellular, the other a modification of common connective or white fibrous tissue. Their microscopic characters and the proportions in which they occur are not the same at all ages. At its first appearance, the cornea, embryology teaches, is purely a cell-tissue; and, in the earliest human foetal cornea which I have examined (at the fourth month), the cell or corpuscular tissue has greatly preponderated. At full term, the disproportion is less: the cells have still simple shapes; but they are separated by a larger quantity of interstitial tissue, which is very distinctly fibrillated. In the adult's cornea, the fibrous tissue domi-

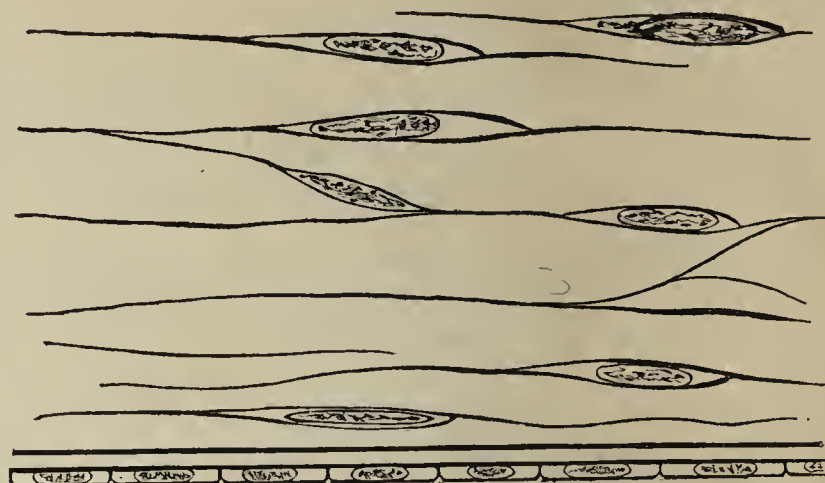


Fig. 2.

nates; and the corpuscles are large-branched cells, cohering in nets of variable sizes, but never coextensive with more than a very small fraction of the entire corneal area. (Fig. 2.)

The cell-nets extend in planes which intersect one another at every possible angle, preserving always more or less parallelism to the corneal surfaces.

Corpuscles lying in the same plane intercommunicate very freely through their branches, and less freely with those in the neighbouring more superficial and deeper planes; and in this way they collectively form a system of plasmatic canals, which pervades the entire cornea.

The *interstitial fibrous tissue* consists of broad flat lamelliform bundles, interwoven with the cell-nets, necessarily also in planes more or less parallel to the corneal surfaces—an arrangement of the tissues which gives the quasi-laminated appearance observable in vertical sections of the cornea. In the foetus, the fibrillation of the bundles is very distinct; and in the adult it is also evident.

Blood-vessels are entirely absent from the healthy adult cornea, the nutrition of which is wholly carried on by the corpuscular system, which draws its plasma from the vessels of the sclerotic and conjunctiva. Its *nerves*, however, are numerous. The distribution of the coarser bundles is easily demonstrable. They enter the circumference of the cornea, and converge towards its centre, repeatedly dividing and uniting in a plexus, most of the bundles of which tend towards the anterior surface. Near here they recombine in a plexus of very fine bundles, from which minute branches are detached towards the anterior elastic lamina, which they perforate, and reach the anterior epithelium. (Fig. 3.) The exact relation of the nerve-fibres to the epithelium is so delicate a subject of inquiry, that it cannot surprise us that different opinions have been arrived at respecting its nature. The passage of the perforating nerve-fibres quite through the epithelium, and their free termination at the outer surface of this, described by one observer (Cohnheim) requires, I think, confirmation. I have not myself succeeded in tracing these fibres beyond the middle tier of epithelial cells; nor have I yet been able to demonstrate their ultimate distribution.

The existence of so many nerve-fibres beneath and in the epithelium explains how it is that apparently trifling abrasions, such as the slight scratches which a mother often receives from her suckling's finger-nail, are followed by intense pain, profuse lacrymation, and distress, which seem out of all proportion to the extent of the injury.

The only remaining corneal tissue is the *delicate membrane* which lines the posterior surface of the lamellated tissue, called after Dëmours and Dëcëmet, and sometimes also named the *posterior elastic lamina*. Its thickness is only about one-third of that of the anterior elastic lamina. It is perfectly homogeneous, without the slightest trace of structure. It is separable from the lamellated tissue by careful dissection in pieces of large size. Its *strength* and *extensibility* are shown by its protrusion as a vesicle beyond the anterior surface of the cornea, when the anterior epithelium and the lamellated tissue have been per-

forated by ulceration; and its *extensibility* is further exemplified by the large and complicated folds which are often enclosed in the scars of penetrating wounds. Ulceration and suppuration, to which all the other corneal tissues soon succumb, leave this unaffected; and it is often present, quite unaltered in appearance, in the dense white scars which replace the cornea when this has sloughed. Its only yet known disease consists of wart or *knob-like thickenings* which project from its free surface into the anterior chamber. They occur, I think, rarely; and I have not yet myself had an opportunity of examining them.

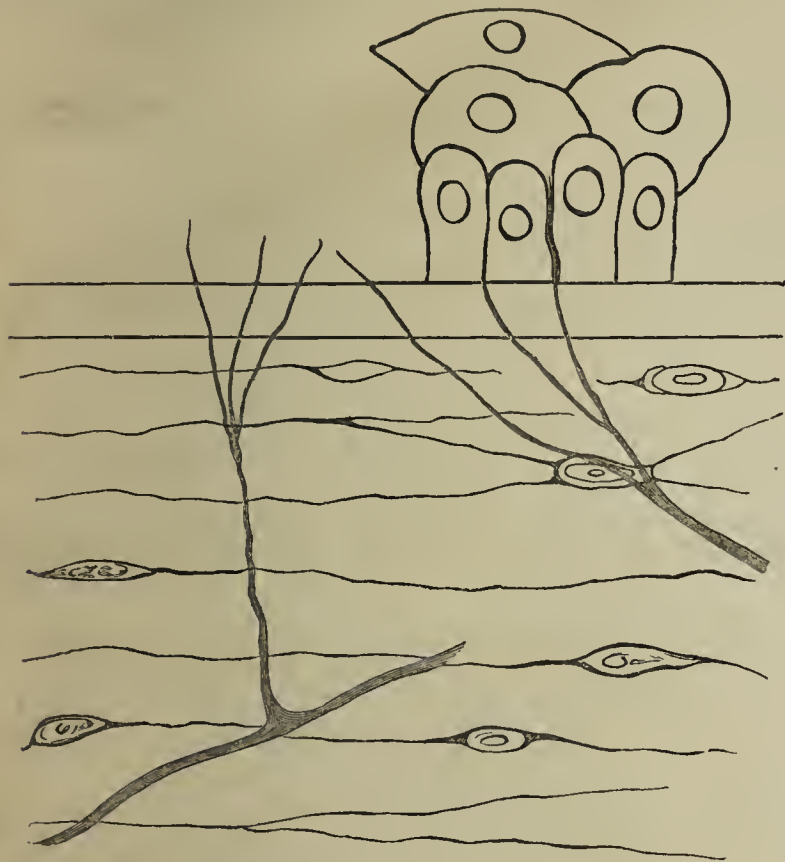


Fig. 3.

A single layer of delicate pavement-epithelium lines the inner surface of the lamina. Its cells proliferate in some forms of keratitis, and produce minute opaque dots upon the back of the cornea, recognisable when illuminated by an oblique pencil of light.

Morbid Alterations.—The cornea is not merely an excellent field for observing those coarser features which clinically stamp that chain of minute tissue-changes in which the process of inflammation essentially consists, but it supplies the anatomist with unusual opportunities of studying these tissue-changes themselves.

The microscopy of *keratitis* demonstrates that vascularity or even the nearness of blood-vessels is not essential either to the beginning or continuance of these structural alterations—a fact now generally conceded; and, further, it shows us that these tissue-changes begin in, and primarily affect, those formed elementary parts possessed of nuclei, or which, as some express it, contain masses of germinal matter. To take a simple instance, when we microscopically examine the tissues about a corneal wound, even so early as a few hours after its infliction, we find them slightly clouded, and the nuclei and corpuscles already a little enlarged. Next, segmentation of the nuclei fills the corpuscles with a young brood in the guise of lymph, or granulation, or pus-corpuscles, which, escaping from the parent capsule, accumulate between the lamellæ, and form the minute deposits which, in the case of pus, we call *onyx* (Fig. 4.); or, again, the cell-proliferation extends and the interstitial fibrous tissue disappears, and we call this process *diffuse parenchymatous inflammation* or *diffuse suppuration*. Remembering the free communication of the corneal corpuscles, it is surprising that suppuration is so often limited. When a wound or ulcer is small and distant from the circumference, all these tissue-changes may proceed until its perfect cicatrisation, without the presence of any blood-vessels; although, when the injury is more extensive, and near the periphery of the cornea, and the healing slow, vessels always run to it from the sclerotic and conjunctiva. Scar-tissue wants the regular lamelliform arrangement of the normal corneal tissue. It is an opaque fibro-nucleated web of common connective tissue, enclosing in fresh scars many granulation-corpuscles, derivatives of the normal corneal cells, and including, under the circumstances which I have just mentioned, intruded conjunctival

and sclerotic blood-vessels, the number of which is some sort of measure of the activity of the tissue-changes going on in the scar.

I suspect that the diminished opacity of the scars of wounds, after division of the anterior synechiæ (a practice originated by Mr. Teale), is rather due to the starvation of the scar-tissue by depriving it of the pabulum brought to it by the vessels of the iris, than properly attributable to the removal of the traction of the iris on the scar which has been thought to constitute a source of continued irritation.



Fig. 4.

When the iris is entangled in a corneal wound, we not infrequently find particles of uveal pigment in the corneal corpuscles at a considerable distance from it—an interesting illustration of solid particles wandering in a relatively dense tissue. All pigment, however, occurring in the cornea, has not this origin: some is evidently a product of the disintegration of extravasated blood. There are also exceptional cases, in which it does not come from either of these sources. Their histology is yet unknown to me; but I have not any doubt of the fact, for I had lately, amongst my hospital patients, a waterman suffering from parenchymatous keratitis, the upper half of whose cornea became of a sepia brown colour; and a careful scrutiny, with an enlargement sufficient to reveal the presence of blood-vessels had they existed, failed to discover any.

An occasional circumstance in keratitis is *vesication*, which occurs in two forms: one in which large blebs project from the corneal surface, upon which they may be made to shift their place by slight pressure. This accompanies the more acute and suppurative kinds of keratitis, and is also now and then seen in glaucoma. Von Graefe (*Archiv für Ophthalmologie*, Bd. vii), who has published an account of their structure, says that in two instances the bleb was composed of the anterior epithelium, with the elastic lamina and a thin stratum of lamellated cornea.

The cornea is very rarely the seat of *primary tumours*. The only ones which have come under my own observation have all been congenital dermoid tumours—minute fibro-fatty tumours, covered with a true cutis and epidermis, beset with hairs, and provided with sebaceous follicles. They are usually seated on the junction of the cornea and sclerotic; and, as they do not usually involve the lamellated tissue deeply, they probably originate in the conjunctival layer. The evolution of cancer and other allied neoplasms in the cornea is, in my experience, ever secondary; the cornea always becoming implicated by extension of the new growth to it from neighbouring parts. In their earliest stages, these neoplastic processes are not marked by optical characters essentially different from those which tend to the formation of ordinary inflammatory products—*e. g.*, pus. There is a phase in which the microscopic features do not enable the observer to decide between a simple inflammatory product and that which will build up a tumour. We notice first enlargement, then proliferation of the corneal walls. So far, inflammatory process and neoplasia essentially agree; but here the

agreement ceases. In the one case, the further evolution of the brood is towards pus; in the other instance, the progeny become the formed elementary tissues of a cancer, a sarcoma, and the like.

Here seems to me to be the proper place to add a few words on the anatomy of *conical cornea*, since certainly, in its later stages, when the apex of the cone is nebulous, if not before, tissue-changes of an inflammatory or irritative type are present. The affection is commonly met with in young adults, who are generally of feeble constitution; and it usually affects both eyes, although often in unequal degrees. By the kindness of Mr. Bowman, I had, some years ago, an opportunity of submitting to minute examination a beautiful example of it. The conical part of the cornea was thinned. The attenuation increased from the base to the apex of the cone, the thickness of which was only one-third of that of the normally curved circumference of the cornea. The anterior and posterior epithelia and D  mours' membrane were unaltered; but the anterior elastic lamina was thinned, and the immediately underlying lamellated tissue was replaced by a stratum of crowded club-like nuclei. More deeply still, the corneal corpuscles were very numerous, dominating over the interstitial tissue, and actively multiplying. At the base of the cone, there was a gradual transition from the diseased to the healthy lamellated tissue; and the circumference of the cornea was perfectly normal.

[To be concluded.]

ON LOCOMOTOR ATAXY.*

By J. LOCKHART CLARKE, M.D., F.R.S., etc.

THE curious disease known by the name of locomotor ataxy is very imperfectly understood even by those who have had many opportunities of observing it. A great number of practitioners have never seen a case, or at least have not diagnosed it when they have seen one. It is not uncommon to find locomotor ataxy mistaken for some form of cerebral or spinal paralysis, and cerebral or spinal paralysis mistaken for locomotor ataxy. The pathological physiology of this disease is not well understood even by those who are more expert in its diagnosis; while specimens of its morbid anatomy have been seen only by a very few British practitioners, since I believe I am the only person in this country who has made it a subject of investigation.

For these reasons I thought that, while practitioners from all parts of the kingdom are now met together, it would not be uninteresting to select, and illustrate by specimens of morbid anatomy, two cases of locomotor ataxy, one of which presents all the symptoms characteristic of the disease, while the other is wanting in some of those symptoms, and therefore might be, to the inexperienced, a subject of difficult diagnosis. I shall not, however, now dwell on the differential diagnosis of the disease. Those who wish for further information on this point, I may refer to the writings of our distinguished visitor, Dr. Duchenne de Boulogne, whose name is identified with this disease, and to my own article on locomotor ataxy in the first volume of *St. George's Hospital Reports*. But, before I read the cases which I have selected, it may be well to give the briefest possible outline of the symptoms and course of the malady.

In a great number of instances, the first symptoms make their appearance in the form of strabismus, with diplopia, which may disappear for a time and then return; or in the form of amblyopia or weakness of sight, which may go on to complete amaurosis. After a variable period, these symptoms are accompanied by so-called "rheumatic" and lancinating pains, which occur at variable intervals, in different parts of the limbs. In many cases, the ocular disturbances, except perhaps extreme contraction of one or both pupils, never make their appearance; the pains, which may extend over months or even years, accompanied by some weakness, being the first in the train of symptoms. Either at the same time, or subsequently, there is commonly more or less numbness in the feet and legs, in the hands and arms, and sometimes in the face. Sooner or later, the patient begins to find that he cannot properly maintain his balance; that he totters in walking, like a man partially intoxicated, or that he cannot guide the movements of his fingers. He has lost, to a certain extent, the power of controlling the action of some of his voluntary muscles. Still later, the voluntary movements become more or less jerking or spasmodic; and in the course of the disease other symptoms supervene, as incontinence of urine and dysuria, which frequently alternate in the same patient; loss of control over the sphincter ani; generally, though not always, loss of sexual power and desire; occasional hyper  sthesia over certain

parts of the limbs; and sensations of tightness around the body and limbs. In rare cases, of which I have seen two, the senses of smell and taste are impaired. Usually, the patient's general health is not much affected, and his intellect remains unimpaired. Locomotor ataxy is a disease which occurs more frequently about the middle period of life, and is much more common in men than in women. This very concise outline must of course be considered only as a general introduction to the cases which I intend to relate.

MORBID ANATOMY.—The morbid anatomy of locomotor ataxy consists chiefly of a certain grey degeneration and disintegration of the posterior columns of the spinal cord, of the posterior roots of the spinal nerves, of the posterior grey substance or cornua, and sometimes of the cerebral nerves. A variable number, and frequently, in the latter stages of the disease, nearly all the nerve-fibres of the posterior columns and posterior roots fall into a state of granular disintegration, and ultimately disappear. Usually, the posterior columns retain their normal size and shape in consequence of hypertrophy of connective tissue, which replaces the lost fibres. In this tissue, at wide but variable intervals, lie imbedded the remaining nerve-fibres, with the *d  bris* of their neighbours, in different stages of disintegration. In some places they are severed into short portions, or into rows of globular masses, formed out of their medullary sheaths, or white substance, which has been stripped from their axis-cylinders. In other places they have fallen into smaller fragments and granules, which either lie aggregated in the line of the original fibres, or are scattered at irregular distances. Corpora amylacea are usually abundant, and oil-globules of different sizes are frequently interspersed among them, and collected into groups of variable shape and size around blood-vessels of the part. I am inclined to believe, from my own investigations, that, in the course of the disease, the posterior cornua of grey substance are *always* more or less affected, as I have elsewhere pointed out; and it appears to me to be a question whether they are not the first parts, or at least amongst the first parts, that are morbidly changed. I have also shown, and will show you to-day, that in some cases the deeper central parts of the grey substance are more or less injured by areas of disintegration. These latter lesions, however, are not essential to the production of locomotor ataxy, the peculiar symptoms of which depend solely on lesions of the posterior columns, of the posterior nerve-roots, and probably of the posterior cornua. The cases in which they occur may be considered as mixed cases, partaking of the nature of locomotor ataxy and common spinal paralysis, like the second of those which I shall describe.*

[To be continued.]

ADDITIONAL NOTES ON UNUSUALLY RAPID ACTION OF THE HEART.

By RICHARD PAYNE COTTON, M.D.,
Senior Physician to the Hospital for Consumption, Brompton.

In the *BRITISH MEDICAL JOURNAL* of June 1st, 1867, I related a case, illustrated by sphygmographic drawings by Dr. Sanderson, in which the pulse reached 232 per minute. It was the first of the kind which had been published. In the *JOURNAL* of June 22nd of the same year is a letter addressed to me by Sir Thomas Watson, Bart., in which he describes a very similar case which had fallen under his notice several years previously, and where the pulse reached 216 in the minute. Dr. James Edmunds also described a like case (*JOURNAL*, June 15th, 1867). A short time afterwards, four other cases were recorded—one by Dr. J. D. Brown (*JOURNAL*, July 20th, 1867); two by Dr. R. L. Bowles (*JOURNAL*, July 20th, 1867); and one under the care of Dr. Broadbent at St. Mary's Hospital (*JOURNAL*, Aug. 3rd, 1867).

As this closes the number of cases hitherto placed on record, and the condition is, as Sir Thomas Watson justly remarked, "a very rare form of disorder," I have thought it might be worth while to add the following case, which has lately fallen under my observation.

A few months ago, I was requested by Mr. Langhorne, of 227, Brompton Road, to meet him in consultation upon a case of excessive palpitation of the heart. We found the patient—a gentleman aged about 35, and leading ordinarily a very active and anxious life—suffering with severe dyspnoea and general depression, accompanied by marked symptoms of gastric derangement and slight muscular rheumatism. It was impossible to count the pulse, the beats being far too quick, feeble, and apparently irregular; but, on placing the stethoscope upon the heart, we

* Read before the Medical Section at the Annual Meeting of the British Medical Association in Oxford, August 1868.

* All the morbid appearances above described were shown to members of the Association at Oxford, in preparations made by the author from spinal cords, etc., of cases of locomotor ataxy.

could distinctly count 200 pulsations in the minute—each pulsation being regular and uniform, and consisting of but one sound, and that quite free from murmur. The patient stated that his palpitation and distress had come on simultaneously two days before; and that he had had several previous attacks, but of a milder character.

Remembering the treatment of my former case, I suggested the free use of stimulants, with ammonia, potassa, and digitalis; and, in the course of two days, the heart returned *suddenly* to its normal action, and at the same moment the patient to his ordinary condition—whether as a sequel or a consequence of the treatment, a *post* or a *propter*, I cannot say.

I have very recently seen the same gentleman in perfect health, his heart beating quite naturally, and not exceeding 80 in the minute. He told me, however, that, since the attack which I have described, he has had several others similar in kind, but less severe; and that on each occasion the heart returned *suddenly* to its proper action.

Of the seven cases now recorded, in four instances the excessive action of the heart terminated *abruptly* and *suddenly*, the patients having been able to tell the exact moment of its occurrence. In the remaining three cases, the same may or may not have obtained; the circumstance either having escaped observation, or not having been stated. This forms an interesting feature in the disorder, and is well worthy of notice in any similar cases which may occur.

I feel much hesitation even in suggesting an explanation of the strange phenomena exhibited in the cases I have related. In my former paper, I ventured upon the supposition that they were due either to an obscure and abnormal irritating state of the blood, or to an extreme and inexplicable sensitiveness of the heart itself, or possibly to a combination of both such conditions, but having the common effect of causing the heart to contract upon its contents long before its cavities have had time to become filled to their normal extent. It remains, however, to reconcile with this, or, indeed, any other view of the matter, the *sudden* return of the heart to its healthy action. I confess that I am unable to understand this; but

“There are more things in heaven and earth
Than are dreamt of in our philosophy.”

CASES OF JAUNDICE FOLLOWING HÆMORRHAGE, WITH SOME REMARKS ON THEIR CAUSE.

By WILLIAM SMITH, Esq., Clifton,

Fellow of the Royal Medical and Chirurgical Society of London, etc.

THE cases of jaundice which I am about to bring before your notice, followed in both instances a profuse loss of blood from accidental causes. I have purposely used the expression “following hæmorrhage”, and not “consequent on”, or “caused by it.” I doubt whether I should be altogether justified in using the latter expressions; but I at the same time think there was a connection in the phenomena more intimate than mere antecedence and sequence—in fact, that the one was, to a great extent, the cause of the other.

D. V., a strong and healthy collier, aged 24, in killing a duck, thrust the knife into the wrist, in the direction of the radial artery. From the profuse and dangerous bleeding which ensued, and other circumstances, the artery was probably wounded. The hæmorrhage was excessive, and the means used for its arrest rather tended to encourage it. A number of cloths and linen rags were wrapped round the wrist, with no attempt at effectual pressure. The arm was placed over a tub; and, as the man became faint, brandy was administered *ad libitum*. I afterwards saw the tub with the coagula in it, and I was astonished that death had not occurred at once.

It was about an hour after the accident that I arrived at his residence. All hæmorrhage had then ceased, and he was in a profound condition of syncope. I dressed the wound with simple adhesive plaster, a compress, and bandage, and had him carried to a warm bed. The heart's action was barely perceptible, the skin cold, and covered with sweat, the pupils dilated, the sphincter ani relaxed, the breathing slow, with, at intervals, a deep sigh. I could with difficulty get him to swallow, but succeeded at last in administering some stimulants and warm tea. Vomiting occurred, and in a few hours he rallied from the dangerous state of collapse. The wound did well, and healed without difficulty. But, about a week after the accident, the pulse assumed a febrile rapidity, the skin became hot, and there were alternate chills and flushing, with nausea and anorexia. Erysipelas or pyæmia might be impending; but the severe and prolonged prostration afforded another explanation, in the reac-

tion of an irritative character, which attends such cases. The next day, my patient was jaundiced, and continued so for about three weeks. The skin and conjunctiva were of a deep yellow hue, the stools light, and the urine tinted with bile-pigment. The bowels were constipated; but, after the feverishness subsided, his general health improved. I gave no active medicines, avoided mercurials, and trusted to effervescent, the mineral acids, and an occasional dose of castor-oil. The patient did extremely well.

The next case much resembled the former, except that the hæmorrhage was venous, instead of arterial. A farmer, aged 56, suffered much from varicose veins. He had consulted me, and I had advised an operation, and not wishing this, to keep a bandage or laced stocking on the leg. Neither of these precautions was taken. He went ploughing in a distant field, and was found by his wife, lying on the ground, as she supposed, dead. A varicose vein, over which there had been an ulceration, had given way, and no doubt an immense quantity of blood was lost. The condition of this man was, if possible, worse than that of the one before described, and the history of the case, to a certain period, the same. Well marked febrile reaction, with jaundice, set in about the fifth day. He recovered in the same manner as the former case. He, however, sank the next winter from, I believe, congestion of the lungs. I did not attend him in his last illness, and did not know of his death till a considerable period had elapsed.

The following case was related to me by the friends of a lady, some of whose family I attended. At the age of twenty-three, she one day fell accidentally, striking her nose against a projecting piece of furniture. Alarming epistaxis ensued, lasting the whole day, and leaving her deplorably weak. A few days afterwards, she was attacked with intense jaundice, lasting several months.

The following case has been kindly furnished me by Mr. Edward Martin, of Weston-super-Mare; and, although that gentleman thinks the sequence of the icterus purely accidental, yet, for reasons which I will shortly enter on, it seems to me to admit of a different interpretation.

“On the 15th April 1866, I was summoned to Mrs. D. in the eighth month of her second pregnancy. I found her suffering from a smart attack of hæmorrhage, and learnt that she had had a similar one a week or two before. The placenta was easily found presenting; but, the os uteri not being sufficiently dilatable to interfere, the tampon was applied and ice administered, and the bleeding readily restrained. The patient was watched till the morning of the 25th, when the hæmorrhage returned, accompanied by slight pains of an irregular character. The os still not freely admitting the finger, and the patient keeping up well, I recurred to the plug for a few hours, and again easily arrested the drain. I was sent for urgently in the evening, and before my arrival (a very short period), my patient had lost a large quantity of blood, the flow of which was now unchecked, the tampon having become displaced. She was faint, and, as a matter of course, the os uteri easily dilatable. Some brandy having been given, the turning was quickly and readily accomplished, and the child (a dead one) delivered. There was no subsequent hæmorrhage, and she made a good though slow recovery.

“She was attacked by jaundice on the 25th of May, just one month from the delivery, having suffered the previous day from shivering, headache, and symptoms of approaching fever. The yellowness of skin, white stools, and bilious urine, lasted about a week; the treatment being two grains of calomel and a dose of castor-oil every other morning, with a taraxacum and nitric acid mixture thrice daily.”

It is but fair that I should add Mr. Martin's remarks on this case. He says:—“As thirty days had elapsed from the last attack of hæmorrhage, and as the lochial discharge was by no means excessive, I am scarcely inclined to think there was any connection in the way of cause and effect between the loss of blood and the jaundice.”

From the anomalous character of the cases which fell under my personal observation, I considered that any collateral peculiarity should be noticed, and especially epidemic or endemic condition of the atmosphere or locality. I could not discover anything which could be fairly said to constitute an efficient cause of the symptoms. Perhaps hepatic congestion and derangement of the *primæ viæ* had been more than usually common during that autumn.

The rarity of one morbid condition following another may make us suspect it to be purely accidental, and these cases *may* hence have been so. But in how small a proportion of wounds do tetanus and pyæmia follow the injury; yet they are undoubtedly connected with it. In a large practice, in which for fifteen years I witnessed accidents almost daily, I find I have notes of only seven cases of traumatic tetanus, and two of pyæmia; besides which the antecedent is rare; excessive hæmorrhage in modern practice is very uncommon.

Closely allied to, and bearing on this subject in its most important relation, is the question of jaundice produced by mental emotion. Frerichs, in his work on *Diseases of the Liver*, published by the New

* Read before the Bath and Bristol Branch.

Sydenham Society, says: "The jaundice from mental emotion is developed much more rapidly than is even the case in complete closure of the ductus choledochus." He assigns two causes which may produce this effect—"1, by interruptions of the circulation of the blood through the liver, by the influence exerted by the nerves upon the calibre of the portal vein; or, 2, by interruptions to the heart's action, the respiratory and the renal circulation."

Now undoubtedly, if mental emotion of a depressing character, acting thus on the circulation, can produce jaundice—a fact, I think, sufficiently established—it does not appear at all improbable that great losses of blood, producing as they do weakness, irregularity, and obstructed circulation, should lead to the same result.

Again, there are many cases of jaundice recorded resulting from snake bite and pyæmia. Whether they depend on deranged innervation, affecting the circulation through the liver and great vessels, or whether from a change in the condition of the blood, we have not sufficient data to determine. My own opinion is, that the phenomena I observed were due to congestion of the liver, just at that period when reaction had set in. What is really the effect on the circulation of profuse hæmorrhage? I do not mean the immediate effect in those cases where death occurs directly after excessive bleeding. We then find all the venous and arterial cavities empty; but this is not the case shortly afterwards, if the patient should survive. Rapid absorption of watery fluid takes place. It is increased in its proportions even during the abstraction from an artery or vein. Thus Dr. Zimmerman (vol. iv, p. 389) found, in bleeding dogs, that the last drawn portion of the blood contained 12 or 13 parts of water in 1,000 more than the blood first drawn; and Polli notices a corresponding diminution in the specific gravity of human blood during venesection, and has suggested the only possible explanation of the fact; namely, that during bleeding, the blood-vessels absorb very quickly a part of the serous fluid with which all the tissues are moistened.

Nature therefore endeavours, and partially succeeds, in restoring the volume of the circulating fluid. But I may say, in the words of the poet, "quantum mutatus ab illo." It is no longer the same highly stimulating and nutritive fluid; besides which, the weakened condition of the great vessels and cavities of the heart peculiarly favour that condition, which we here denominate passive congestion, and which Andral and the French pathologists designate asthenic or passive hyperæmia.

Now we all know that jaundice may be produced by congestion of the liver of a passive character, as well as from more active congestion arising from over-stimulation. In the former case, the jaundice may first arise in the liver where the bile is reabsorbed into the circulation. These cases I therefore regard as the result of passive congestion coming on with febrile reaction. In themselves, they only form a minute fraction of the tendency to visceral congestion induced by hæmorrhage, or any other debilitating causes, such as the long exposure to high temperature, and the consequent feebleness, the depressing passions, animal poisons, and many other causes which will immediately suggest themselves to your memory.

I think it probable that, if the records of venesection were ransacked, we should find abundant evidence of subsequent congestion, not only of the liver, but of many other viscera. The experience of every medical man teaches him that oedema is a common consequence of excessive losses of blood. This probably is owing, in some measure, to the watery condition of the blood before alluded to, but also in no insignificant degree to the atonic condition of the heart and great vessels, whether from defect of proper nutrition, or from loss of nervous energy.

There is one other theory I think it right to mention in relation to this subject. The one on which I have hitherto dwelt supposes the cases to have resulted from hepatic congestion secondarily to the change in the blood. But you are doubtless aware that many pathologists believe that the cause of jaundice should be sought in a morbid condition of the blood without any abnormal condition of the liver. Frerichs says:—"Breschet, to whom belonged the honour of having first supported the derivation of the bile-pigment from the blood by direct proofs, bluntly expressed this view as to the origin of jaundice as follows: 'Je présume ainsi que l'ictère est occasionné bien moins par la bile, que par le sang.' A similar expression is made use of by Dubreil: 'La teinte ictérique est la suite d'une modification malade des parties constituantes du sang, peut-être de la matière colorante portée sur le serum.' This theory has acquired fresh support from the investigations of Virchow upon pathological pigments. These investigations have proved that, under certain circumstances, a yellow substance is formed from the hæmatine, which, in relation to solvents and reagents, bears a close resemblance to cholepyrrhin.

"Zenker and Funke have brought forward fresh arguments in favour of the intimate relation subsisting between the bile-pigment and the red matter of the blood, by shewing that a modification of the colouring matter of the bile, viz., bifulvine, can easily be transformed into hæma-

toidine, a derivative of hæmatine. This would appear to indicate the possibility of a direct transformation of hæmatine into cholepyrrhin."

Whether the facts I have brought before you are best accounted for by the former or the latter theory, I am not in a position to decide; but of their resulting from each other I have very little doubt.

CASE OF RUPTURE OF THE HEART.*

BY GEORGE MAY, JUN., ESQ.,
Surgeon to the Royal Berkshire Infirmary.

A. B., aged 61, during the night of September 23rd, was seized with acute pain in the epigastrium, extending through to the back. For two or three evenings he had complained of slight uneasiness in the chest: he attributed this to indigestion, and prescribed for himself some quinine. Soon after the pain commenced, both arms became cold up to the elbows. I saw him early in the morning, and remarked the anxious expression of his countenance and the tumultuous action of the heart, the sounds being distinct, with a frequent but feeble pulse, which never fell below 120 in a minute. The pain ceased after a few hours, and did not return. During the following night, the breathing became very hurried, with congestion of the lungs. From this time, the symptoms varied but little. He could not lie down or turn on his left side. There was increased dulness on percussion over the cardiac region. The last day or two of his life, his legs became swollen; and he died on October 11th, suddenly, seventeen days from the commencement of his illness.

POST MORTEM EXAMINATION, twenty hours after death.—The body was fat. The pericardium was filled with soft clotted blood, but no serum. The anterior wall of the lower half of the left ventricle was slightly adherent to the pericardium. The heart was moderately covered with fat, and pale; the anterior wall of the left ventricle was very thin, not thicker than cartridge-paper, and supported by a layer of partly organised deposit, which was firmly adherent to it. Near the auriculo-ventricular septum were two small openings in the anterior wall, about large enough to pass a No. 6 bougie. There were atheromatous deposits in the aorta.

I can only find one case, recorded by Dr. Quain in the *Pathological Transactions* for 1861, in which the patient survived more than a few hours; and in that case there was no distinct proof of rupture. That the illness depended on the heart, and would probably end fatally, was early diagnosed; but, as I had not heard of any case of rupture in which the patient survived more than a few hours, the true nature of the illness was not detected.

In a case of rupture of the left ventricle which I presented to the Society some years ago, death occurred within one hour.

In early life, my patient had lost his sight from small-pox, and for the last few months had ceased to take exercise, not having left the house during that time.

The case seems to have been one of aneurism of the left ventricle, associated with fibroid degeneration. The thinning of the wall of the ventricle was partly remedied by a deposit of fibrine; but this, not taking place close to the mitral valve, allowed rupture to take place. The escape of blood into the pericardium caused adhesive inflammation, but did not close the aperture; and the patient existed in a condition similar to that produced by effusion of serum into the pericardium. The smallness of the aperture was the reason why he probably escaped immediate death. Until his last illness, he had never suffered from any symptoms of inflammation of the heart.

ANEURISM OF THE HEART.*

By T. L. WALFORD, Esq., Reading.

MR. G., aged 62, died October 1st, 1868, having first complained of the illness which caused his death in November 1865. He complained, when taken, of severe pain in his chest and arms. He passed an agonising night—at one time on the bed, at another on the floor, shifting his position continually, in vain attempts to get ease. All subsequent attacks came on in a similar manner. He was needy in circumstances, but inactive in disposition, and was strictly temperate.

The symptoms generally present were: shortness of breath, which was easily disturbed; pain in the chest; oppression; and inability to lie. Of the sounds of the heart, only one was observed at the apex; a slight *bruit* was believed to be heard at a distance. The least exertion made him pant as if he had been running. The pulse was quick, 100, without firmness. Such was the record in January 1866.

* Read before the Reading Pathological Society.

In March 1866, he was seen with Dr. Cowan; and the diagnosis at that visit was enlargement of the left ventricle. It was a question whether there was not some narrowing of the aortic orifice, though no sound was heard—only one sound at the apex. Some iron, with an aperient pill and some antispasmodic, were prescribed for him.

In May 1868, he was seen again in conjunction with Dr. Cowan. The note then made was, "Enlargement of the left ventricle; some obstruction, probably narrowing of the arch of the aorta; some regurgitation, as evidenced by a moist state of the tubes at the base of the lungs." He was ordered tincture of perchloride of iron, with tincture of digitalis; and a sedative when required.

In August, there was a congested condition of the right base of the chest. His legs, which had been oedematous since April, increased much in size; and his breathing became so short, and so aggravated by the slightest movement, that he could not lie. An incision was made on the inner side of the leg, most swollen, with great relief, so that he could lie again. In this way the time was passed until October 1st, when, at 3 P.M., he suddenly expired.

On October 2nd, a *post mortem* examination was made. The heart was larger than normal; and on the wall of the left ventricle was bulging, of the size of a wineglass in diameter. On examining it from within, it was found to be filled with coagulated fibrine, constituting chronic aneurism of the heart—a specimen, at once beautiful and complete, of a secondary heart-disease.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

REPORT ON THE TREATMENT OF DELIRIUM TREMENS.

It is interesting to note in the following report, which gives a fair idea of the state of opinion in the profession on the subject, the great change which has taken place within the last few years in the treatment of delirium tremens. Instead of the heroic doses of opium, which were almost as a matter of course given in cases of this disease, opium is now used only by some physicians, and by them in comparatively small doses; the excessive treatment by alcohol has given way to more moderate measures, and now it is given up altogether, or stimulants are administered in much smaller quantities, while judicious nursing, except on rare occasions, has taken the place of the strait jacket. It is satisfactory to find that all are agreed as to the great importance of abundant nourishment of the best kind, and perfect rest.

CHARING CROSS HOSPITAL.—Dr. Salter's treatment is sedative, pushed to extremity, aided by stimulants, and, above all things, *feeding*. The results which he has obtained have been uniformly such as, in his opinion, leave nothing to be desired.

MIDDLESEX HOSPITAL.—Dr. Goodfellow is not inclined, during the early part of the disease, to interfere greatly. His treatment is mainly expectant and dietetic, abundance of nourishing food being allowed. Should the urgent symptoms, however, continue, subcutaneous injections of morphia, from a fourth of a grain upwards, according to circumstances, are given; and stimulants, spirits, or beer, as the case may be. The following mixture Dr. Goodfellow has found frequently of great service.

R Quinæ disulphatis gr. ij; chloroformi ℥xx; tincturæ cardamomi comp. 3j. To be taken in water every four or six hours. If there be much febrile disturbance, a grain of opium with a grain of calomel is prescribed.

Dr. Murchison advocates no special rule, his mode of treatment depending upon the individual character of the case. Generally speaking, however, he employs opium if there be no real affection, but if this be present, he believes tincture of digitalis, in twenty or thirty minim doses, offers considerable advantages. He thinks stimulants in some cases useful, but he by no means employs them in all cases. Nourishing food and quiet are, however, invariably necessary.

ST. BARTHOLOMEW'S HOSPITAL.—Dr. Farre always takes care to get the bowels open at first. He then gives opium; or, if the pupils have any disposition to contract, opium and antimony several times a day. If sleep be not induced by this means, he uses cold affusion to the head. Wine or beer is allowed, if the pulse be low, or the skin perspiring. He has given half-ounce doses of digitalis in several cases without injury, but without marked benefit.

ST. THOMAS'S HOSPITAL.—Dr. Peacock has been lately employing bromide of ammonium in delirium tremens with very good results.

WESTMINSTER HOSPITAL.—The plan of treatment which, as a rule, Dr. Fincham adopts, is as follows. He cuts off at once all alcoholic stimulants, and administers directly abundance of easily digested and nourishing food—*e. g.*, three pints of strong beef-tea, and one of arrow-root and milk, given in divided quantities every two hours, as in a case of fever. If, by giving one or two pints of porter in the day, he can get food taken more readily, Dr. Fincham allows that quantity. As soon as possible, he urges the patient to take solid food, in the shape of meat, given as regular meals, with porter; continuing, at the same time, beef-tea, etc., in less quantity. Dr. Fincham gives no opium. If, at the commencement of treatment, the patient appear much exhausted, he gives ammonia; but, as a rule, prefers to give, as medicine, hydrochloric acid in some bitter infusion, in order to increase the appetite and assist digestion. If the patient have been drinking hard up to the time of his coming under treatment, Dr. Fincham has found, on several occasions, great and rapid improvement take place after the action of a brisk purgative—*e. g.*, calomel and colocynth, or a drop or two of croton-oil. This must, of course, be followed by the due administration of nutritious food, etc.—Dr. Basham thinks that the treatment of delirium tremens cannot easily be reduced to a plan, as each case must be regarded as a separate study. The effect of fermented stimulants on the nervous system, when acting as a poison, although manifesting for the most part a series of morbid phenomena common to all, nevertheless require a marked modification of treatment in different individuals. Thus total absence of sleep, hallucinations more or less of one type, an excitable restless manner, complete loss of appetite or power to take or digest solid food, and very depraved alvine excretions, are the common typical symptoms of that disorder of the nervous system known as delirium tremens. The great object of remedial treatment is to allay or calm the excitable but exhausted nerve-force. Sleep and rest are the points aimed at. But sleep will not follow the use of any one known agent. There are peculiarities, whether of the nervous system itself in each individual, or of the relation of the nerve-force to the other functions of the organism, which must ever shut out the idea of one remedy or one plan of treatment being entirely effective. It has ever appeared to Dr. Basham characteristic of a limited experience, to expect or to hold out the hope that any one special remedy will be universally applicable in this disease. Opium, digitalis, antimony, have their advocates; and, doubtless, occasional successful results follow their use in particular cases. Of these, opium perhaps has been most largely used—in many cases with great advantage. It often quickly procures sleep; and, with that result once obtained, the paroxysm may almost be pronounced to be at an end. But it is only in a certain class of cases that opium is thus immediately beneficial. Take a case of delirium tremens accompanied by a good deal of vascular meningeal excitement; hallucinations of the usual type; hideous images; mental aberration; irritable, excitable manner; nights without sleep; heat of scalp; suffused conjunctiva, and pupils contracted; a sharp, quick, hard pulse. Give such a patient opium, and it will either poison him or bring on a deep comatose condition of great hazard; or, if the quantity given does not act thus, it adds to the excitement, and aggravates the symptoms to a pitch little short of those of arachnitis. Now if, with proper discrimination, some ten, dozen, or eighteen leeches had been applied to the scalp, followed by a brisk calomel purge, and then a moderate dose of opium, a grain or twenty minims of Battley, probably a different and more favourable result will follow. The chief aim in the treatment of delirium tremens is to allay the present paroxysm and obtain sleep; and the best remedy to secure this can only be found by a careful estimate of the idiosyncrasies of the individual, and of the presence or absence of morbid complications in other organs or functions beyond those of the nervous system.

NETLEY HOSPITAL.—The system on which Dr. Maclean goes in the treatment of delirium tremens is, first to secure perfect quiet and seclusion for the patient, placing him under the care of careful and trustworthy attendants, who are instructed to use every means to calm and reassure the sufferer. The dangerous practice of forcing sleep by opiates he never under any circumstances follows; nor does he allow the blood of a patient already poisoned by alcohol to be still further charged by the use of stimulants. Instead of this, he insists on the administration of strong beef-tea at short intervals, to which Cayenne pepper has been freely added. Without the addition of pepper, the stomach will rarely retain the nourishment. Food is absolutely necessary. A man who has been drinking to such an extent as to bring on this formidable affection, has, nine times out of ten, been eating little or nothing. Dr. Maclean is a great advocate for a darkened room and careful nursing by judicious male attendants. Women cannot restrain patients who, in their terror at the imaginary objects of "horror" by

which they are surrounded, are apt to be violent. He regards with well founded disfavour the system of forcing sleep by large doses of morphia, and has seen more than one person die with all the symptoms of narcotic poisoning, who were thus treated.

QUEEN'S HOSPITAL, BIRMINGHAM.—The following is Dr. Fleming's treatment of delirium tremens. The patient is placed in bed. All harshness or restraint, unless absolutely necessary, is carefully avoided. Tranquillity and a free supply of pure air are secured. The face, neck, and arms are sponged from time to time with tepid water. As a drink, Carrara water or toast-and-water is given freely. For diet, the patient has at first milk and strong beef-tea alternately every four hours, and gradually, as the appetite improves, chicken, mutton, etc., until the stomach can accept the ordinary food. Alcoholic stimulants in every form are stopped at once and entirely. If there be any manifest symptoms of faintness, the following is prescribed.

R *Ætheris chlorici* (Duncan and Flockhart), *spiritus ammoniæ aromatici*, sing. $\mathfrak{z}\text{ij}$; *tincturæ lavandulæ comp.* $\mathfrak{z}\text{iv}$; *spiritus vini gallici* $\mathfrak{z}\text{x}$. Two drachms for a dose, in a wineglassful of water, every two or four hours, according to circumstances.

The further addition of alcoholic poison having been stopped, the objects of treatment are—1, to eliminate the poison already in the blood; 2, to control its effects; 3, to favour convalescence. To promote elimination by the skin and kidneys, the following mixture is given.

R *Spiritus ætheris nitrosi*, *liquoris ammoniæ acetatis*, sing. $\mathfrak{z}\text{v}$; *sodæ phosphatis*, *sodæ et potassæ tartratis*, sing. $\mathfrak{z}\text{v}$; *aquæ ad* $\mathfrak{z}\text{xx}$. M. Two ounces every four hours, two hours before meals.

Should an active purge be indicated, Dr. Fleming gives the colocynth and hyoscyamus pill, with from half a grain to a grain of the acetic extract of colchicum. The second object of treatment, that of controlling the effects of the poison, is attained by the administration of a mixture of ten drachms of dilute phosphoric acid with twenty drachms of tincture of hops. Of this, two drachms are to be taken every four hours, one hour before food, in a large wineglassful of water. This helps to sustain the patient, and lessens the feeling of depression. At bedtime, the following draught is ordered.

R *Tincturæ cannabis* $\mathfrak{m}\text{xxx}$ ad lx ; *liquoris morphinæ acetatis* $\mathfrak{m}\text{xv}$ ad lx ; *spiritus ætheris nitrosi* $\mathfrak{z}\text{i}$; *aquæ pimentæ ad* $\mathfrak{z}\text{ij}$. M.

This seldom fails to induce sleep. This medication is pursued until convalescence is established, when the tonic regimen is strictly enforced, including good food, pure air, cold bathing, with zinc and iron as blood-tonics. This treatment has furnished very good results; and Dr. Fleming considers that it compares most favourably with other modes of cure.

ABERDEEN ROYAL INFIRMARY.—Dr. Harvey has long since abandoned the practice of treating delirium tremens with heroic doses of opium, and of using much restraint with the jacket. His treatment of it has been, on the whole, "expectant"—letting the patient alone, giving him plenty of food, and moderate exercise in the ward or out of doors, if in a condition for it. He is inclined, however, to think that, from his knowledge of the *calmative* action on the nervous system of bromide of potassium in full doses (twenty to thirty grains, repeated daily, at short intervals), this article of the materia medica will be found to prove a valuable remedy in the graver forms of the disease.

EDINBURGH ROYAL INFIRMARY.—Dr. Laycock has treated a considerable number of cases. The following notes have been kindly compiled and sent us by Dr. David Ferrier, his late clinical assistant. In all cases of delirium tremens, Dr. Laycock insists at the outset on perfect quiet. The hands and face are washed; the room kept cool and fresh, but not cold. No mechanical restraint of any kind is attempted. Food is given, of a quality and kind suited to the state of the stomach. At first, it is often refused; in which case it is administered in a concentrated form (beef-tea, etc.), in small quantities, at intervals of one or two hours. If the breath smell of drink, and there be reason to think that the patient is labouring under an overdose, a gentle emetic is prescribed. In other cases, emetics are not employed. In the majority of cases, there is stomachic or biliary derangement. In some, food is vomited, or, if retained, causes pain, because of the congested and inflamed state of the mucous membrane of the stomach. In such cases, a pill containing a third of a grain of nitrate of silver, a third of a grain of hydrochlorate of morphia, and a sixth of a grain of calomel, gives great relief, and lessens the desire for stimulants. In cases of constipation and hepatic congestion, podophyllin, calomel, colocynth and hyoscyamus, castor-oil, etc., are ordinarily used. Podophyllin seems to have good effect. The following formula has been used by Dr. Laycock with advantage: Two grains of extract of podophyllin, and a scruple each of compound cinnamon powder and extract of hyoscyamus, with a sufficient quantity of mucilage; the mass to be made into four pills, and one to be taken every six hours till the bowels are moved. In the majority of cases, no other method of treatment is

adopted than rest, nutrients, and purgation if necessary; and the method is followed by complete success. A favourable termination is expected, independently in most cases of active remedies, in from four to fourteen days. The average duration of treatment is six days; and such also seems to be the result of cases treated more lately by Dr. Sanders according to the expectant method. Medicinal agents are used, with the purpose of favouring the natural tendency to recovery. The effect of drugs used to this end cannot in many cases be satisfactorily determined, since it is difficult to eliminate, from the influence of the drugs employed, the share due to diet and regimen, and that due to nature. It seems probable, that they exercise an influence over the intensity of the symptoms, although they may not either cause sleep or shorten the duration of the disease. The indications for the employment of alcoholic stimulants are drawn from the condition of the patient. When food has not been taken for several days, and the hallucinations are of a frightful or distressing kind, and especially when the pulse is very quick and feeble, the first sound of the heart heard indistinctly, the tongue coated, oedematous, and indented at the edges, wine and brandy may be administered medicinally with advantage. Except in such cases of protraction, alcoholic stimulants are not employed. Great caution, Dr. Laycock thinks, is shown in the administration of opium and its salts. It is never given in cases which indicate any tendency to serious encephalic lesion or insanity. These cases are characterised by a tendency to aggressiveness, where the notional delusions predominate over the hallucinations of the senses, and where the state of the pulse and nervous system indicate the sthenic rather than the asthenic type of delirium. It is not always easy to determine beforehand when opium tends to induce greater prostration and distress. Generally, however, the patient is of a nervous habit, with a florid complexion, or at least has had, and is of a neuro-vascular diathesis. When not contraindicated by these conditions, opium is sometimes administered with advantage, but never in more than ordinary doses; and regard is always had to the effect of the drug in exciting contraction of the pupils. The want of sleep is often the result of a morbid apprehension of sleepless nights; and, in such cases, a placebo, administered with the assurance that it is a powerful hypnotic, is often successful. Where there is great exhaustion, and morphia is inadmissible, camphor in from two to three grains every three hours, or the carbonate of ammonia combined with camphor and hyoscyamus, often prove useful. Cases intolerant of opium or stimulants of the sthenic type, and especially where there is some inflammatory complication, as pneumonia, are successfully treated by small doses of tartar emetic. Dr. Laycock has not much experience of digitalis. From the results of several cases treated by Dr. Sanders in the Royal Infirmary, Edinburgh, with half-drachm doses of the tincture of digitalis three times a day, it has proved beneficial. All the cases treated in this way were severe cases, and all recovered speedily. The administration of the drug was discontinued when the pulse became moderate and the signs of delirium had abated. The average duration of stay in the hospital was seven days. Chloroform has been employed in very violent cases with advantage—viz., in those cases where great exhaustion would follow continued raving and struggling; thus demonstrating the patient's powers of recovery.

LEEDS GENERAL INFIRMARY.

CASES OF HEPATIC DISEASE.

By J. D. HEATON, M.D., F.R.C.P., Physician to the Infirmary.

CASE I.—*Discharge of Gall-stones from the Umbilicus: Recovery.* Margaret P., aged 39, was prematurely confined of a seven-months' child, still-born, five months before admission. During the early part of her pregnancy, she had an inflammation in the body, attended with much pain, for which leeches were applied. She seemed to recover from this, but subsequently (about two months before her confinement) an abscess formed at the navel, which was poulticed; it became very painful, and ultimately opened spontaneously, discharging much matter which was followed by the escape of some gall-stones. The opening at the navel did not close, but continued to discharge matter mingled with mucus and bile, and occasionally a gall-stone, the exit of which was accompanied with much pain and soreness. In all about eight or ten stones had been discharged up to the time of her admission; they were of about the size of a horse-bean, and had flattened sides. She had never had jaundice. The bowels were generally in good order, and, except for the local inconvenience of the opening at the navel, she was now in pretty good health. The liver was not enlarged. The aperture was exactly at the umbilicus; the part around was inflamed; a ropy, mucous fluid escaped, mingled with pus and bile.

The patient remained under observation about three months; poultices were applied, at first, to the place; the bowels were gently regulated with aperients; and she was kept at rest. During this time, several calculi were discharged similar to those which had been passed previously. After the escape of each stone, the body was sore and tender for a time. Ultimately no calculi escaped for a considerable time, the opening became very nearly completely closed, and was free from pain, and the patient, feeling herself quite well, was discharged.

In this case, the mucous membrane of the gall-bladder had been inflamed, which condition had been due to the presence of gall-stones, perhaps favoured by the state of pregnancy. Ulceration of the mucous membrane resulted; and, the gall-bladder having become adherent to the abdominal walls, a fistulous communication between the seat of the ulcer and the umbilicus, had been gradually formed. Thus a comparatively safe, though troublesome exit was provided for the concretions; and, upon their removal, the canal by which they escaped having contracted, the patient is restored to health; no serious injury to the biliary apparatus having resulted from the occurrence.

CASE II. *Hepatic Abscess Discharging into the Bronchial Tubes: Recovery.*—Mary P., a middle aged woman, was admitted into the Infirmary, whose previous history was obtained, as follows. She had been ill and under medical treatment for three months. She had, at the commencement of her illness, been treated for chronic hepatitis. Subsequently, she came under the care of another practitioner (my informant), who then found complete dulness of the right side of the chest, which measured two inches more in circumference than the left side. She had intense pain, relieved only by large doses of morphia. Suddenly she expectorated a large quantity of pus; and, in the course of six hours, nearly a chamber-pot-full of matter is said to have been expectorated. When this large discharge ceased, the expectoration which continued was tinged with bile. Great relief to the pain followed the escape of matter; but she was much prostrated; and she was sent to the Infirmary that she might have better support than her own means would supply.

When she came under our observation, the more marked symptoms had subsided. There was still deficient resonance and obscure respiration in the right chest, and pain under the axilla, for which a blister was applied. The liver symptoms had subsided. She had no febrile symptoms, pulse feeble, tongue clean. She did not remain long in the Infirmary, being anxious about her family, and determined to go home. Her treatment meanwhile was simply in aid of the spontaneous restoration which was in progress.

This case, though imperfectly recorded, is a well-marked example of abscess of the liver opening, by ulceration, into the right pleural cavity, and thence, by erosion of the substance of the lung (probably at a point adherent to the thoracic walls), into a bronchial tube by which the matter was discharged through the mouth. A direct communication with the interior of the liver was still, for a time, maintained; and some bile, flowing from open biliary ducts, mingled with the sputa. No doubt this was a state of much danger; continued suppuration and progressive destruction of lung tissue being probable results. But, whilst under observation, the curative process seemed to be in the ascendant, and there was a fair prospect of restoration to health, more or less complete; a result very rarely obtained in cases of like nature.

CASE III. *Hepatic Abscess opening into the Pericardium.*—In addition to the above, I will notice briefly a case not under my own treatment, but of which I witnessed the *post mortem* examination; being that of a young woman who had been out of health for no long time with general symptoms, only rather obscurely pointing to the liver; when she was suddenly seized with pain in the chest, great agitation, great excitement, and disturbance of the heart's action, oppression of the breathing, and speedy death.

The *post mortem* examination disclosed a large abscess in the liver, which had penetrated the diaphragm, and opened into the pericardium, which was filled with pus, yellow from an intermixture with bile. So indeterminate had been the symptoms of the progress of this serious lesion that the real nature of the case had been unsuspected. The abscess of the liver was probably secondary, or metastatic, though the source of the original impurity of the blood of the portal vein was not apparent; and the large formation of matter had been effected without any of the subjective symptoms usually accompanying suppurative inflammation. Although the escape of the matter of an hepatic abscess into the thorax is not very uncommon, its discharge into the pericardium is of unusual occurrence, and is improbable *a priori*. In the Sydenham Society's *Translation of Frerichs*, I find that author quotes Rokitansky, Graves, and Fowler as having witnessed this result. The discharge of the matter into the shut sac of the pericardium is a mistaken direction of a spontaneous curative attempt which manifestly can only terminate in speedy destruction.

REVIEWS AND NOTICES.

SPECTRUM ANALYSIS. Six Lectures, delivered in 1868, before the Society of Apothecaries in London. By HENRY E. ROSCOE, B.A., Ph.D., F.R.S., Professor of Chemistry in Owen's College, Manchester. With Appendices, Coloured Plates, and Illustrations. Pp. 348. London: Macmillan and Co. 1869.

It is not a little creditable to the Society of Apothecaries, that this course of Lectures on Spectrum Analysis was delivered under their auspices, and that they secured the aid of one so thoroughly versed in the subject as Dr. ROSCOE is known to be. In the lectures, as now published, the reader is led up gradually from the first principles of spectrum analysis to its application to the chemical examination both of terrestrial and of the solar and stellar bodies. The value of the lectures is further increased by the addition of copious appendices.

There is, we believe, no modern discovery in physical science which has been so remarkable, or has made such rapid progress, as the spectrum analysis; and a more complete, and at the same time more simple and intelligible, account of the subject, could scarcely be given, than is contained in the book before us.

It remains only to add, that the printing and paper are of the best; and the external appearance of the book is highly elegant.

THE BATHS AND WELLS OF EUROPE: THEIR ACTIONS AND USES. With Hints on Change of Air and Diet-Cures. By JOHN MACPHERSON, M.D. With a Map. Pp. 336. London: Macmillan and Co. 1869.

DR. MACPHERSON'S object, in adding one to the many volumes which have been written on the European watering-places, has not been to give an exhaustive account of them, but to furnish a sketch of the present state of our knowledge on the subject of the therapeutic action of mineral waters; and to this he adds remarks on some cognate subjects—change of air and diet-cures.

The author first notices the elements of treatment, under the several heads of Bath-Life, Change of Air, External Use of Water, Internal Use of Water, and Mineral Waters generally. In his remarks on Change of Air, he says of mountain climates, that little is really known of the operation of mountain air, and that its effect on the system must be learned from observation. The statements that accelerated action of the heart, giddiness, headache, etc., are produced by great elevations, he does not think worth much notice, as these effects are not experienced at a height of 8,000 feet in the Himalayas, among the Europeans fresh from the plains. On the question of immunity from consumption in the inhabitants of mountain regions, he says: "While there is little doubt that certain elevated spots enjoy a considerable amount of immunity from the disease, it would be easy to show that this is also the case with various places at the level of the sea. Consumption undoubtedly occurs among the natives of the Himalayas, and is not infrequent; and, among the children of Europeans in the Indian hills, acute chest and especially laryngeal attacks are common. . . . Tuberculosis is said not to be common at Interlachen, a height of 1,700 feet, and still less frequent among the true hill people. At Gais, 2,875 feet high, there is a good deal of phthisis and rheumatism; in the valley of Château d'Ex, 2,900 feet, consumption is common. At Leukerbad, 4,400 to 4,600 feet high, inflammations of the chest are a very common cause of death. At St. Moritz, it is said that phthisis is unknown. It does not, however, follow, because there may or may not be a good deal of consumption in a place, that it is unsuitable, or the reverse, as a change to a consumptive patient."

Dr. Macpherson sums up his opinion on this subject, by saying that it may be required to modify the old view that mountain climates are necessarily unfavourable to all kinds of consumption.

In the part of the book specially devoted to Bathing, the author describes the mineral waters of Europe under the heads of—1, Indifferent and Earthy Baths; 2, Sulphur Baths; 3, Salt and Saline Baths; 4, Artificial Baths and Inhalations. The wells are described under the heads of—1, Indifferent and Earthy; 2, Sulphur; 3, Salt; 4, Alkaline; 5, Purgative; 6, Iron. There is also a chapter on the presence of minute quantities of Salts and of Carbonic Acid in Springs, and on Artificial Waters. In these chapters on the baths and wells, he does not give an extensive or elaborate description, but has a few words of useful information about each of the principal watering-places and the properties of their waters.

The book is concluded with two interesting chapters on Popular Cures from the Vegetable World, and on Milk and its Preparations.

Those who wish to obtain practical information on the European

watering-places, and the conditions of health for which they are suited, but do not require an elaborate discussion on the chemical constitution of their waters and of their merits, will do well to consult Dr. Macpherson's work.

NOTES ON BOOKS.

The Claims of Classical Studies, whether as Information or as Training. By A SCOTCH GRADUATE. Aberdeen: John Adam. 1869.—The author of the pamphlet now before us collects nine different arguments advanced by the apologists for classical education, including two put forward by Mr. Mill, and certain others that have the sanction of last year's Schools Inquiry Commission. All of these he combats in elaborate detail, and pointedly; with what success, we invite readers themselves to judge. The argument appears to be, that *English* will answer all the disciplinarian ends that are now claimed for the classics, and will, besides, go far towards teaching men to say their say in the most intelligible and artistic manner. We cannot here do more than invite renewed attention to the general question, and refer those who are interested in it to the book itself, with the assurance that they will find it a not bulky compendium of all that can be urged against the ascendancy of classical studies, stated in temperate and clear language.

PROGRESS OF MEDICAL SCIENCE.

SURGERY.

REMOVAL OF THE ENTIRE TONGUE.—Dr. Fenwick of Montreal has removed the entire tongue, on account of epithelioma, by an operation speedy and bloodless. The mouth was entered from the floor, the incision being in the median line, between the chin and hyoid bone, the dissection being carried between the genio-hyoid muscles. Through this opening the chain of an écraseur was carried on a long curved needle, back to the base of the tongue, close to the epiglottis. The process of cutting through the tongue with the chain occupied nine and a half minutes. The case progressed most favourably, the patient being able to travel to his home, a distance of 190 miles, on the twelfth day after the operation.—*New York Medical Journal*.

ON THE SEAT OF LIGATURE IN WOUNDS OF ARTERIAL BRANCHES.—Dr. Roser lays it down as a rule in operative surgery that, in hæmorrhage from arterial branches, the ligature should be applied to the seat of injury, and never to the main trunk of the vessel. He agrees in the view that was held by Guthrie, that the latter proceeding is more likely to be followed by bad results, and, in consequence of the multiplication of seats of suppuration, to end in septicæmia and death. Local deligation and removal of clot and secretions from the original wound is more likely, in Roser's opinion, to end in recovery. Dr. Ravoth, on the other hand, holds that the question as to the seat of ligature must be decided according to the nature and seat of the wound, the changes of the involved tissues, the position of the wounded vessel, and the condition of the surrounding parts. He cites, in proof of this assertion, a case of wound of the palm, attended by hæmorrhage, which could be arrested only by compression of the ulnar and radial arteries together, or of the brachial. In spite of firm, local pressure, and the application of perchloride of iron, the hæmorrhage was frequently repeated, and presented itself in a thick stream of blood on the thirteenth day, when the patient, a man aged 63, was seen for the first time by Dr. Ravoth. The hand and arm were considerably swollen, the palm was occupied by a large tumour, and its soft tissues were in a state of mortification. A ligature was applied to the brachial artery; the hæmorrhage was immediately arrested; no inflammatory symptoms followed the operation, and the patient, on the twenty-eighth day, was cured. Roser, in answer to Dr. Ravoth's paper, states that in this case local deligation ought to have been attempted, as the application of a ligature to the brachial artery of a patient so advanced in years might readily be followed by dry gangrene of the extremity.—*Schmidt's Jahrbucher*, No. 3, 1869.

THE SUBCUTANEOUS TREATMENT OF CONGESTION-ABSCESSSES.—Dr. Wertheim reports thirty-two cases of virulent bubo, congestion-abscess, hydrocele, and ganglion at the wrist, in order to prove the advantages attending a plan of treatment which consists in the removal of the accumulated fluid through a small trocar, and subsequent injection of some medicated fluid. The introduction of tincture of iodine, and of other agents hitherto employed for injection in similar cases, is believed to be prejudicial in cases of congestion-abscess, as these frequently irri-

tate and set up inflammation. The solutions used by Dr. Wertheim are the following: Hydrochlorate of morphia, gr. iv to ʒij of distilled water; camphor, ʒi, rubbed up with ʒij of mucilage of gum-arabic and ʒiv of water, and filtered; creasote water; sulphate of copper, 1 or 2 grains to ʒi of distilled water; and chloride of lime (1 to five grains in ʒi of water). An exploring-needle or small trocar is first passed into the tumour, the fluid contents of which are then forced out by gentle manual pressure; then, by means of the hypodermic syringe, ten drops of the solution of hydrochlorate of morphia, or twenty drops of one of the other solutions, are slowly introduced. During the after-treatment, the tumour is repeatedly emptied of its secreted fluid by pressure; and the injection is repeated, at first daily, and subsequently less frequently. Ice-compresses are applied over the swelling, and the patient recommended to keep to his bed. Dr. Wertheim has derived the following results from his extensive experience of this method of treatment. 1. It is followed by an immediate cessation of the pain previously existing in the tumour. 2. There is also a permanent decline of all other symptoms of inflammation; in no instance were local or general symptoms of reaction observed to follow the treatment. 3. A thick purulent fluid is converted into an exudation which becomes more and more watery, and the quantity of which gradually diminishes up to the end of the third or fourth week, when there is complete absence of secretion, and healing without a scar. 4. The swelling should not be punctured and injected, unless there be full fluctuation; otherwise infiltrations, which disappear very slowly, will remain behind. In conclusion, Dr. Wertheim states that the subcutaneous treatment seems to be indicated in cases of fluctuating buboes, and of recent and mature congestion-abscesses, as, in those instances where failure occurs, this result is soon rendered evident, and the practice of incision can afterwards be resorted to.—*Wien. Med. Wochenschr.*, 87, 1868.

MEDICINE.

ON THE ACTION OF DIGITALIS IN TYPHOID FEVER.—Dr. Ernst Hankel has reported the results of investigations made on 80 cases of typhoid fever, under the care of Wunderlich, which were treated by the administration of an infusion of digitalis—1½ or 2 grammes to 180 grammes. The following were the chief results. 1. Digitalis, administered in suitable quantity in typhoid fever, always produces a considerable diminution of fever, lasting for several days, and lowers the pulse for some weeks. Hence the use of the drug is indicated in cases in which the temperature in the evening attains the height of 40.5° C. (105° Fahr.), and in the morning presents only slight intermissions; also in cases in which the contractions of the heart are 120 or more in the minute; particularly when these signs occur in the second week of the attack. 2. Digitalis lessens the delirium, and is indicated whenever this symptom coexists with unusual height of temperature and frequency of pulse. 3. The pulse, especially when small, becomes fuller after the administration of digitalis. 4. The administration of the drug is not contraindicated by albuminuria, or even by Bright's disease. 5. With proper caution on the part of the medical attendant, dangerous and deadly collapse need not be feared. Digitalis may be given without danger to anæmic and depressed patients. 6. A tendency to hæmorrhage is not much increased by administering digitalis. The infusion may be even continued during bleeding, if this be not very profuse. 7. Gastric catarrh is increased naturally by digitalis. 8. The duration of the attack is prolonged under the influence of digitalis, so that this remedy ought only to be administered in cases where danger is threatened by fever, low pulse, and cerebral symptoms.—*Archives der Heilkunde*, April 1869.

NEW INVENTIONS, &c., IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

BLACKLER'S SELF-ADJUSTING SPRING PESSARY.

THIS instrument is similar in some respects to the double "Hodge" of Dr. Protheroe Smith, though differing materially, in that the lower extremity leaves the urethra and parts adjoining perfectly free from pressure. It seems to be well adapted for cases of partial prolapse and retroversion and retroflexion of the uterus, and will doubtless be found very useful in cases where an ordinary "Hodge" fails to effect the purpose. Its structure—a spring wire, covered with a soft elastic tubing—is a great improvement upon the ordinary gutta-percha.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 3RD, 1869.

THE ANNUAL MEETING OF THE ASSOCIATION.

THE programme of the Annual Meeting of the Association in Leeds is gradually approaching completion. Our readers will see that several important additions have been made, and will be glad to hear that, though not officially announced as part of the programme, invitations to visit the mineral springs of Harrogate and the West Riding Lunatic Asylum at Wakefield, and to form an excursion to Scarborough by invitation of the Directors of the Grand Hotel Company, are likely to be issued to such members as are known to have signified their intention to be present at the meeting.

It is scarcely necessary for us to do more than call special attention to the several requests conveyed in the programme for such information as may aid the Local Committee in their labours.

It is especially important that intending exhibitors, whether in the Museum, Library, Display of Surgical Instruments, or in any other department, should forward, *as early as they possibly can*, concise descriptions of such specimens, books, or other articles, as they intend to contribute. Catalogues of each department are in preparation; and, though the articles themselves need not be forwarded to Leeds till within a day or two of the meeting, we can see that, in order to render the catalogues complete, and to make such arrangements for the display of all articles as shall meet the complete approval of contributors, the descriptions are an absolute necessity.

We would also take this opportunity of reminding the profession, that the Committee of Council have decided to admit members of the Association from the 1st of July at a *subscription of half a guinea* for the half-year; it being understood that each gentleman so joining the Association shall continue his membership during the whole of the year 1870 at least.

A PROSPECT OF MEDICAL REFORM.

A MOST important document was read at the opening meeting of the session of the Medical Council on Thursday last. It was a letter from the Medical Officer of the Privy Council, intimating that the Government proposed, in the next session of Parliament, to take into consideration the whole working of the Medical Act; and requesting the opinion of the Council, especially with regard to the improvement of medical education and qualification, and the amendment of the constitution of the Council. The letter was ordered to be entered on the minutes, with the view of being referred to a Committee. It will probably give rise to a serious discussion. We are also glad to note that the President, in his opening address, expressed himself strongly in favour of a conjoint examining board in each division of the United Kingdom, for the purpose of licensing the general practitioners of medicine.

THE PROVIDENT SYSTEM AS A REMEDY FOR HOSPITAL ABUSES.

THE profession seems to be agreed that the abuses of the privileged system in our hospitals are great—socially and medically—and, as a proof of this, we may refer to the recent meeting of the Metropolitan Counties Branch of the Association, when the subject of Hospital Administration was discussed. At that meeting, almost all the speakers recognised the evils of the indiscriminate medical relief afforded by hospitals; but the suggestions for remedying them were various. There was a general feeling, however, that patients should contribute something towards the support of the hospitals; and we agree with those who were of opinion that this can best be done by the adoption of the Provident System, which long experience has proved to be in many ways at least preferable to that at present carried out in our hospitals.

Thirty years have passed since Mr. Smith of Southam commenced his advocacy of Provident Dispensaries; and during that time these institutions have received the support of many distinguished men, who have also recommended the extension of their principle to hospitals. Such names as Mr. Jones of Derby, Dr. A. P. Stewart, Dr. William Ogle of Derby, Dr. Heslop of Birmingham, and Mr. Beck, occur to us; and we could mention many others. By the exertions of these men, Provident Dispensaries have been formed in various parts of the country. Some of these have achieved success, and others have failed from local opposition, faulty administration, and other causes; and these successes and failures have been most useful in teaching us what we should copy and what we should avoid in the management of similar institutions. We propose here, in the first place, to enumerate some of the advantages which have been found to result from the system usual in Provident Dispensaries, and then to deal shortly with the question of its extension to hospitals.

The principal advantages of this system are the following. 1. The poor, instead of being compelled to be beggars for alms, are encouraged in habits of forethought and independence. 2. The small periodical payments required are made while the patient is in health and engaged in his employment. 3. The best medical aid can be obtained by the sick without calling on medical men to sacrifice their time without reward; and this can be done at a smaller cost to the rich than in charitable dispensaries, where the medical services are gratuitous. 4. The admission of unsuitable patients can be effectually checked, as members enter in time of health, and an interval of some weeks must elapse between the application and admission, during which inquiry can be made into their circumstances. 5. There is no delay in obtaining medical aid. 6. The system affords facilities for the registration of disease.

It is sometimes objected to Provident Dispensaries that the patients, by paying small sums, get a false idea of sufficient payment; but we could, on the contrary, quote the opinion of many who have had experience of Provident and Charitable Dispensary patients, that the former are generally less exacting, more thoughtful of their doctor's comfort, and much more grateful for attention and skill than the former. It is right to state that Dr. Rumsey, whose opinion on all medico-social subjects is entitled to respect, seems to disapprove of any thing short of self-supporting dispensaries, on mutual assurance principles: but however desirable these might be for a wealthier class, they would exclude most of the working poor, whom it is the object of institutions on the mixed system to help.

With regard to the extension of the provident system to our hospitals, we have heard it objected that the subscriptions would fall off if we took away from governors the privilege of recommending patients, but it is probable that any shortcoming from this cause would be more than made up by the payments of patients and by increased help from those who believe that the best charity is to help those who help themselves. It is urged, also, that hospitals are intended for medical education, and

by excluding the very poor many cases useful for teaching purposes would be lost. There is some force in this objection; but, we believe that the majority of hospital patients could afford to pay, during health, the small weekly sums entitling them to attendance during illness, and, in order to meet the wants of the poorest class, it might be advisable to conjoin a purely charitable with a provident hospital. The result of this arrangement would probably be that those who could afford it would pay, and the working classes would soon dislike the Charitable Hospitals as much as they now dislike the Union. In districts where Provident and Charitable Dispensaries exist together, it is found that the latter is frequented only by the poorest.

Difficulties would, of course, arise in carrying out in hospitals the details of the Provident as of any other new system. It would be an instalment of reform, at all events, to make the out-patient departments of our large hospitals provident. Where there is a large population, varying with the demand for labour, many would apply who are not members—especially at first—and in these cases a moderate fee might be charged, which should be large enough to discourage patients from delaying to enter as Provident members. Out-patient Provident members might have the privilege of admission without letters. A visiting medical officer might be required to attend on patients who are too ill to come for advice, and for whom there is no room in the hospital.

THE BALY MEMORIAL, ESTABLISHED BY DR. DYSTER.

“THIS memorial,” say the regulations of the College of Physicians, “shall consist of a gold medal, to be awarded every alternate year to the person who shall have distinguished himself in physiology. The honour shall be extended to foreigners without exception,” etc.

Dr. Baly, as every one knows, distinguished himself as the translator, and as something more than the translator, of Müller's *Physiology*. There was, therefore, a special purpose in connecting the Baly Medal with physiology. Why, then, have the College of Physicians ignored the express purpose of the memorial, and bestowed this, the first medal, on a gentleman whom we all acknowledge as the first comparative anatomist in Europe? Mr. Owen has been often called the English Cuvier, and justly so; for he has followed in the steps of that great leader. But was Cuvier a physiologist—a searcher into the laws of life? and would the College of Physicians have bestowed on him this Baly Medal, had he been still alive? We may surely answer, No. Why, then, was it bestowed on Mr. Owen? We need hardly say, in asking this question, that we yield to no one in admiration of Mr. Owen; but we feel bound to ask the question, in anticipation of the next gift of the Baly Memorial Medal. That the College have made a great mistake, is clearly enough evidenced by the voting of the College, where the vote in favour of Mr. Owen was only carried by a majority of four; while a motion to refer the subject back to the Council was defeated by a majority of only *one*.

Surely the College of physicians must be aware of what is meant by the term “physiologist”? We do not need to split straws in getting at a definition. When medical men speak of physiologists, they speak of Sir Charles Bell, of Magendie, of Marshall Hall, of John Reid, of Claude Bernard, of Müller, of Bischoff, of Brown-Séquard, of Schiff, of Marey, etc.; but assuredly they do not speak of Cuvier and of Owen. It was suggested at the College, that in future the Council should be required to state the grounds upon which they recommend any one for the medal. What would they have stated in this case? We turn to Carpenter's *Physiology*, and we there find that Mr. Owen's works are quoted mainly as the works of an anatomist, and not as an author who had made researches into the play of the vital functions—into physiology. We cannot doubt that the College have not bestowed the medal in accordance with the terms of their own regulations. We are aware that the Council justify their recommendation of the gift of the medal in this case by a reference to some passages in Dr. Dyster's letters, where he

speaks of Darwin and Huxley as admissible, in the absence of physiologists properly so called; but we are sure that the profession will not endorse their action. We regret to have to refer to such a matter, but feel bound to do so, in order to provide against a recurrence of such a serious mistake. We have, happily, good grounds to hope that in future the medal will be given to a distinguished physiologist; for the reason that so large a minority of the Fellows were opposed to the present bestowal of it. These facts of themselves condemn the decision of the Council. If the right man had been selected to receive the honour, we have no hesitation in saying that the medal would have been voted to him unanimously by the College. The College vote condemned the Council's award.

CHOLERA has disappeared from the 58th Regiment at Allahabad.

SEVEN deaths from heat-stroke are reported to have occurred lately on one day among the troops at Kamptee.

MR. HAYNES WALTON has been appointed in charge of the ophthalmic department of St. Mary's Hospital. He will continue, however, to act as surgeon to the hospital.

AT the bazaar lately held in aid of the Hospital for Diseases of the Chest, City Road, in the grounds of the institution, over £200 were collected.

M. MARTIN, in a memoir presented to the French Society of Therapeutics, says that the cultivation of the sunflower neutralises the influence of marshy emanations; and that the experiment has been tried with success near Rochefort and by the Dutch.

DR. J. BRAXTON HICKS has been appointed full Physician-Accoucheur at Guy's Hospital *vice* Dr. Oldham, resigned. Dr. J. J. Phillips succeeds Dr. Hicks as Assistant-Physician-Accoucheur. Dr. Oldham retains connection with Guy's Hospital as Consulting-Physician-Accoucheur.

ABOUT twenty of the more delicate boys belonging to the Duke of York's School at Chelsea have been sent to Netley Hospital for the advantages of sea bathing and fresh air. For the past few years, the authorities have sanctioned this removal of the sickly lads to Shorncliffe and Netley for the summer months; and their health has been much improved by the change.

ACCORDING to the Report of the Directors of the Metropolitan Association for Improving the Dwellings of the Industrial Classes, the Association has during the past year housed an average population of 3,531 persons, of whom 62 died, 38 deaths occurring among the children. These deaths show an annual death-rate rather under 18 per 1,000, while the death-rate of the whole metropolis during the same period exceeded 24 per 1,000.

THE *Worcester* training-ship is now permanently moored off the pier at Southend. The boys express themselves as delighted to get away from Erith, where they were debarred from bathing and fishing, owing to the filthy state of the water, caused by the metropolitan sewers outfall. They are now able to obtain more amusement and exercise, as well as fresh air; and their general health is consequently very much improved.

THE BRITISH MEDICAL ASSOCIATION: INVITATION TO HARROGATE. AT a meeting of the Harrogate Improvement Commissioners on the 21st June, there was presented a memorial, signed by the members of the medical profession in Harrogate, calling the attention of the Commissioners to the propriety of inviting the Council and members of the British Medical Association to Harrogate. After some discussion, it was agreed that the Board should invite the Council and members of the Association to Harrogate to a number not exceeding one hundred; and that the Board should leave to the medical gentlemen of Harrogate the arrangements for their proper reception and introduction to the virtues of the mineral waters.

MEDICAL BENEVOLENT SOCIETY IN BIRMINGHAM.

AT a quarterly meeting of the Directors, held at Mr. V. W. Blake's residence, Old Square, Birmingham, on Wednesday evening, June 30th, grants amounting to £60 were made; three to widows of medical gentlemen, and one to a single lady, the daughter of a deceased member, each left without adequate means of support.

BEARDS IN THE NAVY.

THE *Army and Navy Gazette* says that the Lords of the Admiralty have caused a circular to be issued authorising officers, seamen, and marines on board Her Majesty's ships to discontinue the use of the razor under certain restrictions. The hair of beard, moustaches, and whiskers is to be kept well cut and trimmed, and not too long for cleanliness. The beard is not to be worn without moustaches, or the latter without the former.

A SURGEON FINED FOR NOT VACCINATING HIS CHILD.

AT Derby, on Monday, Mr. Allan Borman, surgeon, was summoned for neglecting to have his child vaccinated. In reply to the charge, he said that he had not vaccinated his child, and he did not mean to do so. He had been in practice as a surgeon thirty-five years, and had lived to see the evil of vaccination. The defendant was fined one shilling and costs.

MONUMENT TO THE LATE DR. KENNION OF HARROGATE.

ON the death of Dr. Kennion, just a year ago, it was at once suggested that there should be some public mark of the respect and esteem in which he was held. Various proposals were made; and the one fixed on at the time was a full length portrait, which has been placed by the Improvement Commissioners, as custodians for the inhabitants, in the Chalybeate Spa Concert Room. Subsequently, it was decided to erect a marble monument to the memory of Dr. Kennion; and the work is now approaching completion. The design selected is a broken column, sixteen feet high, in white Sicilian marble, with drapery, and a medallion portrait of Dr. Kennion in relief. The inscription under the medallion is to be as follows:—"Sacred to the memory of George Kennion, M.D., F.R.C.P.; born November 18th, 1813; died June 30th, 1868. Erected by Public Subscription." The base of the monument is to consist of four blocks of darker marble, the colours in gradation, and of different sizes; the marble for which will be supplied from the quarries of Pateley Bridge. The foundation block will measure seven feet square, by one foot nine inches in depth. Subscriptions to the amount of £200 have already been paid; and the Committee state that more than £100 will still be required.

PRIZES OF THE ACADEMY OF SCIENCES.

THE following prizes were announced at the annual public meeting of the Academy of Sciences in Paris, as having been awarded for the year 1868:—*Montyon Prize for Statistics*: Dr. Berigny of Versailles; very honourable mention, Dr. Ebrard; honourable mention, M. Fayer, M. Charpillon, and M. Rambosson. *Prizes in Medicine and Surgery*: A prize of £100 to M. Villemin for his researches on the Inoculation of Tubercle; honourable mention, and £60, to M. Foltz, for his Clinical and Experimental Study of Capillary Embolism; the same to Dr. Austin Flint, for his Experimental Researches on a New Function of the Liver; and the same to M. Raciborski, for his Treatise on Menstruation. MM. Larcher, senior, Goubaux, Jaccoud, Grandry, Susini, and Hayem, also received honourable mention; and the works of MM. Stelling, Onimus, Legras, and Saint-Cyr, were referred to the Commission for 1869. Grants of £40 each were voted to M. Collin and M. Grehaut, to aid them in continuing their researches, the former on Trichinæ and Trichinosis, the latter on Respiration in Man; and £20 was voted to M. Labordette of Lisieux, in aid of his observations on the use of the Laryngeal Speculum in the Treatment of Asphyxia from Submersion. The *Bréant Prize*, for the discovery of the cure or of the causes of Cholera, has been open fifteen years, and the principal sum has amounted to £4,000, and the interest to £200. No essay of sufficient merit for

the prize has been sent in; but the Academy awarded, as encouragement, £100 to M. Lorain, for his Studies in Clinical Medicine and Pathological Physiology, and his Memoir of Cholera as observed at the St. Antoine Hospital; £60 to Dr. Brébant, for his Work on Epidemic Cholera considered as a Personal Morbid Affection; and £40 to M. Nicaise, for the observations made by him in the places to which he was sent on a Government mission in 1865-66. The *Barbier Prize*, for a valuable discovery in surgery, medicine, pharmacy, or botany, having a bearing on therapeutics, was divided between Dr. T. R. Fraser of Edinburgh, for his researches on the Calabar Bean; and M. Rabuteau, for his researches on the Physiological Action of certain Metallic Compounds. The *Godard Prize* was awarded to Professor Giambatista Ercolani of Bologna, for his researches on the Glandular Organs; and Dr. Dieu, of the Hôtel des Invalides, received honourable mention for his Micrographical Studies.

TESTIMONIAL TO MR. HECKSTALL SMITH.

AT a largely attended dinner, which closed an interesting and highly successful meeting of the South-Eastern Branch, at Reigate, on June 17th, a testimonial (the progress of which has been several times noticed in this JOURNAL) was presented to Mr. Heckstall Smith, of St. Mary Cray, by Dr. Sibson, President of the Council of the Association, in the name of the subscribers. It consists of a silver panel-gilt centre-piece, with glass dishes, and two dessert-stands. On it is the following inscription:—"Presented to Thomas Heckstall Smith, F.R.C.S., at the Twenty-fifth Anniversary of the South-Eastern Branch of the British Medical Association, by his Friends, in token of their admiration of his generous devotion to the best interests of his profession, and of his chivalrous defence of its honour. June, 1869."

LEGAL ACTION BETWEEN TWO MEDICAL MEN.

AN action, in which Dr. James Edwards was the plaintiff and Dr. Snow Beck the defendant, was put down for hearing in the Court of Queen's Bench on the 24th of June. When, however, the case was called, ten special jurors only could be found, and both parties declined to pray a *tales*. Mr. Digby Seymour, Q.C., stated that neither the plaintiff nor his witnesses were present, and he could not proceed without them. Mr. Sergeant Parry, for the defendant, said it was a case involving a medical discussion, and if not referred to a medical man, it ought to be tried by the highest intelligence procurable; and, further, if commenced, the trial would probably last four or five days. The Lord Chief Justice said the rule of the Court was that, if neither party would pray a *tales*, the case was put at the bottom of the list, and this trial would, therefore, come on about twelve months hence.

THE WATER-SUPPLY OF LONDON.

THE Report of the Royal Commissioners on the Water-supply of London has lately been issued; but copies are at present very scarce. They are generally satisfied with the quantity and quality of the present supply; but recommend that the management, instead of being distributed among several companies, should be consolidated under public control. The following are the advantages which in their opinion would arise.

"1. Such a measure affords the only effectual means of carrying out, in the metropolis, the system of constant supply. The great powers necessary for the purpose could only be confided to some public body who would be responsible for their proper application. The unity of action, and the extent of command that would be possessed by such a body, would enable the difficulties to be grappled with far more effectually than could be done by divided and private companies; the divisions of districts would disappear, and hence the store reservoirs and mains might be rearranged with a special view to the new system of distribution; and the inhabitants would be much more likely to fall in with rules and arrangements established by a public body having no independent interests, than with those made by commercial companies. 2. This measure would offer the best mode of ensuring a proper supply of water to the poor, which, as already stated, has been found impracticable under the present system. For a public control would involve compulsory rating, under which all difficulties of a financial nature,

which are the only ones really formidable, would necessarily disappear. 3. We believe that the consolidation of the various present interests would tend largely to economy. The fusion of the districts; the more convenient rearrangement of the distribution; the abolition of the several and widely dispersed centres of action; the uniformity of management; and many other beneficial effects of the measure, would all result in saving. 4. The transfer would tend to improve the quality of the supply. If the frequent examination and testing of the water, under public management, showed at any time that the filtration was inefficiently carried out, the public, instead of uselessly complaining, as heretofore, would have the remedy in their own hands. 5. The change of ownership would increase the probability of beneficial results from the measures already enacted, or any further ones to be enacted, for the purification of the Thames. 6. This measure would much facilitate the provision of water for all public and municipal purposes, and in particular for the important object of extinguishing fires."

THE NEW LAW COURTS.

A DEPUTATION from the Medical Club waited upon the Chancellor of the Exchequer in Downing Street, on Thursday, July 1st, by appointment, to impress upon him the necessity of considering the important sanitary questions involved in the erection of the proposed new Law Courts. The deputation was introduced by Dr. Brady, M.P., accompanied by Sir John Gray, M.P., and Dr. Lush, M.P., and consisted of the following gentlemen: Dr. Lory Marsh, Mr. Nunneley, F.R.C.S., Dr. Richardson, F.R.S., Dr. Stannus Hughes, Mr. Booth, Dr. Allen, Dr. Sabben, Dr. Rogers (Rainhill), Mr. C. J. Burgess, Mr. Field, Dr. Prosser James, and others. The deputation was courteously received by Mr. Lowe; and, on retiring, he promised to support the views of the deputation, and invited the Club to send a representative to appear before the Select Committee appointed by the House of Commons to consider the general subject.

THE MEDICAL COUNCIL.

THE session of the Medical Council for the present year commenced on Thursday last, July 1st, at the Royal College of Physicians. The warrant of the Privy Council, appointing Dr. Macrobin as representative of the Universities of Edinburgh and Aberdeen, was read; and Dr. Macrobin was introduced and took his seat. The President, Dr. Burrows, in opening the business, delivered an address. The Committees appointed last year, on Medical Education and on State Medicine, had worked incessantly and had collected a great deal of information, which, however, was of a very heterogeneous character. He had applied to the President of the Privy Council regarding the amendment of the Medical Act, and had been met with the usual courtesy and the usual plea of pressure of business. Subsequently, he had received a most important letter from the medical officer of the Privy Council, in which it was stated that the Government, if it took up the matter, must enter on the subject of the whole working of the Medical Act—especially in regard to the standard of professional qualification and the constitution of the Medical Council. He (the President) considered that those who were not aware of the state of medical education before 1868, could form but a very imperfect idea of the results which had been effected by the Medical Council in the improvement of medical education. The failures were due to the fact that the best teaching could not always make pupils into real students. He expressed a strong opinion, that the only efficient plan was to make the plan of education much less restricted, and the examinations thoroughly efficient. There should be an efficient conjoint examining board in each division of the United Kingdom. Some time was wasted in a discussion, raised by Sir Dominic Corrigan, as to whether the President had not been re-elected last year merely until the commencement of the present session. The President, Mr. Cæsar Hawkins, Dr. Andrew Wood, and Dr. Aquilla Smith, explained that the re-election of Dr. Burrows had been entirely unconditional. Afterwards, the ordinary committees were appointed; and various documents addressed to the Council were read and ordered to be entered on the minutes of the Council.

THE ARMY MEDICAL OFFICERS AT NETLEY.

ON Wednesday evening, the staff and regimental army medical officers at Netley Hospital entertained, at their mess-room, the Mayor of Southampton and the heads of the various government and civil departments at Southampton.

THE VOLUNTEER MEDICAL ARRANGEMENTS AT WIMBLEDON.

THERE are, as last year, two hospital marquees erected within the hospital enclosure at Wimbledon camp—one for the regular troops, and the other for volunteers. Surgeon-Major Wyatt is in charge, with Staff-Assistant-Surgeon Morgan to represent the army; but as yet, we understand, no volunteer medical officer has been appointed, nor has any official reply whatever been received by Dr. Murray to his letter which we published last week.

THE SUICIDE OF A FAMILY BY PRUSSIC ACID.

AT the inquest, held on Wednesday, on the body of Duggan and his family, evidence was adduced which showed apparently that the provisions of the Sale of Poisons Act had not been strictly carried out. Two bottles which had contained Scheele's hydrocyanic acid were found in the rooms of the deceased. A druggist stated that he had sold two bottles of the acid to a man who gave his name as Fearon; but that the deceased Duggan was not the man. He could not, however, inform the coroner and jury where Fearon resided; notwithstanding that the Act provides that every person to whom poison is sold shall enter his name and address in a book kept for the purpose.

THE CLUFF MEMORIAL.

It has been decided to devote the money collected for the memorial in London and Dublin amongst Mr. Cluff's old fellow-students, to found an exhibition, to be given alternately at Trinity College, Dublin, and University College, London. A small amount will be set aside for the erection of a memorial tablet in each institution.

THE ASYLUM FOR IDIOTS AT EARLSWOOD.

ON Monday last, the first stone of an additional block of buildings in connexion with the Asylum for Idiots at Earlswood was laid, with the usual ceremonies, in the presence of a very large concourse of people, by His Royal Highness the Prince of Wales, who was accompanied by the Princess. Four hundred purses, each containing five guineas, were laid on the stone as offerings for the benefit of the institution; and the Prince of Wales presented a cheque for one hundred guineas. The new wing, which is intended for the accommodation of three hundred new inmates, will, it is estimated, cost £12,000. A daily contemporary gives the following numerical statement of the intellectual condition of the inmates of the asylum.

"MALES.—*Speaking*: 64 can speak fairly; 36 can speak indistinctly; 30 can make a few sounds only; 16 do not speak at all. *Reading*: 20 can read fairly; 20 can read by spelling the words; 16 know nearly all the letters; 39 know a few letters; 51 know none of the letters. *Writing*: 22 can write sentences in copybooks; 20 can write easy words; 21 can make a few letters; 52 can make strokes and the letter O; 31 scribble or make no attempt. *Arithmetic*: 7 can do small sums by themselves—1 in fractions, 6 in the simple rules; 20 can add from blackboard, and count above one hundred; 20 can count above fifty; 18 can count above twenty-five; 53 can count a little; 28 not at all. "FEMALES.—*Speaking*: 48 speak fairly; 34 speak indistinctly; 28 only make sounds; 35 do not speak at all. *Writing*: 13 write in copybooks; 10 write copies on slates; 26 write letters on slates; 54 form strokes and O; 42 have no idea whatever. *Reading*: 15 read very fairly; 28 by spelling the words; 34 know some of the letters; 67 know none of the letters."

These results and other similar ones—which would not have been nearly approached, had the idiots been left to less care than that which has been bestowed on them—have been produced by the unwearied labours of the officers of the asylum, among whom the late superintendent, Dr. Langdon Down, holds a most honourable place. We trust that a generous response will be made to the appeal in behalf of

the institution, in which a good and noble work is being done, unclogged by any suspicion that the benefits are being wasted on the undeserving.

ELECTION OF COUNCILLORS IN THE ROYAL COLLEGE OF SURGEONS.
THE election of three members of Council took place on Thursday. The following is the number of votes, with plumpers, for each candidate:—

	VOTES.	PLUMPERS.
Solly	222	20
Erichsen	199	19
Gay	161	14
Lee	138	7
Erasmus Wilson	125	3
Adams	87	2

The elected candidates were, therefore, Mr. Solly, Mr. Erichsen, and Mr. Gay.

THE AUSTRIAN PHARMACOPŒIA.

IN the new Austrian *Pharmacopœia* the grain and ounce weights have been abandoned, and the decimal system (*grammes*, *centigrammes*, and *milligrammes*) adopted. A commission has been appointed by the Minister of the Interior, to bring this change into general use. A commission of physicians and apothecaries has also been formed, to settle the prices of the substances newly introduced into the *Pharmacopœia*.

THE MIDDLESEX HOSPITAL.

MR. HENRY ARNOTT has been appointed conjoint lecturer on Pathology with Dr. Cayley at the Middlesex Hospital Medical College. The lectureship in *Materia Medica* and Therapeutics becomes vacant, in consequence of the resignation of Dr. Henry Thompson.

CONVALESCENT HOME AT TUNBRIDGE WELLS.

IT is proposed to establish a Convalescent Home in Tunbridge Wells for poor children, more particularly in connexion with the East London Hospital, Ratcliffe Cross. As at present intended, any one sending a child will have to pay a sum of four shillings towards the weekly expenses; but it is hoped that, in the course of time, the patients may be received gratuitously. As is usual with such charities, a medical certificate will be required before the child can be admitted. If the necessary funds are forthcoming, the hospital will be opened this summer; but we understand that Mrs. Ladds, the benevolent promoter of the scheme, is unable to purchase or rent a desirable house until a larger sum is subscribed. We need hardly say a word of recommendation for an object so deserving. The benefit to be derived from a residence for a short time in the country, and especially in the case of children, is well known to every medical man.

LORD HENRY SEYMOUR'S BEQUEST TO THE "HOSPICES".

THIS long contested bequest was again brought under notice on Tuesday last, when a suit for the administration of Lord Henry Seymour's estate was heard in the Rolls' Court. It having been arranged between the French and English legatees that the charities of each capital should take an equal moiety, about thirty-one London charities out of one hundred and eighty were held by the Master of the Rolls, on a former occasion, to be entitled to the English moiety. Many of the excluded charities appealed; and the Lords Justices gave a new definition of the word "hospices", so that eighty-four charities were held entitled. Out of the French moiety, about £46,000 has already been paid to the managing bureau of Parisian charities; and it was now ordered that enough of the £64,000 Consols in England to produce a sum of £46,000 and upwards should be sold; and that out of it the costs of the litigation as to the charities entitled should be paid, and also £400 to each of the eighty-four charities, leaving a balance to be divided at some future time. The Court also decided that, under a gift à la Hospice des Lunatics de Londres, Bethlehem Hospital and St. Luke's were entitled in equal shares. It will be seen that the costs of the litigation apparently amount to about £12,000, or more than one-fourth of the £46,000 to be at present divided.

SCOTLAND.

THE CHAIR OF PATHOLOGY IN THE UNIVERSITY OF EDINBURGH.

WE believe it is pretty well understood that Dr. Henderson, Professor of Pathology in the University of Edinburgh, will shortly resign his chair, owing to continued bad health. Dr. Sanders and Dr. Grainger Stewart are, we understand, already in the field as candidates for the appointment.

THE MELROSE DISTRICT LUNATIC ASYLUM.

THE plans for the Melrose District Lunatic Asylum have been approved of. The site chosen is near the base of the Eldon Hills. The accommodation will be for 170 patients, exclusive of the infirmary.

THE NORTH OF SCOTLAND MEDICAL ASSOCIATION.

THE Council of the North of Scotland Medical Association met in Aberdeen on Saturday, June 19th; Dr. Ross, Elgin, in the chair. They resolved to admit the Deeside Medical Society as a branch of the general Association. It was agreed to hold the annual meeting in Aberdeen, on Saturday, the 7th of August next. Mr. George of Keith took occasion to show the Council an interesting case of deficiency of the development of the anterior part of the pelvis, resulting in almost complete inversion of the bladder.

THE FRENCH ACADEMY OF SCIENCES AND DR. FRASER OF EDINBURGH.

WE are glad to hear that one of the Barbier Prizes of the French Academy of Sciences has been awarded to Dr. Thomas R. Fraser, Assistant Professor of *Materia Medica* in the University of Edinburgh, for his well known and elaborate researches on the Calabar bean. It is only a few months since that Dr. Fraser and Professor Crum Brown jointly received the Macdougall-Brisbane Prize of the Royal Society of Edinburgh for a valuable paper on the connection between the physiological action and chemical constitution of bodies.

EDINBURGH UNIVERSITY ATHLETIC SPORTS.

THESE sports passed off with great success on Saturday the 19th and the following Monday, Tuesday, and Wednesday. The larger number of events, however, came off on Wednesday, when the attendance at Whitehouse Loan, Morningside, was large, and the meeting was enlivened by the presence of the band of the 42nd Highlanders. Sir Alexander Grant, Bart., Principal of the University, presented the prizes at the termination of the games.

LAYING THE FOUNDATION STONE OF DR. GRIERSON'S MUSEUM AT THORNHILL.

THE foundation stone of this museum, the site and building material for which were handsomely granted by His Grace the Duke of Buccleuch, was laid with Masonic honours on June 22nd. The programme consisted of a procession to and from the site, and a public dinner. The building will contain a residence for Dr. Grierson, as well as abundant room for displaying his collection of curiosities in natural history, antiquities, art, and science. In one of the documents deposited in the foundation stone is the following:—"The building was erected by Thomas Boyle Grierson from money saved by him while in the practice of medicine in the village of Thornhill, and the surrounding district; and the collections in the museum were formed by him."

THE UNIVERSITY OF EDINBURGH AND FEMALE MEDICAL STUDENTS.

AN appeal has again been made to the Senatus Academicus of the University of Edinburgh by several ladies, praying that it would recommend the University Court to admit women to the matriculation examination for medical students, and to the usual examinations for degrees. It will be remembered that, seven years ago, Miss Garrett failed in her application for permission to study in Edinburgh; and that, only a few months ago, Miss Jex-Blake met with a similar repulse.

at the hands of the University Court. In the latter case, however, a large majority in the Senatus were in favour of Miss Blake's admission to the several summer courses; but the cry against the impropriety of mixed classes gained the day. Now, however, the petitioners propose to pay the professors liberally to lecture to them separately; so that we see no other course open to the Senatus but to recommend that the University shall be opened on such terms to women. Sooner or later, our Universities must open their gates to females. It would, therefore, be an act of grace on the part of the University, and worthy of Scotland, advanced as it is in liberal opinions on education, to lead the way, and afford suitable opportunities of study for ladies entering the profession.

IRELAND.

RATHDRUM UNION.

THE Board of Guardians of the Rathdrum Union, at their last meeting, increased the salary of Dr. Hatch, medical officer of the Anamoe Dispensary District, from £90 to £100 per annum; and passed the following resolution with reference to the late Dr. Manning, medical officer to the workhouse:—"That the Guardians desire to express their deep sorrow on account of the death of their medical officer, the late Dr. Manning, who, for a period of twenty-seven years, discharged the duties of his office under the Board with a zeal, efficiency, and success, rarely equalled; and it is hereby resolved that the deep sympathy and condolence of the Guardians be conveyed to his bereaved widow and family."

THE DUBLIN HOSPITALS.

DR. MAPOTHER'S paper on the Dublin Hospitals, of which we gave an abstract last week, caused an animated discussion, which lasted through two evenings.—Dr. STEWART thought that something might be said both for and against the purchase system. It was not proved that this system prevailed at the House of Industry and the Meath Hospital.—Mr. JAMES HAUGHTON, a governor of Cork Street Fever Hospital, said that the system which prevailed there was to appoint the physicians for periods of seven years only.—Dr. EVORY KENNEDY contended that the success of hospitals was best secured by the appointment of young men, provided they had experience proportioned to their age.—Dr. O'LEARY spoke against the purchase system.—The Rev. Dr. HAUGHTON did not object to the purchase system in an institution where a man took a share; but it was to be condemned where jobbing was carried on without regard to the charitable objects of the institution.—After some remarks from Dr. R. McDonnell, Dr. Henry Kennedy, and Mr. H. D. Hutton, Dr. JACOB said that the medical officers of the Dublin Hospitals were now holding the foremost rank in the profession. Where the purchase system was recognised, the Governors were not restricted in their choice of candidates further than by the fact that money was paid for the position; but they took care to elect properly qualified men.—On the motion of Dr. Shaw, seconded by Dr. Murray, the debate was now adjourned.—It was resumed on Tuesday last; when Dr. SHAW, F.T.C.D., condemned the purchase system, and stated that the Legislature was called on to interfere.—Sir D. CORRIGAN thought the payment for an hospital place better than the canvassing of voters, who could know nothing of the candidate's merits; but he condemned election by medical officers.—Mr. WHARTON was proceeding to read a written defence of the Meath Hospital, but, being informed by the Chairman that it was not usual to read replies in that Society, he said he would seek publication in the daily journals, and retired from the meeting.—Mr. McDONNELL, Q.C., Mr. ROSS, and other non-medical speakers, condemned the purchase system, which Drs. MORGAN and McDOWEL defended.—In reply, Dr. MAPOTIER expressed his great regret that Dr. Wharton had not been heard; but, so far, he had not heard any denial of the statements he had made in his paper. He asserted that, so far from a desire to condemn his own profession, he had brought the matter forward to procure the advancement by merit of men who were too poor or too scrupulous to buy surgeoncies. He had on several occasions written against

the system of purchase, but, no amendment following, he was forced to bring public opinion to bear on the subject.—We sincerely trust that the matter will not be allowed to rest here, but that steps will be speedily taken, in the interests of the profession and the public, to sweep away every vestige of a system which is generally condemned out of Dublin, and which places many distinguished members of our profession in a false position.

ROYAL COLLEGE OF PHYSICIANS: THE BALY MEDAL.

THE Annual Oration in honour of Harvey was delivered at the Royal College of Physicians, on Saturday last, by Dr. Owen Rees, F.R.S. At the conclusion of the oration, the President, Dr. Alderson, said:—"The duty which I have now to perform being altogether new, it is proposed that I should make a short statement of the circumstances relating to the endowment of the Baly medal, the first presentation of which we have now to make. In June, 1866, the College received a communication from one of its members, Dr. Frederic Daniel Dyster, of Tenby, to the effect that he had a great desire to make some lasting memorial of his friend, the late Dr. William Baly. The communication was made to the College by one of our most respected Fellows, Dr. Martin, who forwarded a letter from Dr. Dyster in explanation of his wishes. These wishes were that the memorial should take the form of a medal, and he chose physiology, as most nearly connected with the practical work of Dr. Baly's life, to be the subject of the work for which the medal should be awarded. Dr. Dyster bestowed £400 for the purpose, and left the award in the hands of the College of Physicians, with power to present it annually, or biennially, as might seem desirable. It was decided by the College that it should be awarded biennially; and on the recommendation of the Master of the Mint, the best of our living artists, Mr. Wyon, has been entrusted with the work of art. It is proper to mention that, in stating his wishes, Dr. Dyster, the founder, especially mentioned that in physiological science he should give precedence to the topic of development. The Council of the College, anxious fully to carry out the intentions, requested further instructions from the founder in this particular, and the answer expressed his desire that the word should be taken in its widest sense; and he wished to exclude no important contributions to natural science that might be based on profound physiological researches, although the works might not with rigid verbal accuracy be called physiological. In the name of the College, I must now request that Mr. Owen will do me the favour to come forward. It is my pleasing duty to announce to you that this College has awarded to you the Baly medal, endowed by Dr. Dyster. It is usual on such occasions, whilst congratulating the medalist, to enumerate the services which he has rendered to the cause of science, and to name the works which have especially marked him as the fittest person to receive the honour. I consider, however, that it would be indivisible for me to select any instances of your attainments. Your widely acknowledged reputation is such as to make it wholly irrelevant to specify your various contributions to the advancement of scientific discovery, based as they are (I here quote the words used by the founder whilst explaining the general scope of his intentions) 'based on the most profound physiological researches.'"

Professor Owen replied as follows:—"If anything could add to the gratification I feel in receiving this mark of honour from the highest representative body of the medical profession, it is its association with the memory of one of its most amiable and accomplished members, of one whom I have never ceased to regret as a most valued and trusted friend. To say that the announcement with which I was this morning favoured by you, sir, was wholly unexpected, will not surprise; and I need not add that it was as gratifying as unexpected. Whatever value of a lasting character may attach itself to my life's labours (and I do not flatter myself as to the durable amount), I can with truth aver that any result tending to the advancement or improvement of the practical applications of my old and original profession, as a medical man, has ever been the return for anatomical or physiological labour which has been most pleasurable, and most valued by me. And there is no part of my scientific life that I look back to with more unmixed gratification than that devoted to the elucidation of the labours of John Hunter. To receive this mark of your approval adds all that I could wish, and more than I ever presumed to expect. I return you, sir, and the ancient and learned body over which you preside, my most respectful and grateful thanks."

ASSOCIATION INTELLIGENCE.

BRITISH MEDICAL ASSOCIATION:
ANNUAL MEETING.

THE Thirty-seventh Annual Meeting of the British Medical Association will be held in Leeds, on Tuesday, Wednesday, Thursday, and Friday, the 27th, 28th, 29th, and 30th days of July next.

President—H. W. ACLAND, M.D., LL.D., F.R.S., Regius Professor of Medicine in the University of Oxford.

President-Elect—CHARLES CHADWICK, M.D., F.R.C.P., Senior Physician to the Leeds Infirmary.

An *Address in Medicine* will be delivered by Sir WILLIAM JENNER, Bart., M.D., F.R.S., Physician in Ordinary to Her Majesty, and Physician to University College Hospital.

An *Address in Surgery* will be delivered by THOMAS NUNNELEY, Esq., F.R.C.S., Surgeon to the Leeds Infirmary.

An *Address in Midwifery* will be delivered by T. E. BEATTY, B.A., M.D., Dublin.

The business of the meeting will be conducted under five sections:

Section A. MEDICINE.—*Presidents*, W. T. Gairdner, M.D. *Vice-Presidents*, J. T. Banks, M.D.; and J. D. Heaton, M.D. *Secretaries*, T. Clifford Allbutt, M.D., 38, Park Square, Leeds; H. Charlton Bastian, M.D., F.R.S., 81, Avenue Road, London, N.W.

Section B. SURGERY.—*President*, William Hey, Esq. *Vice-Presidents*—George Southam, Esq.; and W. Stokes, jun., M.D. *Secretaries*, W. Fairlie Clarke, M.B., 1, Curzon Street, Mayfair, London, W.; and T. R. Jessop, Esq., 32, Park Square, Leeds.

Section C. MIDWIFERY.—*President*, Arthur Farre, M.D., F.R.S. *Vice-Presidents*, S. Berry, Esq.; and W. O. Priestley, M.D. *Secretaries*, G. H. Kidd, M.D., 17, Merrion Square East, Dublin; and J. Thorburn, M.D., 333, Brighton Place, Oxford Street, Manchester.

Section D. PHYSIOLOGY.—*President*, J. Hughes Bennett, M.D., F.R.S. *Vice-Presidents*, Lionel S. Beale, M.B., F.R.S.; and A. T. H. Waters, M.D. *Secretaries*, E. Chapman, Esq., M.A., Frewen Hall, Oxford; H. Power, M.B., 45, Seymour Street, Euston Square, London, W.

Section E. PUBLIC MEDICINE.—*President*, W. Farr, M.D., D.C.L., F.R.S. *Vice-Presidents*, E. D. Mapother, M.D.; and A. P. Stewart, M.D. *Secretaries*, G. H. Philipson, M.D., Saville Row, Newcastle-on-Tyne; and A. Wiltshire, M.D., 8, Richmond Terrace, Whitehall, S.W.

TUESDAY, July 27th.

1 P.M.—MEETING OF COMMITTEE OF COUNCIL—Town Hall.

3 P.M.—MEETING OF GENERAL COUNCIL—Town Hall.

8 P.M.—FIRST GENERAL MEETING—Lecture Room, Philosophical Hall.—The retiring President, Professor ACLAND, M.D., F.R.S., will resign his office.—The new President, Dr. CHADWICK, will deliver his Inaugural Address.—The Council's Report will be read, and discussion taken thereon.—Election of General Secretary.—Election of Auditors.—The Report of the Medical Benevolent Fund will be read.—Presentation of Hastings Medal.

WEDNESDAY, July 28th.

8.30 A.M.—PUBLIC BREAKFAST of the Association—Town Hall.

9.30 A.M.—MEETING OF NEW COUNCIL—Town Hall.—Special business: To elect new President of the Council.

11 A.M.—SECOND GENERAL MEETING—Lecture Room, Philosophical Hall.—Appoint Place of Meeting in 1870 and President-elect.

12 A.M.—Address in Medicine, by Sir W. JENNER, Bart., M.D.

2 P.M.—MEETINGS OF SECTIONS—Town Hall.—Adjourn at 5.30.

8.30 P.M.—President's *Soirée*—Victoria Hall, Town Hall.

THURSDAY, July 29th.

10 A.M.—THIRD GENERAL MEETING.—Town Hall.—Reports of Committees—Captain Galton's paper on Hospital Construction, with discussion.

2 P.M.—Address in Midwifery, by Dr. BEATTY—Lecture Room, Philosophical Hall.

3 P.M.—MEETING OF SECTIONS—Town Hall.—Adjourn at 5.30.

6 P.M.—PUBLIC DINNER of the Association—Victoria Hall, Town Hall.

FRIDAY, July 30th.

10 A.M.—FOURTH GENERAL MEETING.—Address in Surgery, by THOMAS NUNNELEY, Esq., F.R.C.S.—Lecture Room, Philosophical Hall.

11 A.M.—MEETINGS OF SECTIONS—Town Hall.

3.30 P.M.—CONCLUDING GENERAL MEETING—Town Hall.

Papers.—Gentlemen desirous of reading papers, cases, or any other communications, are requested to give notice of the same to the General Secretary, at their earliest convenience. All papers must be in the hands of the General Secretary, or of one of the Secretaries of the Sections to which the paper belongs, on or before Saturday, July 24th.

Reception Room.—A room will be opened in the Philosophical Hall as a reception room on Tuesday, July 27th, at 10 A.M., and on the following days at 8 A.M., for the issue of tickets to members, and for supplying lists and prices of lodgings, and other information.

Members and others who require information with respect to the meeting are requested to make application in this room.

Places of Meeting.—All Council, General, and Sectional Meetings, will be held in the Town Hall, by the kind permission of the Mayor of Leeds.

The General Addresses will be delivered in the Lecture Theatre of the Philosophical Hall.

The Annual Public Dinner and the President's *soirée* will be held in the Victoria Hall, Town Hall.

The Annual Museum and the Annual Library, together with the Exhibition of Surgical Instruments, will be held in the Leeds School of Medicine, in Park Street, close to the Infirmary.

The General Post-office and the several Telegraph Offices are in Park Row, close to the reception room.

Gentlemen intending to visit Leeds during the Meeting are requested to send their names *without delay* to Dr. Eddison, Park Square, Leeds.

Annual Museum: Notice to Exhibitors.—Rooms will be provided at the School of Medicine for the Museum, in which it is intended to exhibit all new objects of interest to the profession, such as: 1. New Instruments and Appliances in Medicine and Surgery. 2. New Drugs and new Preparations. 3. New Books—English and Foreign. 4. Pathological Preparations. 5. Photographs, Drawings, Casts, and Models of Pathological Specimens. 6. Models of New Inventions relating to Public Health, etc. 7. New Preparations of Food. The Museum will be opened on Tuesday Morning the 27th, and will remain open until the Evening of Friday the 30th. All objects intended for exhibition must be addressed "*Care of Dr. Eddison, the School of Medicine, Leeds*:" and be delivered on or before Monday the 19th, and must be removed from the Museum on Saturday the 31st July, or not later than Monday the 2nd of August. No object can be exhibited unless it is accompanied by a written or printed description, and a short reference for insertion in the Catalogue. Intending Exhibitors are requested to apply to Dr. Eddison for any information they require, and to inform him as soon as possible what they intend to exhibit, and how much space they are likely to need. In case any members prefer bringing preparations with them, they are particularly requested to forward short descriptions beforehand, in order that they may appear in the Catalogue. Adequate space and the necessary fittings for properly exhibiting the objects sent will be provided; but all expenses connected with packing and carriage, and all risk from injury or loss, must be borne by the Exhibitors.

Notices of Motion.—The following notices have been given.

Dr. DAVEY: To alter Law VIII, by substituting the word "twenty" for "ten" members, to be elected members of the Committee of Council.

Mr. GAMGEE: That a Committee be appointed to inquire into the income and expenditure of the British Medical Association, with a view to ascertain if its resources admit of being more efficiently employed, than they now are, for the advancement of science and for the promotion of the material and social interests of the medical profession.

The Rev. Dr. BELL has given the following notices.

1. To move that, if the first general Meeting for business be held in the evening, it be adjourned at ten o'clock, if the business be not concluded by that hour.

2. To call attention to the "Financial Statement" given in the JOURNAL of 17th April: (a) in relation to the items of expenditure and income in the publication of the JOURNAL; (b) the stipends of the officers, especially that of the General Secretary.

3. To ask, in reference to the Meeting of the Committee of Council of 9th June, 1869, second resolution (a) whether the cheque books of the Local Secretaries, as well as of the General Secretary, be included in the audit; (b) in whose name the General Secretary keeps the banking account of subscriptions received by him.

4. To move that the Ten (on Twenty, according to Dr. Davey's notice) elected members of the Committee of Council, be not eligible for re-election, after serving two (or three) years, in greater number than one-half, until they have been non-members for a like period.*

* This is an alteration of one of the Laws of the Association, and therefore cannot be brought forward without giving two months' notice, in accordance with Law 21:—"Any member wishing to propose a new law, or an alteration of an existing law,

5. To draw attention to the propriety of not electing an Editor of the JOURNAL on the eve of the Annual General Meeting, and making arrangements for alterations in the JOURNAL;† also to the advisability of nominating at the previous General Annual Meeting the Gentlemen who are to read Addresses at the next Annual Meeting.

6. To suggest that the Notices of motion for the General Annual Meeting be sent direct to the Editor instead of through the General Secretary.

Papers.—The following Papers have been promised:—

S. Hey, F.R.C.S. On the Beneficial Results of Undesigned and Accidental Hæmorrhage in certain cases.

P. C. Little, F.R.C.S.I. On Railway and other Accidents; with Cases and Observations.

E. Gaylor, L.R.C.P. On the Professional and Commercial Abuses of the Club System.

Lawson Tait, L.R.C.P.Ed. On Fungous Tumour of the Dura Mater. On Idio-Muscular Contraction.

J. Braxton Hicks, M.D., F.R.S. On the Use of the Intra-Uterine Douche in Offensive Lochia, as a rule of practice. Cases showing the use of Perchloride of Iron in Flooding.

T. P. Heslop, M.D. How do the Sick Children of the Poor obtain Medical Attendance?

R. Hibbert Taylor, M.D. A case of Poisoning with Extract of Belladonna; with detailed account of *post mortem* appearance.

Wm. Squire, L.R.C.P. On the Temperature-Variations occasioned by Vaccination, and its effects upon the Health of Infants.

A. S. Myrtle, M.D. On Hydro-Therapeutics—the resources of Harrogate specially considered.

Vincent Jackson, M.R.C.S. On the Hypodermic Administration of Alcoholic Stimulants.

John Birkett, F.R.C.S. On the Causes of Death after Amputations of the Limbs in Hospitals.

C. B. Fox, M.D. Remarks on Ear-Cough, and its mode of production.

J. M. Fothergill, M.D. On Uræmic Diarrhœa.

* * * No Paper shall exceed *twenty* minutes in the reading, and all subsequent speakers must not exceed *ten* minutes.

T. WATKIN WILLIAMS, *General Secretary*.

13, Newhall Street, Birmingham, June 24th, 1869.

NORTH WALES BRANCH.

THE annual meeting of the above Branch will be held at the Royal Hotel, Rhyl, on Tuesday, July 6th, at 1.16 P.M., under the presidency of W. MAUGHAM, M.D., Carnarvon.

Members of the Council of the Branch will meet at 12.30 P.M.

Dinner at 4 o'clock. Tickets, including wine, etc., 12s. each. To be had at the bar of the above hotel.

Gentlemen who purpose reading or communicating papers and cases, and who intend dining, will please to give an early intimation to

Beaumaris, June 1869. D. KENT JONES, *Hon. Sec.*

MIDLAND BRANCH.

THE annual meeting of the above Branch will be held in the Board Room of the Leicester Infirmary, on Thursday, July 8th, at 2 o'clock; T. W. BENFIELD, Esq., President, in the Chair.

Dinner at the Bell Hotel at 5.30 P.M. Tickets 7s. 6d. each, exclusive of wine.

Gentlemen intending to read papers, are requested to communicate, without delay, with

Leicester, June 1869. JOHN SLOANE, M.D., *Honorary Secretary*.

METROPOLITAN COUNTIES BRANCH.

THE seventeenth annual meeting of the above Branch will be held at the Star and Garter Hotel, Richmond, on Monday, July 12th, at 3 o'clock P.M.; JOHN E. ERICHSEN, Esq., in the Chair.

Dinner at the Hotel at 5.30 P.M. Tickets (exclusive of wine), 10s. 6d. each.

A. P. STEWART, M.D. } *Honorary Secretaries*.
ALEXANDER HENRY, M.D. }

75, Grosvenor Street, June 1869.

must send notice to the Secretary at least *two* months previous to the annual meeting, and specify the change proposed. The Secretary shall immediately cause such notice to be published in the JOURNAL, which publication shall be repeated three times at least, and it shall be announced in the Report of the Council.—T. W. W.

† This is already provided for by a resolution of the Committee of Council, passed at their meeting on June 9th. The election of Editor will take place after the Leeds meeting, at a time to be there announced.—T. W. W.

BATH AND BRISTOL BRANCH.

THE annual meeting of the above Branch will be held at the Philosophical Institution, Park Street, Bristol, on Thursday, July 8th, 1869, at 4.45 P.M.; when R. N. STONE, Esq., will resign the Chair to C. H. COLLINS, Esq., President-elect, who will deliver an address.

The dinner will be held at the Royal Hotel, College Green, Bristol, at 6.30 P.M. Dinner tickets, including ice and dessert, 7s. 6d. each. Wines at moderate charges.

It would help the arrangements at the Bristol Annual Meeting if those gentlemen who intend to be present at the Annual Meeting of the Association in Leeds would kindly inform the Secretaries.

The Bristol Secretary particularly requests that those members who intend to be present at the dinner, will send him their names before Monday, July 5th, in order that the necessary arrangements may be completed.

R. S. FOWLER, } *Honorary Secretaries*.
CHARLES STEELE, }

READING BRANCH.

THE annual meeting of the above Branch will be held in the Town Hall, Reading, on Wednesday, July 14th, at 4.45 P.M.

GEORGE MAY, jun., *Honorary Secretary*.

Castle Street, Reading, June 1869.

SOUTH EASTERN BRANCH: ANNUAL MEETING.

THE twenty-fifth annual meeting of the South Eastern Branch was held at the Public Hall, Reigate, on Thursday, June 17th. There was a large attendance of members and friends.

Mr. CORDY BURROWS was called to the chair. He said—In the absence of our President, Mr. Ticehurst, I have been requested, as one of the former presidents of the Branch, to commence the business of the day, and to introduce to you our President elect, Dr. Holman. We are met to-day in a most sacred place, so far as this Branch of the Association is concerned. Reigate is rendered sacred in our feelings and affections inasmuch as the late Thomas Martin, who was the originator and founder of this Branch of the Association, lived here. He acted as its secretary for many years, and infused into it those feelings of love and affection, and that earnest desire to promote the success of the medical profession, which will ever endear him to our memory. He was followed by his son, Mr. Peter Martin. The mantle fell from the father to the son; and that which the father had carried out so successfully, the son carried on for the progress of the profession which we all have so much at heart, until the Almighty took him, in mid-day of life, from us. The mantle fell again from Peter Martin to the gentleman who acted equally well to us in the same capacity, and who, by his urbanity and ability, has endeared himself to us. And, as a reward for those services, we have given to him the highest honour which we have to give, the Presidency of this Branch of the British Medical Association. We have done so because he has well merited the honour, and because we know that to the end of his days nothing will be left undone by him to promote the success of this great Association—of this Branch of it particularly—and the happiness of every member of it. I have very great pleasure, Dr. Holman, in introducing you as our President to-day.

Dr. HOLMAN, who was much cheered, then delivered an address. He commenced by thanking the Branch for having decided on holding their twenty-fifth anniversary in Reigate, the home of the Martins, and for having elected him President. After a few other preliminary observations, he referred to the social condition of the profession before the establishment of the British Medical Association, and to its present state; and then proceeded to comment on some of the more prominent topics connected with the Association. First, as to the JOURNAL, he spoke in terms of high praise regarding its present condition; but thought that “exactness as we do, and justly, so good a JOURNAL, we are getting too much for too little money..... I do not imagine that the idea of increase of subscription will be acceptable or palatable at present; but, reflecting as we ought this day to do, on the condition of our Association, it has appeared to me that we ought to ask ourselves: Are we not obtaining more than we ought to receive for the amount subscribed? and again, Are we not leaving things undone, that ought to be done, for lack of funds?” He recommended that the addresses read at the annual meeting of the Association should, with a carefully made selection of the papers read in the sections, be printed in a separate volume, instead of appearing in the JOURNAL. The President next spoke of the District meetings, the working of which in the South Eastern Branch had been most successful. Returning then to the subject of the Association finances, he recommended that the annual subscription should be twenty-five or twenty-six shillings in all cases; and that from

this the local treasurers might deduct a capitation allowance for their respective Branches. In speaking of education, he said that the opinion of the majority of the Branch was certainly in favour of a well-conducted apprenticeship, or residence with a medical man, where the daily routine of practice would be observed; but, prior to this, a broad elementary basis was needed. The purely scientific parts of primary professional education—such as chemistry, botany, physiology, and natural philosophy—ought to form a compulsory part of the general secondary course of study. He was of opinion, that ere long the “one-portal” system of entrance into the profession would be adopted; taste, circumstance, and opportunity, deciding the particular sphere of practice to be followed. In preliminary education, also, there should be a more thorough elementary teaching of the ancient languages than now exists. With regard to the Medical Council, he considered that its constitution ought to be amended and its powers increased. Dr. Holman also commented on sanitary administration, Poor-law medical service, etc., and concluded with some remarks on his long connection with the Branch, and the circumstances which had obliged him to resign the office of secretary, which had been held in succession by Mr. Thomas Martin, Mr. Peter Martin, and himself, for twenty-five years. “In resigning”, he said, “I felt almost recreant to a sacred trust bequeathed to me by the Martins; but I am assured that, could they revisit this meeting to-day, they would approve the step I took last year. And, if it be permitted to the spirits of ‘just men made perfect’ to look down on what is going on below, I think that both father and son would not be dissatisfied to see such a gathering to witness the growth of that Society on which they bestowed so many an anxious thought, or many an hour snatched from needful repose. If, then, you would wish to make some return for the benefits they secured to you; if you would requite in some measure the sacrifices of health, of time, of purse, which they so freely made, go home and urge one and all of your friends to join our ranks, and thereby to assist in perpetuating the good work so well and so worthily begun.”

Mr. ALBERT NAPPER (Cranleigh) proposed a vote of thanks to the President for his admirable address. There were one or two points to which he would draw attention. With reference to the JOURNAL, though it had of late vastly improved in every respect, he thought they must all have felt that the President's remarks were perfectly reasonable. The Association was, as it were, outgrowing the JOURNAL, which was cramped for room. The reports of provincial meetings suffered in consequence of the want of space, for the JOURNAL was now principally taken up by the reports from London, Edinburgh, and Dublin. That was not the chief intention of the promoters of the JOURNAL; and to remedy the defect, they should increase the size of the JOURNAL, and meet the cost by an increased subscription. Another point to which he would allude was that of the education of young practitioners. He had found many men holding office, and he was surprised that they should know so little of the practice generally in the treatment of disease. Their diagnosis was very bad; and as to prescribing, they seemed to have no knowledge of it at all; but many of them became good practitioners in a short time when having the benefit of practical teaching. He could not help thinking that those young men who went into practice without having been with a medical practitioner for some time, must do so under much disadvantage. He was glad to hear the chairman's remarks as to Poor-law medical officers. They could hope for no justice so long as they were appointed and paid by the guardians; for while the appointment was with the guardians, the medical officers must be their servants. Mr. Griffin had brought the matter before Parliament, but he thought that he carried his proposition too far. If they got their appointments out of the hands of the guardians, and left them to the Government, then they would get what they wanted. The Poor-law medical officers should also be *ex officio* members of the boards of guardians.

Mr. HECKSTALL SMITH (St. Mary Cray) seconded the proposal. That the address was an able one, he was sure each one would be ready to admit; it was very able indeed. It was not necessary for him to go over the ground touched on by Mr. Napper; but there was one subject on which he had thought much, and that was the raising and educating of young practitioners under the present system. There was a radical wrong in it, and he was sure it arose from the students not having a proper clinical teaching. For years the Association had dwelt on the defects of the preliminary education of young practitioners. Twenty-seven years ago he addressed a meeting at the Hanover Square Rooms on the subject; and, thanks to the Apothecaries' Company, there had been some improvement since. The College of Surgeons must, indeed, do something if they wished to recover their position of respect in the advancement of medical science. They had held back as long as they could, but at length they had reluctantly given them some improvement. He concurred with the President in his remarks

on education. With regard to clinical instruction, there was some radical defect, and he thought it had arisen from the abandonment of the much maligned apprenticeships. No doubt the apprenticeships were too long; but if, instead of making the term *five* years, they made it *two*, to commence after the preliminary examination, he was perfectly satisfied a sound basis would be given for clinical studies. If this course were not to be revived, then the hospital system must be remodelled, and daily tuition enforced. It was impossible for a man to carry away all the lectures he heard, in his head; and if attention to cases at the bedside were not carried out, they must insist upon systematic clinical instruction in the hospital. He would say one word as to his hearty feeling of pleasure that the successor of the Martins, having so long given them his services as secretary, had consented to their holding the first meeting of the Branch here, after his secession from that office, that he might become the President. There was not a man in the whole Branch who did not honour the successor to the Martins, and who did not honour Reigate also, because it had held three men on whom the mantle had successively fallen worthily, and who had been the mainstay of this great branch.

The motion was carried by acclamation.

The PRESIDENT acknowledged the compliment, observing that he was aware his paper was not up to the mark of some of his predecessors; but, as he told them, he had done the best he could in the time which he could spare from his ordinary labours.

Report of Council.—Mr. HODGSON, the Honorary Secretary, then read the Report, as follows:—

“In making our annual report, we feel it alike a filial duty and a pleasure, in the first place, to draw attention to the very prolific condition of our parent; the Association having increased its members, during the last year or two, beyond all precedent. Its financial state is also more satisfactory than has been the case for many years past; the treasurer's accounts for the year 1868, as published in the JOURNAL of April 17th, 1869, representing the existence of a balance in hand of £201 : 0 : 9. We could much wish that the balance were such as to admit of the scientific objects of the Association being prosecuted more thoroughly; and possibly, if a slight increase in the amount of each annual subscription were made, and fewer of the subscriptions were allowed to get into arrear than seems the case at present, that desirable end might be brought about.

“The annual meeting at Oxford last August was, as you all know, a great success. The annual meeting for this year is arranged to be held in the last week of July, at the busy town of Leeds, where the din and whirl of machinery will offer an attraction and a great contrast to the quiet calm that surrounded us in the Oxford Colleges during vacation. Our Yorkshire brethren are, we hear, vying with each other in preparing a warm welcome for the Association; and for those who are interested in modern improvements in hospital construction, the new hospital recently opened will offer especial interest, as no expense has been spared by the managers, who even commissioned the architect (Mr. Gilbert Scott), and Dr. Chadwick, our President-Elect, to visit the principal hospitals in Europe, to secure this being everything that the best knowledge of the day could make it.

“Whilst on the subject of hospitals, we cannot refrain from expressing a hope that the stir which has recently been made by the *Times*, and by the late editor of our JOURNAL, to expose their great abuses, will, in time, lead to wholesome reform. Our own opinion is, that *too many* free general hospitals exist; and *far too many* special ones; that wherever a general hospital is really required, it should be made as general as possible, providing within its walls for the treatment of almost every medical and surgical case; and that the staff should be large accordingly. This would do away with a considerable number of the objectionable special hospitals. The sick paupers should be provided for by efficient Poor-law arrangements. And, lastly, to provide for the wants of that large class who are just too well off to be fit objects for a free hospital or dispensary, the principles of the so-called self-supporting dispensaries and cottage hospitals should be adopted, and developed to a much larger extent than at present; the medical officers to which should invariably be remunerated for their services.

“The Subcommittee, appointed at Oxford to consider the subject of the direct representation of the profession in the Medical Council, have drawn up an able address on the subject, together with a form of petition to Parliament. These will be submitted at this meeting for your approval and adoption, and for your authority to our President to sign it in behalf of the members of the Branch. Another form of petition will also be submitted to you, for the like purpose, on the subject of secondary education—a copy of the one drawn up by the General Medical Council, and adopted by the Oxford meeting of this Association. The Parliamentary Committee of the Association has been most

zealous in watching the occurrences of the year, and the various bills bearing on the profession that have been proposed during the session, and in endeavouring to promote such alterations in the same as seemed desirable. The best thanks of the whole Association, and indeed of the entire profession, are due to this Parliamentary Committee, and especially to their active secretaries, Drs. Stewart and Gibbon.

"And now, to speak of our own Branch in particular, we are glad to be able to do so most favourably. The number of our members is steadily on the increase. Our printed list of 1868 contained the names of 258 members. Since then, we have enrolled—in Kent, 13; in Middlesex, 3; in Surrey, 13; in Sussex, 19—48 new members. Six members—Mr. Allwork of Maidstone, Dr. Barker of Worthing, Mr. Bottomley of Croydon, Mr. Gregory of Leigh, Dr. Lowry of Town Malling, and Mr. Sankey of Wingham—have died; 7 have withdrawn; 2 have left the district; and 4 have allowed their subscriptions to lapse. The number of members is now 287, making an increase on our present list (as compared with last year's) of 29. Three of the six deceased gentlemen (Mr. Bottomley, Mr. Gregory, and Mr. Sankey) were old members of the Branch. Mr. Bottomley had occupied the Presidential chair, and in early life was active in promoting reforms in the profession.

Our district Branches in East Kent, West Kent, East Surrey, and West Surrey, continue in active operation, and thereby contribute to develop some of the most important interests of the Association. To the local secretaries, Dr. Frederick J. Brown of Rochester, Dr. Bowles of Folkestone, Dr. Lanchester of Croydon, and Dr. Morton of Guildford, our warmest thanks are due.

"The Executive Council has just authorised the formation of similar district meetings in East Sussex, which they have reason to believe will be welcome to the members of the Branch resident therein (including Tunbridge Wells). Mr. Frederick C. Mudd of Uckfield has kindly undertaken to act as local secretary.

"The present annual meeting, from the several facts of its being the twenty-fifth anniversary of the Branch, from its being held in the town in which its venerable founder lived, and from the unusually intimate acquaintance with all the affairs of the Association and of the Branch possessed by the President, bids fair (we believe) to be remarkable in the history of the Branch."

Dr. ARMSTRONG (Gravesend), in moving the adoption of the report, said, that a large number of persons availed themselves of the gratuitous assistance of the hospitals and dispensaries, who were well able to pay, there could be no doubt, and he thought some plan should be devised by the aid of this Society to reform the matter. As to the advantage of the district meetings of this Branch, he could speak with confidence, because he was one of the originators of the West Kent District; and he could promise them all that by so meeting together, and giving their experiences one to another, it would not only afford them much pleasure, but promote their knowledge also. He urged those who were living in neighbourhoods where no district association existed, to form one at once. He moved the adoption of the report.

Mr. FLAXMAN SPURRELL (Belvedere) seconded the motion, which was carried.

Petitions.—The SECRETARY then produced a copy of the petition to Parliament, which, the chairman stated, had been drawn up by Dr. Sibson, Dr. Waters, and Mr. Watkin Williams, and had already appeared in the JOURNAL, for the Direct Representation of the Medical Profession in the General Medical Council.

Dr. WESTALL (Kensington) proposed that the petition be signed by the chairman for presentation.

Dr. HALL (Brighton) seconded the adoption of the petition.

The SECRETARY next read a form of petition in favour of improved Secondary Education, similar to that drawn up by the General Medical Council.

Dr. WARDELL (Tunbridge Wells) moved the adoption of the petition. It was of the utmost importance that medical men should be well educated. There had been no improvement in their education, while, on the other hand, sons of merchants and tradesmen now often had the advantage of a college education. It was of paramount importance that all men entering into the medical profession should have a classical education. He knew that in Edinburgh many of his fellow students had to study the classics to pass their preliminary examination; and this, of course, took away from the time they should have spent in the hospitals.

Mr. BLACKALL MARSACK (Tunbridge Wells) seconded the motion, which was carried.

Financial Statement.—The SECRETARY read the financial statement, of which the following is an abstract: *Income*—Balance in hand, June 1st, 1868, £35:4:4; Branch Subscriptions received since, £36:19: total amount, £72:3:4. *Expenditure*—£46:10:10. Balance in hand, £25:12:6.

Mr. WALLIS (Hartfield) moved the adoption of the balance-sheet, which had already been audited by Dr. Hall and Mr. Cordy Burrows. With regard to the JOURNAL, he thought all country practitioners were satisfied with the change in it. It was *the* JOURNAL of the profession, and he thought no man would grumble at an extra shilling or two for it. (Several members: "Make the subscription twenty-five shillings.") He hoped they would never lose the JOURNAL, for it was the one great thing they wanted.

Dr. HENRY (London) seconded the motion, which was carried.

Place of Meeting in 1870: President-elect.—Mr. HECKSTALL SMITH, in proposing the next resolution, said it afforded him much pleasure, and it would be equally pleasing to all around, in proposing to them for selection their next place of meeting, that they should also secure the Presidency of a gentleman known to all of them, or to a very great many. Those who did know him had learned year by year to appreciate his high qualities, his high love for his profession and for this Association, his honourable and upright bearing in every part in life. He proposed "that Gravesend be the place of their next annual meeting; that John M. Burton, Esq., of Park Lodge, Lee, be the President-elect; and that C. J. Pinching, Esq., of Gravesend, and H. Jeaffreson, M.D., of Wandsworth, be the Vice-Presidents-elect."

Mr. HARRIS (Worthing) seconded the proposition, which was carried unanimously.

Mr. BURTON expressed his thanks for the honour. He would endeavour, as far as he possibly could, to carry out the objects of this Branch, of which they had been so kind as to elect him President.

Dr. ARMSTRONG said his colleagues would be very glad to welcome the members to Gravesend; and as Gravesend was "the place to spend a happy day", he hoped they would find the visit as happy as possible.

Members of Council.—The Honorary Secretary then announced the result of the voting for the two Councils, as follows:—*Representatives of the Branch in the General Council of the Association:* J. Armstrong, M.D.; R. L. Bowles, M.D.; J. Cordy Burrows, Esq.; J. M. Burton, Esq.; A. Carpenter, M.D.; W. Carr, M.D.; F. Fry, Esq.; A. Hall, M.D.; C. Holman, M.D.; A. Napper, Esq.; T. Heckstall Smith, Esq.; J. R. Stedman, Esq.; N. Tyacke, M.D.; E. Westall, M.D.—*Council of the Branch:* R. L. Bowles, M.D.; J. M. Burton, Esq.; C. Chaldecott, Esq.; H. Collett, M.D.; T. Fuller, M.D.; A. Hall, M.D.; H. Jeaffreson, M.D.; H. T. Lanchester, Esq.; A. Martin, M.D.; T. H. Martin, Esq.; J. R. Stedman, Esq.; J. S. Steele, Esq.; C. Trustram, Esq.; R. J. Wilson, M.D.

New Members.—The names of seven gentlemen were then proposed for membership, besides the forty-eight that had been proposed during the year. All were duly elected.

A vote of thanks to Mr. Hodgson, the Honorary Secretary (carried by acclamation) terminated the business proceedings.

An interval of two hours (before dinner) was then spent in enjoying the beautiful scenery of the neighbourhood, and in inspecting the gardens, conservatories, and museum, of Mr. Wilson Saunders. The Earlswood Idiot Asylum had been visited in the morning, before business commenced.

Dinner.—At the dinner in the evening, considerably over one hundred gentlemen sat down. It went off with great *éclat*—the testimonial (a service of plate) to R. Heckstall Smith, Esq., being presented by Dr. Sibson, F.R.S., on behalf of the subscribers.

LANCASHIRE AND CHESHIRE BRANCH: ANNUAL MEETING.

THE thirty-third Annual Meeting of this Branch was held in the Town Hall, Lancaster, on Monday, June 24th. In the absence (from illness) of the retiring President, GEORGE MALLETT, Esq. of Bolton, Mr. Steele of Liverpool introduced the president elect, WILLIAM HALL, Esq. of Lancaster, who took the chair and delivered an address.

Abstract of President's Address.—After thanking the members for the honour conferred on him, Mr. HALL referred to the growth of the Association, which might fairly be considered to have attained to a robust adolescence, and to have acquired such powers of absorption and assimilation as would in a few years, he trusted, enable it to absorb and accumulate into one grand organisation every worthy member of the profession. Referring to the Medical Council, he thought that a very strong case had been made out for some modification in its institution; and, for himself, he thought the best plan was to procure such changes in the colleges, etc., as would make them truly representative institutions, by allowing all their members to participate in the election of their governing bodies. The Council, though composed of men of the highest character, did not understand the requirements of country practice. "Amongst other things, the total abolition of the apprentice-

ship system is, I consider, not an *unmixed good*; for, had the period of service been reduced from five years to two or three, I am certain that the rising generation of country practitioners would have been better fitted for their duties than they will be under the present system. Of this I have been convinced by experience; for I have had more than one assistant M.D., trained under the new method who, though full of theoretical knowledge, and perfectly capable of judging in those cases of serious disease and accident which constitute the great majority of cases seen in a large general hospital, yet felt themselves perplexed and at a loss how to act in those simple cases—both medical and surgical—which form the great bulk of private country practice; whereas, if they had been occupied for two or three years in a well-frequented surgery or dispensary, they would not only have been well practised in the minor operations of surgery and the diagnosis and treatment of the ordinary kinds of medical cases, but they would have become versed in the processes of pharmacy and chemistry, and familiar with the properties and doses of the various articles of the *Materia Medica*—all which knowledge would have been of the highest advantage on their becoming students at an hospital or university.” Against quackery, Registration Acts and penal enactments were powerless; the evil must be met and combated by such instrumentality as that of the Association. “Let each branch in its own district, and the British Medical Association as a whole, strive as far as possible to eradicate the *spirit of quackery* from our own ranks, by putting its veto and condemnation on all acts which have that spirit, and the desire for notoriety as their source; for what but this spirit is it which leads one man to write long letters on professional subjects to the daily papers, signing his name and full address? Another writes a trashy book or pamphlet, with some popular or sensational title, and advertises it for weeks or months together in the daily papers, with his full name and private address. What, but the same spirit, is at the root of the sudden and wholly unnecessary multiplication of small special hospitals, which we have seen within the last few years, which are also most persistently advertised, and the names and *private* address of the medical officers given at length? What but this spirit leads one man to set up and advertise an Hydropathic establishment, another a Homœopathic hospital, and others, still more lost to common decency, advertise themselves as ready to accommodate themselves to the varying faiths of those who may honour them with their patronage, by treating them either homœopathically or allopathically? Others, again, adopt a different and cheaper system; they keep their names constantly before the public as analysers of *anything that can be advertised*, or give testimonials as to the peculiar excellence of some particular emulsion, biscuit, cocoa, stays, materials for blisters, poultices, splints, cod-liver oil, or even quack medicines. In short, nothing is too ridiculous, nothing too trivial, to stoop to, for all these things are constantly advertised, and the names and private addresses of the unknown testimonial-mongers, along with them, and so they attain their object—*notoriety*.”

“Having washed our own hands clean, we may then try to produce a better state of mind on the part of the public, and this is to be done by improved education, and by that means alone. I would have every child, both male and female, instructed so far in the simple and rudimentary facts of anatomy and physiology as would enable them to understand the *rationale* of the laws of health, to estimate properly the value of fresh air and free ventilation, and the importance of cleanliness, both personal and domestic. I would have these matters in a rudimentary form taught in every National School, and in every school of higher pretensions I would have some of the valuable time which is now absolutely wasted in the study of dead languages which will never profit nineteen-twentieths of the boys in after life, devoted to the more extended study of these subjects, along with the various branches of natural philosophy and natural history.”

Mr. Hall then made some remarks on the insufficient remuneration of medical witnesses; and concluded by calling attention to the trial of the dry earth system of sewage as carried out in Lancaster for two or three years. The conclusions which, he thought, might be deduced from the local trial, were the following. “The mixture of dry earth and ashes is a perfect deodoriser of human excreta. Ordinary privies, by simply being made open behind, and treated with a daily sprinkling of dry earth, etc., may be rendered tolerable and innocuous even in very confined situations. The dry earth system will answer admirably in all public institutions, with a large extent of ground under cultivation—where all the labour of preparing and removing the earth can be done by the inmates, and when the product can be applied to the fertilising of their own land. But the difficulty of procuring a sufficient supply of earth, the cost of cartage and labour in the preparation and depositing in the closets, and lastly, the want of appreciation on the part of farmers of the value of the consequent product, and the difficulty as to the disposal of it, will render the system almost impossible of applica-

tion in a large town. And, lastly, and perhaps the most important drawback of all, this system does not answer in a financial point of view.”

Report of the Council.—Dr. SIMPSON (Honorary Secretary) read the report of Council. “In presenting their usual report, the Council congratulate the Branch in again holding the annual meeting in the city of Lancaster. The five years that have elapsed since our last meeting in this place have been years of great success to the Parent Association, and this Branch has shared in the general prosperity. Our members, at the meeting held here in 1864, were 212, and they have now increased to 286. While this is to a certain degree satisfactory, your Council cannot but repeat the remark that, if each one used his individual influence, our numbers might be doubled at our next meeting. Even then there would be scope for great increase, before we could say, as we hope to do at some time, that the great bulk of the profession in the two counties was united in one common bond of association. Your Council have received invitations from Liverpool and Preston, and a resolution will be laid before you in reference to the place of meeting next year. The parent Association now counts in its ranks many of the most gifted and distinguished men in our profession. Its annual meetings attract many of the most renowned workers in medicine and the collateral sciences, not only from the various parts of our own country, but from the continent of Europe and the other side of the Atlantic; and, though it has been said that it does little directly to further scientific progress, we may point with satisfaction to the recent report on the action of mercury as one example of a laborious, painstaking, and difficult research, that in all probability would never have been attempted but for this Association. The opportunity for the interchange of thought and discussion afforded by the annual meetings has led to much mental activity and effort through the profession at large. The papers read have a high average of merit, and we see in the greatly improved character of the JOURNAL another indication of progress. This applies in a similar way to the annual meetings of the Branch. They draw together gentlemen from the most distant parts of the two counties—they cement old friendships and create new ones—and they give to many just the stimulus required to induce them to bring forward cases and communications of interest and value that would otherwise be lost to the profession. Considerations such as these, which might be greatly multiplied, seem to your Council to give a sufficient reason for asking you to second their efforts for the increase of the Association and of the Branch. In February last, a special general meeting of the Branch was held in Manchester, to prepare a memorial to be presented to the House of Commons in favour of the direct representation of the profession in the General Medical Council. At this meeting, a memorial, drawn up by Dr. Waters of Chester, was unanimously adopted, and in accordance with a resolution passed at the meeting has been signed by the President and Secretary. Although, from the engrossing nature of other questions, no Bill for the Amendment of the Medical Act has been introduced into Parliament this session, there is reason to believe that the generally expressed opinion of the profession has not been without its influence, and that this association has done good service by giving information to our legislators which will aid in guiding them to a right issue, when the question, as it soon must be, is brought forward for their consideration. In accordance with the rule that the five members who have served longest on the Council retire by rotation, Dr. Desmond, Mr. Flint, Mr. Ellis Jones, Mr. Mallett, and Dr. Ransome now relinquish office, but are eligible for re-election.

“At the date of the last Annual Meeting the balance in hand was £37:9:4½; subscriptions received since, £27:2:6; making a total of £64:11:10½. The ordinary expenses of the Branch during the past year have been £26:11:8; leaving in the hands of the Secretary a balance of £38:0:2½.”

On the motion of Dr. SPENCER (Preston), seconded by Mr. ALLEN (Preston), the report was unanimously adopted.

Vote of Thanks.—On the motion of Dr. PARSONS, seconded by Dr. MATHER, a cordial vote of thanks was passed to the late President, G. Mallett, Esq., and to the late Vice-Presidents, J. E. Morgan, M.D., and A. B. Steele, Esq., and to the other members of the Council, for their services during the past year.

Place of Meeting in 1870.—It was moved by Dr. WATERS (Liverpool), seconded by Mr. SOUTHAM (Manchester), and carried unanimously, “That the next Annual Meeting be held in Preston; that Lawrence Spencer, M.D., be appointed President-elect; and that Christopher Johnson, Esq., Lancaster, and W. Howitt, Esq., Preston, be appointed Vice-Presidents-elect.”

Dr. SIMPSON moved and Dr. MCNAUGHT seconded the following resolution, which was also carried—“That Mr. Manifold of Liverpool

and Mr. C. Johnson of Lancaster be re-appointed Local Secretaries; and that Dr. R. C. Brown be appointed Local Secretary for Preston."

Councils.—The following appointments were also made for the ensuing year; *Representatives in the General Council*: T. Davies-Colley, M.D., Chester; L. E. Desmond, M.D., Liverpool; John Harrison, Esq., Chester; L. Spencer, M.D., Preston; G. Mallett, Esq., Bolton; T. Mellor, Esq., Manchester; W. Roberts, M.D., Manchester; G. Southam, Esq., Manchester; A. B. Steele, Esq., Liverpool; T. Turner, Esq., Manchester; J. Vose, M.D., Liverpool; E. Waters, M.D., Chester; A. T. H. Waters, M.D., Liverpool; M. A. E. Wilkinson, M.D., Manchester; H. Simpson, M.D., (Honorary Secretary *ex officio*). In the *Council of the Branch*, the following gentlemen were elected to fill the vacancies in the place of five members retiring by rotation: L. E. Desmond, M.D. (Liverpool); G. Mallett, Esq. (Bolton); A. Ransome, M.D. (Bowden); G. Daglish, Esq. (Wigan); and D. W. Parsons, Esq., (Liverpool).

Paper.—Mr. A. B. STEELE read a paper on the treatment of Puerperal Convulsions.—Other communications were delayed for want of time.

Votes of Thanks.—A cordial vote of thanks was passed to Mr. Steele for his paper. Votes of thanks were also passed to the Mayor and Corporation for the use of the Town Hall, and to the President for his services in the chair, and the meeting was brought to a close.

The Northern Counties Asylum for Idiots, which is now approaching completion, the Asylum, and the Castle, were open to the inspection of the members in the course of the afternoon.

Dinner.—The members, with the Mayor and other visitors, dined together at the King's Arms. The usual toasts were heartily responded to, and the proceedings terminated at an early hour. Although not the most numerously attended, this meeting, at almost the northern limit, was one of the most agreeable ever held by the Branch.

CORRESPONDENCE.

DEBATING COLUMN FOR DISCUSSION OF PAPERS, ETC., PUBLISHED IN THE "JOURNAL".

REMARKS ON MR. JESSOP'S "MODE OF AFTER-TREATMENT IN OPERATIONS UPON THE URINARY ORGANS".

SIR,—Mr. Jessop's article on "A Mode of After-Treatment in Operations upon the Urinary Organs", in your JOURNAL of June 19th, opens up two questions: firstly, Is there such a state as infiltration of urine? and secondly, Can Mr. Jessop's drainage-tube avert the assumed danger? To each of these queries I reply in the negative. To Professor Ellis belongs the credit of having taught surgeons better and more accurate views of lithotomy than they previously had; and hence we now know that there cannot be such a result as infiltration of urine, so long as there is a free exit to the urine. Mr. Ellis has proved that surgeons do that in lithotomy which they professed not to do—to open up the deep fasciæ; and that no infiltration of urine followed such a procedure; for, as he pertinently pointed out, where have we such uniform success in lithotomy as in boys, where the deep fasciæ are always cut or torn open, and no infiltration of urine takes place?

Experience shows that the amount of mortality after lithotomy increases with each decennial period of life, clearly proving that the cause of death is constitutional, and not local.

I have never seen, either in the practice of others or my own, such a state as infiltration of urine after lithotomy; and, although the tissues occasionally become soddened and broken down after that operation, yet the result is to be attributed to erysipelas or some other pathological condition.

But, granting for a moment that there is such a condition as infiltration of urine, can Mr. Jessop's drainage-tube effect the end proposed? Certainly not. When a man is in the prone position, the orifices of the ureters are on a lower horizontal plane than the meatus internus; and hence all that surface of the bladder which is situated between those points is constantly covered with urine. Now, what is the direction of the internal wound in lithotomy? In an article by me on Lithotomy in the *British and Foreign Medico-Chirurgical Review* for January 1867, p. 213, I have shown that the incision in the bladder extends from the urethra towards the orifice of the left ureter; and hence it must be always bathed with urine. To effect Mr. Jessop's object, it would be necessary not only to have the bladder empty, but also to keep it dry; neither of which things can be done; for, do what we may, there will always be a certain amount of urine in the bladder—not more, perhaps, than a tablespoonful, but still amply sufficient to keep the wound saturated.

According to Mr. Jessop's account, the point of his silver catheter must have been two inches above the orifices of the ureters; and hence the instrument could not possibly have kept the bladder empty. Mr. Jessop looks upon the urine as a foreign body, whose contact with the wound is to be avoided; and tries to carry out his end by leaving in a silver catheter, which the human body regards as a foreign body of an infinitely more disagreeable kind, and of whose presence it is intolerant.

To Dr. Henry Dick belongs the merit of discountenancing leaving a catheter in after operation; for, at p. 105 of his memoir on *The Treatment of Stricture by the Subcutaneous Division*, he states: "I strenuously object to leaving a catheter in the urethra after the operation, on the grounds—first, because it is greatly to the discomfort of the patient; secondly, because it acts in an irritating manner on the bladder itself; and thirdly, because it will produce the contrary effect to what it was intended—i. e., the urine will run along the introduced catheter if it be left, and will come in contact with the wound."

I am, etc., W. F. TEEVAN.

Portman Square, June 1869.

TREATMENT OF INGROWING NAIL.

SIR,—Judging from a late correspondence in one of your contemporaries, the treatment of ingrowing nail seems still to be *sub judice*. The experience, therefore, of an old hospital surgeon may not be unworthy of record. There is one form of that affection which is very common; and doubtless familiar to all. A patient directs our attention to a little fungous sore at the edge of one of his nails, either of the foot or hand. It is often exquisitely painful and tender. He calls it "the nail growing into the flesh", and generally has cut away the margin of the nail, in the vain hope of curing it by that means. In such a case, I have found the free use of nitrate of silver an effectual remedy. The indication is to blacken and dry up the fungous sore and the adjoining edge of nail. If one application does not suffice, it may be repeated. The remedy is by no means very painful, if the nitrate be merely kept in contact with the sore, and not *rubbed* on it; and, provided it be properly and effectually done, it will prove almost universally successful.

Bristol, June 1869.

I am, etc., W. F. MORGAN.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Thursday, June 24th.

THE MORTALITY AT BARKING.—Mr. Eastwick asked whether it was not desirable that the medical officer to the Privy Council and a chemist of eminence should be associated with the civil engineer sent to inquire into the state of Barking; and whether the counsel from the Home-office should not also be associated with the Commission as assessor.—Mr. Bruce said that, as far as he was at present advised, he thought the gentleman to whom the matter was committed fully competent to conduct the whole inquiry. If he wished for any assistance, or if the inhabitants were desirous that there should be a special machinery of inquiry, they might communicate either with himself or with his right hon. friend the Vice-President of the Council, who would direct the medical officer of the Council to have an inquiry made. It did not appear at all necessary that any legal assessor should be added to the person now conducting the inquiry.

MEDICAL NEWS.

APOTHECARIES' HALL.—Name of gentleman who passed his examination in the science and practice of medicine, and received a certificate to practise, on Thursday, June 24th, 1869.

Hubbard, Thomas Wells, St. Lawrence, Isle of Thanet

At the same Court, the following passed the first examination.

Hazel, William Francis, King's College
Jones, Theodore Johnstone, St. Mary's Hospital
Paramore, Richard, Guy's Hospital
Roose, Edward C. R., Guy's Hospital

As an Assistant in compounding and dispensing medicines.
Davies, Samuel Richard, Newcastle Emlyn

MEDICAL VACANCIES.

THE following vacancies are declared:—

BELFAST UNION—A Medical Officer for the Belfast Dispensary District (£75 per annum).
BIRMINGHAM AND MIDLAND EYE HOSPITAL—House-Surgeon (£80 per annum, apartments, board, and attendance).
BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN—Dispenser (£50 per annum).

BRIXTON, STREATHAM HILL, AND HERNE HILL DISPENSARY—Resident Medical Officer.
CASTLECOMER UNION, co. Kilkenny—Medical Officer for the Workhouse (£70 per annum); Medical Officer for the Castlecomer Dispensary District (£100 per annum, and Vaccination and Registration Fees).
CLAREMORRIS UNION, co. Mayo—Medical Officer for the Claremorris Dispensary District (£75 per annum, and Registration and Vaccination Fees); Medical Officer for the Workhouse (£50 per annum).
CRIMINAL LUNATIC ASYLUM, Broadmoor, Wokingham—Assistant Medical Officer (£175 per annum, rising to £200, with furnished apartments, coal, gas, and attendance).
DENTAL HOSPITAL OF LONDON—Assistant Dental Surgeon and Dental House-Surgeon (£100 per annum).
GLASGOW EYE INFIRMARY—Surgeon.
GREAT MALVERN—Certifying Factory Surgeon.
HAY UNION, Brecknockshire—Medical Officer for the Radnorshire District (£45 per annum, and extra fees, which amounted last year to £37:15).
HOLLINGBOURNE UNION, Kent—Medical Officer for District No. 2.
KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND—King's Professor of the Institutes of Medicine.
KING'S COLLEGE, London—Professor of Physiology.
LINCOLN COUNTY HOSPITAL—Physician.
LONDON FEVER HOSPITAL—Assistant-Physician.
MERTHYR UNION, Glamorganshire—Medical Officer for the Rhigos District.
MIDDLESEX LUNATIC ASYLUM, Colney Hatch—Assistant Medical Officer for the Female Department (£150 per annum, with board, furnished apartments, attendance, and washing).
MIDDLESEX HOSPITAL—Physician's Assistant.
MIDDLESEX HOSPITAL MEDICAL COLLEGE—Lectureship on Materia Medica and Therapeutics.
NEW ABBEY, Dumfriesshire—Parochial Medical Officer (£40 per annum, and Government Grant).
NORTHWICH PROVIDENT DISPENSARY—Surgeon.
NOTTINGHAM COUNTY AND BOROUGH LUNATIC ASYLUM—Assistant Medical Officer.
QUEEN'S UNIVERSITY IN IRELAND—Examiner in Medicine (£100 per annum); in Surgery (£100 per annum); in Midwifery, etc. (£75 per annum); and in Materia Medica and Medical Jurisprudence (£100 per annum).
RATHDRUM UNION, co. Wicklow—Medical Officer for the Workhouse (£100 per annum); Medical Officer for the Rathdrum Dispensary District (£100 per annum, and Vaccination and Registration Fees).
ROYAL GENERAL DISPENSARY, Bartholomew Close—Physician.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL—Surgeon.
ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Honorary Physician.
SHEFFIELD GENERAL INFIRMARY—Assistant House-Surgeon (£65 per annum, with board, lodging, and washing).
UNIVERSITY COLLEGE HOSPITAL—Resident Medical Officer.
UNIVERSITY OF GLASGOW—Waltonian Lecturer on the Eye.
WIGTON UNION, Cumberland—Medical Officer for the Bowness District (£16 per annum).

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

***HICKS**, J. Braxton, M.D., F.R.S., appointed Physician-Accoucheur to Guy's Hospital, in the room of H. Oldham, M.D., resigned.
LAWRENCE, Alexander, M.A., M.B., M.C., appointed House-Surgeon to Chalmers Hospital, Banff.
PHILLIPS, J. J., M.D., appointed Assistant Physician-Accoucheur to Guy's Hospital, in the room of J. B. Hicks, M.D., F.R.S.

BIRTHS.

DEBENHAM.—On June 19th, the wife of Horace K. Debenham, Esq., Surgeon, of Presteign, Radnorshire, of a daughter.
GRIMSHAW.—On June 17th, at Molesworth Street, Dublin, the wife of *Thomas Wrigley Grimshaw, M.D., of a daughter.
LAWSON.—On June 24th, at 12, Harley Street, the wife of *George Lawson, Esq., of a son.
PLAYNE.—On June 18th, at Maidenhead, the wife of *Alfred Playne, M.B., of a daughter.
SABDEN.—On June 23rd, at Northumberland House, Stoke Newington, the wife of *J. T. Sabden, M.D., of a daughter.
SEQUEIRA.—On June 24th, at Leman Street, the wife of J. S. Sequeira, Esq., Surgeon, of a son.
SHORTO.—On June 24th, at Southampton, the wife of J. Reeve Shorto, Esq., Surgeon, of a son.
WIGMORE.—On June 23rd, at Inverness Road, Bayswater, the wife of William Wigmore, Esq., Surgeon, of a son.
WILLIAMSON.—On June 29th, at 44, Mildmay Park, N., the wife of *James Williamson, M.D., of a son.
YARROW.—On June 25th, at Old Street, the wife of G. E. Yarrow, M.D., of a daughter.

MARRIAGES.

DOVE, J. R. Bathurst, M.B., to Agnes, daughter of W. BUTTON, Esq., late of Lewes, at St. George's, Tufnell Park, on June 23rd.
RENSHAW, Charles J., M.D., of Ashton-on-Mersey, to Susan Fanny, daughter of John KNOWLES, Esq., of Manchester, on June 22nd.

DEATHS.

DAY.—On May 4th, at Akyab, Emma, wife of Francis Day, Esq., Surgeon, Principal Medical Storekeeper, Madras Army.
KOUGH.—On June 21st, at Bagshot, aged 10 months, Elsie Flora, daughter of *Edward Kough, M.B.
PARTRIDGE.—On June 20th, at the Lozells, Birmingham, Eliza, wife of *Thomas Partridge, L.K.Q.C.P.I..
RAINY, George, M.D., at Glasgow, on June 19th, of typhus fever.

REGAN.—On June 10th, at Dublin, Frances, wife of William Regan, M.D.
SPICER.—On June 8th, at Chard, aged 63, Frances, wife of Northcote W. Spicer, Esq., Surgeon.

ST. BARTHOLOMEW'S HOSPITAL.

THE following prizes have been awarded for the session 1868-9. *Senior Scholarship in Medicine, Surgery, and Therapeutics*—H. E. Haynes, C. P. Skrimshire (equal). *Senior Scholarship in Anatomy, Physiology, and Botany*—1, W. J. Walsham; 2, A. H. G. Doran. *Jeaffreson Exhibition*—A. Wall. *Bentley Prize*—J. T. Hartill. *Kirkes Medal*—T. H. Hendley. *Wix Prize*—J. T. Hartill. *Hichens Prize*—J. Shaw. *Practical Anatomy, Senior: Foster Prize*—W. J. Walsham; 2, A. H. G. Doran; 3, C. Hutson; 4, H. Hind; 5, 6, 7, C. J. Newton, J. Wilcocks, O. T. Jones (equal); 8, 9, 10, S. T. Huggins, A. A. Gillithe, C. P. S. Wayman (equal). *Practical Anatomy, Junior: Treasurer's Prize*—W. Furner; 2, G. W. Burn (Examiner's Prize); 3, F. Skaife; 4, M. Groves; 5, W. Fairbank; 6, 7, A. Godfray, A. C. Horner (equal); 8, P. W. G. Nunn; 9, W. Odell.

A READY STETHOSCOPE.—An ordinary kerosene lamp chimney, either straight or bulging, with the base placed to the chest and the top to the ear, makes a most excellent stethoscope, quite equal in sensitiveness to the manufactured instrument.—*American Medical and Surgical Reporter*.

BEQUESTS.—Mrs. Martha Elizabeth Clark, late of Addison Road, Kensington, has left £200 each to the Consumption Hospital (Victoria Park), the Asylum for Idiots, the Royal Maternity Charity, St. Luke's Hospital, the London Hospital, Charing Cross Hospital, and Royal Free Hospital.—By the will of the late Dr. Mackay, the sum of £2000 is bequeathed to the Greenock Hospital.

THE LEEDS HOSPITAL FOR WOMEN AND CHILDREN.—"The Ancient Order of Romans," with a view to benefit the charity and induce other benefit societies to do so in the same way, arranged to attend afternoon service at the Leeds Parish Church on Sunday, June 20th. They met in front of the Town Hall and marched thence in procession, a thousand strong, to the church, when, after a special sermon by the vicar, a collection was made which realised upwards of £20.

MR. F. ST. QUINTIN BOND.—The following resolution was passed at a special meeting of the Governors of the West Sussex, East Hants, and Chichester Infirmary, held for the purpose of appointing a successor to Mr. Bond, who had held the offices of House-Surgeon and Secretary for eleven years. "That, in the opinion of this meeting, Mr. Bond merits the best thanks of the Governors, and the highest testimony to his many able services during the time he has occupied the position of House-Surgeon and Secretary of this Institution, and especially for his great attention and kindness to the patients under his care; and that the best wishes of the Governors be recorded for his future success in his profession."

DISEASED MEAT.—Henry Martin, a butcher, has been fined by the Brighton Bench of Magistrates ten shillings and costs, for each of three carcasses of sheep exposed by him for sale in the Brighton market; and Henry Gravely pleaded guilty to exposing one sheep carcass for sale, and was fined ten shillings.—William Thomson, of Coatbridge, has been fined, by Sheriff Logie, at Airdrie, £3:3 and £2:3 expenses, for having had in his custody part of the carcass of a cow which was unfit for human food. The animal was diseased, and obliged to be killed by the owner (Mr. Robertson) on a Sunday. The defendant buried three-quarters of it in a dunghill behind his shop; and carried the remaining quarter to his private dwelling apartments upstairs, where it was found by the police. The Sheriff, in giving judgment, intimated that the penalty would have been greater if any portion of the animal had been actually exposed for sale.

THE BRITISH ARMY.—The Registrar-General states—according to the returns received from his Royal Highness the General Commanding in-Chief—that the strength of the army, at home and abroad, in the year 1867 was 200,335—viz., at home, 87,607; abroad, 112,728. In England and the Channel Islands the strength was 60,344; in Scotland, 3,517; and in Ireland, 23,746. In the total strength at home the deaths were—of officers, 49, of non-commissioned officers and men 901, representing a mortality in the former of 10.95 per 1,000, and in the latter of 10.84 per 1,000. In Great Britain the death-rate of officers was 12.55, in Ireland 6.62 per 1,000. In Great Britain the death-rate of men was 12.06, in Ireland 7.54. In the total strength abroad, in 1867, the deaths were—of officers 81, of men, 2,203, representing a mortality of 13.33 per 1,000 in officers, and 20.66 in men. In 1865, the mortality of men abroad was 21.02; in 1866, it fell as low as 15.49 per 1,000.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopædic Hospital, 2 P.M.

WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.

THURSDAY...St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY...St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—Obstetrical Society of London. 7.30 P.M., Council Meeting. 8 P.M., Dr. Westmacott, "On the Use of the Whalebone Hoop"; Dr. Lawson Tait, "A Case of Reduction of Chronic Inversion of the Uterus by Sustained Pressure"; Dr. Selby Norton, "On Teething"; and the adjourned discussion on the Report of the Infant Mortality Committee.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

METEOROLOGICAL REPORTS.—In consequence of the temporary absence of Dr. Treutler from Kew, the publication of the Meteorological Reports is suspended for two weeks.

THE OBSTETRICAL SOCIETY AND THE ROYAL ACADEMY OF MEDICINE.

SIR,—As another humble member of the Obstetrical Society, and also an eye-witness of the proceedings at the meeting on June 21st, on which Mr. Heckford has so severely animadverted in your last issue, will you permit me to say, without pretending to offer any criticism on the spirit of his observations, that surely the place to have made them was the meeting itself. He had repeated opportunities offered, alike to him and all other Fellows present, to say what he pleased on the suggestions of the Council; but as he made no remark whatever throughout the entire evening, it does appear to me as a little unfair that he should, in the JOURNAL, attack the Council in the way he has done. I am, etc.,
London, June 1869. A FELLOW OF THE SOCIETY.

PETROLEUM OIL.

SIR,—In your issue of April the 3rd, "D. M." inquires where the above can be obtained in a state of purity. I regret to say I cannot give him the required information, having but lately returned to this country. But he might procure some from a respectable dealer, of sufficient purity for medicinal purposes; it would be well, however, before using it, when any doubts on this point existed, to test its point of ignition. Law regulates that this should not be under 100° F.; but, for medicinal purposes it should not be under 130°. The coal oil, known in the commercial world as American Petroleum No. 1, ignites at 134°, and is therefore sufficiently pure. To ascertain the temperature at which the vapour of a given specimen ignites, half fill a test-tube five or six inches long and one and a quarter in diameter, introduce a naked thermometer, then gently heat the tube by placing it in a bowl of hot water, and from time to time rapidly bring a lighted match to within half an inch of the surface of the oil. The lowest degree of temperature at which a blue flame will be observed to pass from the match to the surface of the fluid will be its point of ignition. During the experiment, the oil should be gently stirred by the thermometer so as to equalise its temperature; but it should on no account be shaken, as shaking considerably lowers its ignition point. If a test-tube be not at hand, a common saucer will do very well. During the last two years my own experience, and that of my Canadian friends whom I induced to give it a trial, warrants me in recommending it to the notice of the profession. To dispensary surgeons I venture to assert it will be found of incalculable service, effecting as it will, on account of its applicability to such a variety of diseases, its marvellous antiphlogistic virtues and its cheapness, a saving in time, trouble, and expense. I have used it in both extremes of life, from the ages of fourteen days to sixty-five years. When applied to infants for phlegmon or confusion, an hour or two's application will suffice, and it should not be left on longer. In all cases, when it is applied externally, the part should be bandaged evenly and with moderate tightness.

Since writing my former communication, I find that Dr. R. Wagner has discovered a method of deodorising petroleum by treating it with a solution of plumbate of soda, prepared by dissolving oxide of lead in caustic soda. Of the oil thus deodorised I have no knowledge. If, however, its medicinal properties be not impaired by the process, it is evident its value must be considerably enhanced thereby. I am etc.,
JOHN MULVANY, M.D., Assist. Surgeon, R.N.
Portsmouth, April 1869.

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

THE BUSINESS OF THE ANNUAL MEETING.

SIR,—I sent to the General Secretary some notices to be inserted in the JOURNAL (of last week) in relation to the coming Annual Meeting. It would not have been right to enter then into the reason *why* I gave notice of my first motion in connection with the *first meeting for business*, but I think a short explanation may prepare the members for its consideration, as it will be the first motion to make on the opening of the meeting—provided it be held in the evening. The reason, then, why I think that an adjournment should take place at 10 o'clock is this—gentlemen may arrive just before the meeting commences, tired and in a bustle, and they are thus not prepared to sit down for several hours, and until midnight, as was the case last year, to consider business matters that I hold to be of the most vital importance to the stability and well-being of the Association. The consequence is that the leave after an hour or two, and a mere handful remain to perform the work—and that hurriedly and imperfectly, as was the case last year; and the excitement and confusion of that meeting cannot, I think, be soon forgotten by all present at it. Find a corner for this note, please. I am, etc.,
DAVID BELL, M.D.
The Vicarage, Goole, July 1869.

CLINICAL DIAGRAMS.

SIR,—In these days of precise observation, every statement in science, to be above suspicion as to the presence of guesswork, and to be available for generalisation should be noted, if possible in a tabular form, and excellent schemes for certain medical records have been published latterly, as by Dr. Falconer and Mr. Freeman, at Bath; Dr. Clifford Allbutt, at Leeds; and Dr. Wunderlich, at Leipzig. But while these are conveniently small, there is great further advantage in our being able readily to exhibit each tabulated observation to others, on a large scale.

Amongst details, however valuable, of a case, or of a series of cases, given in the lecture room, or before a meeting of one of our societies, it is often as useless as it is wearisome to hear statistics of weight, pulse, temperature, or respiration, and how they varied from day to day, in the form of a promiscuous narrative. Obviously what is wanted is a large diagram, visible to all, exhibiting these or similar matters, *as curves*. The delay, expense, and trouble of ruling, or getting sheets ruled, for this purpose is often "prohibitive," when superadded to the practitioner's day's work. For this object, I have had blank large diagrams prepared so simple in ruling as to admit of very various applications. The sheet is of "music-royal" drawing paper, covered all but a margin (for figures and names etc.) with squares of one inch, not heavily ruled, but visible at thirty feet distance. They suit perfectly for recording temperature, pulse, and respirations, separately or all together, as well as for any similar regular observations. If the record be longer than twenty-one days, a sheet is pasted on; if shorter, a piece is cut off, the simplicity of construction enabling this to be easily and neatly managed. A case of fever with the daily observations may be transferred in a few minutes to one of these sheets; indeed, it might be recorded on one from the first. There is a surprising advantage to the lecturer speaking on a case, of which he has the progress *visibly* before his audience, as he can append his comments to their appropriate positions in the diagrammatic curve. I have not used lithography, because it would fix the scheme unalterably for a large impression; whereas, in temperature for instance, should we succeed in introducing the centigrade scale, the size of the day-square should be two inches. Three blank diagrams are prepared by Messrs. Jefferies and Sons, Canynge Buildings, Redcliffe Street, Bristol, who can supply the ruled sheets, which are of very good paper, at four shillings a dozen. Clifton. I am, etc., S. MARTYN.

WE are indebted to correspondents for the following periodicals, containing new reports and other matters of medical interest:—The Wiltshire County Mirror, June 30th; The New York Medical Gazette, June 12th; The Parochial Critic, June 23rd; The Boston Medical and Surgical Journal, June 10th; The Melbourne Leader, April 24th; The Lincoln Journal, June 29th; The Aberdeen Free Press, June 21st; The Western Daily Press, June 29th; The Harrogate Herald, June 23rd; The Lancaster Guardian, June 26th; The Newcastle Daily Journal, June 26th; The Dublin Freeman, June 23rd; The Aberdeen Journal, June 23rd; The Merthyr Telegraph, June 19th and 26th; The New York Medical Record, June 15th; The California Medical Gazette; The Pacific Medical Journal.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. Chadwick, Leeds; Mr. R. Dunn, London; Mr. J. Whicher, Southsea; Mr. S. Wade, Devonport; Messrs. F. Newbery and Sons, London; Mr. S. B. Farr, St. Albans; Dr. David Little, Manchester; Mr. W. Dalton, Cheltenham; Mr. F. J. Kent, jun., Hampton; Mr. F. Le Gros Clark, London; Dr. Maudsley, London; Dr. E. Jones, Dolgelly; Mr. C. Hayward, Manchester; Mr. P. H. Banks, Riseley; Mr. Charles Kemp, London; Dr. Carr, Blackheath; Mr. Dickman, London; and Rev. Dr. Bell, Goole.

LETTERS, ETC. (with enclosures) from:—

Dr. Cotton, London; Dr. J. Lockhart Clarke, London; Mr. Hulke, London; Dr. W. Bennett, Harrogate; Mr. W. A. Renshaw, Ashton; Dr. A. Gamgee, Edinburgh; Dr. J. B. Hicks, London; Mr. C. W. Johnson, Lancaster; Dr. Kelburne, King, Hull; The Chairman of the Central Committee of the Prussian Association for the Relief of Wounded and Sick Soldiers in Time of War, Berlin; Dr. James Russell, Birmingham; Dr. J. FitzPatrick, Lenham, Kent; Dr. Paul, London; A Fellow of the Obstetrical Society; Mr. W. Morratt Baker, London; Mr. J. Sampson Gamgee, Birmingham; Mr. T. Watkin Williams, Birmingham; Mr. J. V. Solomon, Birmingham; Dr. H. Barnes, Carlisle; Dr. H. Simpson, Manchester; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Treutler, Kew; The Registrar of the Medical Society of London; The Honorary Secretary of the Obstetrical Society of London; Dr. Lomas, London; Dr. Heaton, Leeds; Dr. Mapother, Dublin; Dr. Alfred Walker, London; Dr. Procter, York; Dr. Fleming, Birmingham; and Dr. Kidd, London.

LECTURES

ON THE

PRINCIPLES OF SURGICAL DIAGNOSIS:

ESPECIALLY IN RELATION TO SHOCK AND
VISCERAL LESIONS.*Delivered at the Royal College of Surgeons of England.*

By F. LE GROS CLARK, F.R.C.S.,

Hunterian Professor of Surgery and Pathology in the College; Surgeon to
St. Thomas's Hospital; and Examiner in Surgery at the
University of London.

LECTURE I.—LESIONS OF SPINAL CORD.

Introductory Remarks.—Tetanus: its Varieties, Causes, Symptoms, and Signs.—Comparison with other Convulsive Affections; Hydrophobia, Epilepsy, Chorea, Hysteria.—Acute and Chronic.—Shock.—Tetanus in Lower Animals.—Morbid Anatomy.—Repair of Cerebral Substance after Breach of Texture.—Affinity between different Convulsive Affections of the Cord.—Effects of Spinal Caries on the Cord.—Surgical Operation in Fractures of the Spine Discussed.

R. PRESIDENT AND GENTLEMEN,—It may be in the memory of some of my hearers, who did me the honour of attending my former course of lectures, that I proposed to supplement my observations on injuries of the spinal cord, by some further remarks, having for their object the consideration of certain lesions, which the limited time at my disposal did not then permit me to discuss.

The deviations from health of the nerve-centres, dependent on accidental causes, are so various, that many of the consequences of such qualities exemplify an observation I formerly made, that it is very difficult to draw a well-defined line of distinction between that which is medical and that which is surgical; and that it is, consequently, impracticable to study to advantage these several consequences in isolation. Even functional disturbances are often brought under the notice and treatment of the surgeon; and organic changes of a similar nature as regards their effects, though dependent perhaps on widely different causes, are, in like manner, the common property of both branches of the profession.

I am prompted to make these observations to guard myself against imputation of trespassing on the province of the physician in this, I may add, the ensuing lectures, to which the foregoing observations are equally pertinent.

Tetanus is a disease which exemplifies the preceding remarks. Sometimes idiopathic in its origin, more often traumatic, it was long classed as a functional lesion; and its treatment is assigned to the physician or the surgeon, according to the latent or apparent source of the disease. This distinction is purely conventional, and has no foundation in nature. It matters little whether an external wound be the cause of the disease, so far as the nature of the malady is concerned: when once established, the treatment of the original lesion appears to exercise no influence on its consequences, except in rare and doubtful instances, than the excision of the bitten part after the, in many respects, milder disease of rabies is developed. It is true, as far as my experience enabled me to judge, that the so-called idiopathic form of tetanus is more amenable to treatment than the traumatic. Probably the exciting cause is, though unseen, more accessible to remedies; and the disturbance, being unattended by breach of surface, is more often purely functional in its nature. Yet, in whatever sequence or under whatever circumstances the symptoms of this terrible malady present themselves, we feel assured of the existence of some antecedent disturbing cause, locally, if not invariably, peripheral in its nature, and affecting some part of the nervous system. The expression "idiopathic" must not be accepted as convertible with spontaneous or causeless,—an interpretation which is, I think, too often carelessly applied to it. It can simply be in this instance, as indeed in others where it is similarly employed, the exciting cause of the disease cannot be demonstrated, is unseen, probably unknown, or only subject of conjecture. In this sense it is admissible, as opposed to traumatic, where the *primum mobile* of the nervous irritation is apparent, although we may be as much in the dark as regards the manner of its operation in producing the phenomena of the disease.

Whether the class of symptoms, which respond strictly to the definition of tetanus, ever spring from a purely central origin, may, I think, be a matter of question. But we know that they may be accurately imitated; and that the disease itself may be excited, and in a fatal form, by the

agency of a drug. Convulsion also characterises certain injuries of the brain, as I have formerly had occasion to remark. This question, however, opens up the wide and important inquiry, how far all these convulsive affections are allied; and whether they may not, in an extended sense, be regarded as different phases of a diseased action, the modifications of which are dependent on some constitutional bias, organic change, or accidental influence, which determines the character and degree of the resulting consequences. That these excito-motor diseases possess many characteristics, and present many phenomena, in common, there can be no doubt. The premonition of the convulsion in tetanus, epilepsy, and hysteria, often manifests a palpable resemblance. In tetanus, for example, I have known the fit, if I may so term it, arrested, or, at any rate, delayed, by forcibly grasping the wrists of the patient, in anticipation of the spasm which extended, periodically and at definite intervals, from the hands to the arms, and thence to the chest, until the whole trunk was involved in the terrible convulsion. But in these cases of deferred paroxysm, it would seem as if there were a cumulative force in operation; for a repetition of this compulsory delay entailed a renewal of the effort at shorter intervals, and ultimately terminated in a fit of painfully increased intensity. In tetanus alone, of these affections in their severer form, the intellect is not involved; and in this respect it is more allied to chorea. But in the more developed type of hysteria, entire and prolonged unconsciousness may accompany the most protracted tonic spasm that I have witnessed in any of these affections. The respiratory muscles are not *specially* involved in tetanus, though, no doubt, the diaphragm is sometimes affected, in company with other and voluntary muscles of inspiration and respiration.

In the tetanic convulsion, the excitement of the spinal cord, at a centre and source of reflex motor power, overrides the controlling influence of the brain; and the inhibitory authority of volition is thus suspended, leaving the voluntary muscular system generally under the undisputed sway and dominion of excited reflex action. This definition is, however, more or less applicable to all these convulsive affections: the points of contrast are observed in the duration and intensity of the spasm, and in the particular set of muscles which are more especially affected. Thus, in chorea, the muscles of the limbs and trunk, and those employed in articulation, are under this excited influence; and the contortions produced by their irregular and involuntary contraction are, in one sense, aggravated by the exercise of the partially effective effort to control them. The spasm is, however, limited in intensity, although usually without remission, except during sleep. In hysteria there would appear to be no spasm of the glottis, and therefore there is no lividity of face; but the repeated sobbing acts of inspiration are followed by the shrill cry or interrupted cachinnation of prolonged expiration. In marked contrast with these characteristics are those of epilepsy: in the latter, the closing muscles of the jaws and larynx are specially affected, simultaneously with the muscles of expiration; and the struggle seems to be between this determined obstruction and the effort to overcome it: but the convulsion is by no means limited to these muscles. Yet I have witnessed in hysteria convulsion as violent, cramp as rigid as in tetanus, and unconsciousness as profound and prolonged as in epilepsy; but without the capillary congestion of the brain, characterising the partial asphyxia of the latter. In all, probably, the exciting cause of the disease may be either centric or eccentric; and it may be assumed that the eccentric form is more amenable to treatment in all: *i.e.*, if we admit that the conversion of the eccentric into the centric forms by the secondary development of organic mischief in the spinal cord, places traumatic tetanus in that category.

Both animal and vegetable poisons are capable of producing convulsive affections, in many respects nearly allied to tetanus. The close resemblance between the effects of a dose of strychnine and this disease is so remarkable that, but for the direct dependence of the symptoms on the poison, and their presence as an immediate consequence of its exhibition, the two conditions could be scarcely distinguished. In rabies, the introduction of an animal poison is the exciting cause of that frightful train of consequences, of which the leading feature has given its popular name to this malady. But in hydrophobia the muscles of deglutition seem to be specially affected; whilst those of mastication are not so: the symptoms, in fact, indicate that the eighth pair of nerves is particularly implicated. The distressing thirst accompanied by the dread of making the effort to satisfy it; the wild and wandering expression of countenance, the suffused eye, and, beyond all, the helpless, purposeless, unremitting restlessness of this disease, suggestive of the undefined apprehension of something more terrible than death itself, under which the senses reel and the intellect staggers,—distinguish rabies from tetanus and all other convulsive affections, and mark it as the most dreadful of diseases to suffer or to witness. Yet the symptom which is considered as pathognomonic of this malady, and gives to it its name, is not limited to hydrophobia: in many convulsive affections, the spasm

induced by the effort excites the same dread of attempting to swallow liquid: and in hysteria it has been occasionally observed as a prominent and most distressing symptom, enduring for many days. I have also the notes of two or three cases of acute tetanus, in which spasm was excited specially by the effort to drink: these, however, are exceptional instances.

In its traumatic form, the invasion of tetanus can scarcely be mistaken. The general premonitory symptoms may be so unimportant and undefined as to escape notice, but not so the uneasiness about the neck, the sense of constriction about the throat, and the stiffness of the jaws. The period at which these first symptoms present themselves varies considerably; and this variation does not appear to influence the subsequent progress or probable issue of the case. Neither does the nature of the wound nor its condition bear any relation to the intensity of the symptoms: the tetanic spasm may not be developed till the causative lesion is healed, and may then prove rapidly fatal. Pain in the epigastrium or behind the sternum is an early symptom; and cramp in the spinal and abdominal muscles usually precedes that of the limbs. The respiration is often laboured and painfully performed, irregular or hurried, and deglutition difficult. Even slight physical or emotional causes excite a paroxysm; and the dread of its approach stamps on the countenance an expression of anxiety and alarm. Whilst the fit is on, the muscles contort the trunk and limbs in various ways, the extensors of both, however, appearing to have the predominance. The expression of the appealing, anxious face is, at the same time, rendered painfully hideous by the spasm of its muscles. The circulation and respiration are excited, and perspiration is abundant, as a consequence, apparently, of the muscular perturbation. The feebleness of the articulation seems due to the same cause. The temperature is often raised, and usually in a marked degree towards the close of life; but there does not appear to be any febrile action—any sympathetic fever excited by the disease. Constipation of the bowels, more or less obstinate, characterises this malady, and is accompanied by a fetid state of the dejections.

The explanation of these phenomena is not very clear. Probably the sympathetic system is so far involved in the mischief, as to give rise to spasm or irregular contraction of the muscular coat of the intestines, and may also account for the mal-assimilation or decomposition of their contents. There is no doubt that the excited action of the sphincter ani is an obstacle to the relief of the bowel; but cannot alone explain its obstinate resistance to the action of aperients. Retention of urine, when it occurs, is due to spasm of the retaining muscle of the bladder, as its occasional involuntary ejection is consequent on that of the abdominal muscles. Unrelaxing cramp, with exacerbations which recur with increasing frequency and violence—the broken rest—the imperfect nourishment of the frame—the exhausting effect on the nerve-centre resulting from the continuous demand on it by the unremitting spasm—all aid in bringing to a speedy close the acute form of the disease; and the unhappy victim sinks into a state of prostration, both physical and mental, which brings with it some relief to his suffering before he dies. But, more often, death is sudden, and caused by spasm of the larynx, induced by some accidental exciting agency, or occurring during a paroxysm of general convulsion: a livid hue overspreads the face and chest, the eyes become fixed, and the patient dies asphyxiated.

Deviations from this, which may be called the normal course of the disease in its acute form, are occasionally met with, such as remission of symptoms for an extended period, and the simultaneous, perhaps indirectly consequential, occurrence of other affections in which the cerebral functions are more or less implicated. But these latter rare exceptions are not likely to mislead the practitioner, because they are not sufficiently pronounced to mask the original disease, unless as the precursors of death. Indeed, the diagnosis of tetanus is rarely obscure, unless in its subacute form, or when occurring as a phase of hysteria; and the history of the attack is scarcely needed to throw light upon its nature. In the acute form, mechanical lesion of some sort, but not necessarily a breach of surface, is usually the exciting cause; and, in my experience, contused or lacerated wounds, especially of the hands and feet, are the most rife. Of tetanus following severe burns I have seen many instances; and also, though rarely, I have known the healing of a wound precede the first symptoms of the disease. There is no doubt that its most acute form may result from the agency of exposure to sudden transitions of temperature, or even from mental impressions; but such examples are usually classed with the idiopathic, as distinguished from the traumatic, type of the malady.

It has been asserted that the acute form of tetanus is invariably fatal. In one sense this may be true, if the term "acute" be restricted to those cases which never assume, by virtue of the lapse of time, the chronic form. But the instances of recovery are not limited to such as may be

denominated subacute in the early stage; though I admit that the acute traumatic type of tetanus is almost always mortal.

Symmetrical spasm is the usual type of tetanus; but occasionally the spinal affection of one side is determined by the position of the injury. A remarkable illustration of this rare form of the disease occurred about two years since in St. Thomas's Hospital. The patient, a lad of eleven years of age, injured his ulnar nerve by falling on a rusty nail. Some days after the wound had healed, he was attacked with spasm in the arm, and pleurosthotonos succeeded. Although the spasm subsequently became more general, the unilateral feature characterised the case until its fatal termination after three days; the intensity of the spasm continuing more marked, and at times exclusively present on the injured side. I may remark that, in this instance, as in a few others, I noticed the exceptional circumstance of delirium supervening towards the close of life.

As surgeons, we meet with many illustrations, in a modified form, of the characteristics of this large category of spinal affections, to some of which I have already alluded; *e.g.*, the penetration of the cord by a spiculum of bone, and tetanic spasm as the consequence of the irritation; also the same result occurring, but with more of an epileptic type, as a sequence of concussion of the spine. Likewise, sources of local irritation in distant organs not unfrequently excite tetanic symptoms; and the general convulsion, induced by apparently trivial causes, indicates a condition really independent of, though commonly referred to, exalted sensibility. The attendant symptoms may be described as those of spinal irritation, and often resemble hysteria: the disturbance is purely functional. I remember witnessing in a young lady, of robust frame, but under the influence of moral depression, a very severe attack of what could scarcely be designated by any other name than that of tetanic spasm, but especially affecting the legs. Her suffering was intense; and the spasm had lasted, without intermission, for several hours. I referred these symptoms to spinal irritation; and a counter-irritant to the spine, with an anodyne draught, afforded relief. Derangement in the urinary organs not infrequently provokes this condition; and the reactionary consequences which are commonly observed affect the same organs, giving rise to spasmodic stricture, incontinence, and other affections simulating organic changes, and requiring care and sagacity in their diagnosis. Spasm in the urethral bulb and in the sphincter ani, severally in vesical calculus and in fissure of the rectum, are familiar illustrations of a similar form of excited local reaction.

I have, in an earlier lecture, pointed out that concussion of the spine is, in some instances, followed by convulsive movements simulating, if they may not be strictly regarded as, epilepsy. True tetanic spasm will also sometimes be a sequence of such injury, assuming perhaps an intermittent type, and persisting for some time, without there being any ground for supposing the presence of organic lesion.

Again, progressive organic change in the cord, accompanied by corresponding deterioration of cerebral influence and true spinal power, is occasionally attended, under favouring circumstances—of which exhaustion is the most common—by genuine tetanic symptoms. This is a phase of excited motor action which yields speedily to treatment tending to re-establish or equalise the circulation. True shock can scarcely be said to be an attendant or sequence of these convulsive affections of the cord. Nervous exhaustion is common, and proportioned to the violence or protracted nature of the attack; and this very result seems, as I just now remarked, to constitute one exciting cause of renewed muscular spasm. The appeal to the nerve-centre, whatever may be the morbid stimulus, is not of a character to prostrate, but rather to exalt, its energy; and thus the train of consequent symptoms is of a character diametrically opposed to those of shock.

Tetanus in the lower animals is marked by the same class of symptoms as in man; and the acute traumatic type would appear to be excited by the same causes, and to be as resistant to treatment, as in the human subject. I am informed by an intelligent veterinary surgeon, that he finds medicine of little or no avail in this disease; but that absolute quietude, and exclusion of light in a large loose box, is the management he adopts in the treatment of tetanus in the horse. The necessary intrusion is rare, and conducted with the utmost caution, to avoid startling the animal; and food of a semifluid consistence is left in a convenient position, so that it may be imbibed by suction. He added, that some of the most acute cases he has witnessed have been produced by chill. Exposure to a cold draught of air, or washing with cold water, when the animal is heated and exhausted, is a not uncommon cause of this disease. A pupil of the late Professor Sewell informed me that, when lecturing at the Veterinary College on tetanus, that teacher was in the habit of taking from his pocket a stable-key, and saying emphatically, "This, gentlemen, is my treatment of tetanus:" so great was the value he attached to seclusion and repose, and so anxious was

he to impress on his class the imperative necessity of attending to this feature in the treatment of the disease. I think we might take a lesson, in our own practice, from this rational advice, which recognises and strictly enforces the treatment which is best adapted to a malady that may be said to depend, for its sustenance, so much upon extraneous excitement.

In traumatic tetanus, the *condition* of the wound seems to have as little influence in determining the central nerve-lesion, as its nature. Punctured, contused, lacerated, very rarely incised, wounds, bruises, and burns, are followed by tetanus; and the intensity of the attack is in no degree proportioned to the severity of the injury. Sometimes the disease seems to be more prevalent than at others; and I have, on more than one occasion, observed that, at one particular period, cases of severe burn seemed to be peculiarly liable to an attack. Although tetanus is usually developed whilst the causative wound is open, this is not uniformly the case; and a healthy granulating surface is quite consistent with the presence of the disease in its most acute form, though not so commonly as an angry or sloughy wound. In the lad whose case I just now related, the wound in the wrist had healed. In another instance, the period at which the contraction of a cicatrising wound, after removal of a recurrent fibroid tumour, was most active, was that in which tetanus was developed. Whenever I have seen the disease follow a burn, it has been at an early period, before cicatrisation had commenced.

One of the few cases of acute tetanus which I have known to recover was in a patient whom I watched with much interest whilst under the care of my colleague Dr. Barker. The symptoms appeared shortly after he had received a severe blow on the back, and lasted for about a fortnight, varying in their intensity; but at times the paroxysms were remarkably severe. The treatment consisted of large doses of the tincture of Indian hemp, and afterwards of morphia. In this instance, there was no breach of surface.

I am not aware that any good purpose could be answered by discussing the medicinal treatment of tetanus. Unhappily it is an unsatisfactory topic, and throws very little light upon the pathology or diagnosis of the disease. I would, however, venture to remark, in connexion with the question of the differential characteristics between convulsion and shock to which I have referred, that the artificial substitution of the latter would seem to operate in paralysing the former. Thus the influence of tobacco is manifested in this way. An instance which I witnessed at an early period of my professional life made a great impression on me. It was that of a young girl who was under the care of Mr. Travers whilst I was his articulated pupil and dresser. Her hand had been severely lacerated on the palmar aspect by a carding-machine, and acute tetanus followed. An infusion of tobacco was injected into the rectum, and the consequence was an amount of prostration which threatened speedy extinction of life. She, however, rallied, and ultimately recovered. I have never seen so acute a case saved; but whether this result was *post hoc* or *propter hoc*, I do not pretend to decide.

[To be concluded.]

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

HYDATIDS PASSED BY INTESTINES.

By J. SINCLAIR HOLDEN, M.D., Glenarm, Co. Antrim.

MRS. B, aged 60, enjoyed good health to nine months before decease, when she felt some pain over the liver and right shoulder. This gradually became most intense, and produced much debility, as all remedies, outward or inward, failed to give permanent relief. The liver became slightly enlarged, and resilience was lost.

A month before her death, my attention was called to a faecal discharge, which gave her some temporary relief. It contained portions of a cyst, some as large as the segments of an orange, and having attached to their inner surface a number of pedunculated sacs, of the size of a pea. The microscope shewed with these hooklets, evidencing their hydatid origin. No more came away, and I failed to obtain a *post mortem* account to confirm my view that the hydatid fragments had come from a pill-box cyst which had opened direct from the liver into the intestine. The portions were too large to traverse the hepatic duct; nor was there at any time signs of jaundice.

LECTURES ON THE HISTOLOGY OF THE EYE:

(BEING THE ARRIS AND GALE ANATOMICAL LECTURES.)

Delivered at the Royal College of Surgeons of England, June 1869.

BY

JOHN WHITAKER HULKE, F.R.S., F.R.C.S.,

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LECTURE I.—Concluded.

Vitreous Humour.—I must now pass on, gentlemen, to the *vitreous humour*. This, in a perfectly healthy state, is a clear colourless mass of gelatinous consistence, enclosed in a hyaloid membranous capsule.

In the *adult*, the traces of structure perceptible in it are scanty and indistinct, conveying a very imperfect idea of its anatomical composition; but, in the *fetus*, its formed elementary parts are recognisable without difficulty, and their combinations are easily made out; so that we naturally turn to embryology for aid; and this, as in so many other instances, explains points in the anatomy of the adult organ which would otherwise remain unintelligible.

Genetically, the corpus vitreum is an extension of the deeper stratum of the cutis, intruded into the secondary eye-vesicle between the lens and the nervous lamina, which becomes the retina.

In order to make this quite clear, I must ask your attention to some matters in the development of the eye.

The first trace of the eye in the chick, which makes its appearance very early, is a hollow protrusion from the *front and lateral part* of the *foremost cerebral vesicle*. Gradually, as this cerebral vesicle enlarges forwards, and divides into the two segments which Von Baer called the *Vorderhirn* and the *Zwischenhirn*, the primary eye-vesicle shifts its place backwards and downwards until at length it lies beneath the *Zwischenhirn*; there it becomes *pedunculated*. The *stalk*—the future optic nerve—at first is hollow, and through it the cavity of the eye-vesicle communicates freely with the cerebral ventricle.

The upper side of the eye-vesicle, where the stalk is placed, is towards the *Zwischenhirn*; whilst its opposite side is towards the external tegument, which here consists of the epidermal stratum only, as Remak thought, or which includes, as Kölliker believes, a part of the cutis. At this spot, the epidermis thickens; and an *inbud* of it, pressing on the summit of the primary eye-vesicle, pushes this inwards, so changing the *globular* shape of the vesicle into a *cup* consisting of an inner and an outer plate, separated by an interspace, the remnant of the original cavity of the first vesicle, which continues for some time longer to communicate with the brain-ventricle through the still hollow eye-stalk.

The cup thus formed, distinguished as the *secondary eye-vesicle*, is incomplete below; and through this gap—the *fœtal cleft*—the deeper stratum of the cutis intrudes between the epidermal inbud, which is the matrix of the lens, and the anterior plate of the secondary eye-vesicles which is the foundation of the retina.

You will perceive that this intruded portion of cutis fills the space in the secondary eye-vesicle which corresponds to that in the completed eye occupied by the vitreous humour. So long as the fœtal cleft remains open, the intruded portion of cutis (which we may now call the vitreous humour) is directly continuous through it with the exterior cutis, and nutrient blood-vessels enter the vitreous humour through this channel. At a later stage, the fœtal cleft closes, which perfectly isolates the internal corpus vitreum from the external cutis. Von Ammon says that the closure of the fœtal cleft begins at its middle, and proceeds hence in both directions, forwards and backwards.

Simultaneously with the transformation of the primary eye-vesicle into the secondary, the hollow eye-stalk became solid by the approximation of the upper and lower plates, and acquired the form of a flat ribbon. Next, by the inbending of its edges, the ribbon became a gutter, along which the blood-vessels gained the inside of the eye; and, lastly, the gutter, closing in the eye-stalk, takes the cylindrical form of the perfect optic nerve, and includes the blood-vessels within it.

Our knowledge of the distribution of these vessels is still very imperfect. Von Ammon, whose articles in the *Archiv für Ophthalmologie* are a fund of information on the embryology of the eye, says that the *arteria centralis*, immediately on entering the globe, gives off *fine twigs to the sclerotic and choroid*; next it detaches several *lateral branches to the retina*, upon the inner surface of which they spread out and form the *membrana vasculosa fetal retinae*; then it sends off a second set of

lateral branches, from five to seven in number, which ramify on the outer surface of the hyaloid capsule, forming here the *discus arteriosus hyaloideus*; and, finally, the diminished trunk, traversing a canal in the vitreous humour, is distributed to the vascular capsule of the lens. Thus Von Ammon describes *two vascular nets*—one *retinal*, the other belonging to the *vitreous humour*; but this has not been confirmed by later observers. The late H. Müller distinctly says that there are not any other vessels on the outer surface of the corpus vitreum than the retinal ones; and he also mentions that the retina continues long without blood-vessels—a fact which I have myself verified in the human foetus, the moment of their appearance being apparently determined by that of the obliteration of the arteria hyaloidea capsulae lentis. In the human foetus of the fifth month, in which all the retinal layers except the bacillary were distinctly recognisable, I found the retina still quite devoid of blood-vessels; the axial vessels going to the lens-capsule were still pervious; and I failed to detect the vascular net on the hyaloid capsule described by Von Ammon.

Absolutely fresh human embryos are so rarely obtainable, that the structure of the human vitreous humour in the earliest stages of development is unknown. Before and after the fifth month, it consists of a web of delicate fibres, the meshes of which contain a viscid colourless substance. Throughout this tissue, in chromic acid preparations, numerous minute bright globules occur, which, mingled with the fibres, give, under a moderate enlargement (a quarter of an inch) some resemblance to a stellary tissue. This resemblance is, however, only superficial, and disappears under a higher magnifying power; which makes it evident that the bright globules have not any definite relations to the fibres, since some of them lie free in the meshes of the web, and others cohere singly or in groups to the sides of the fibres or at their intersections. Examined with one-twelfth or one-twenty-fifth objective, these bright globules do not exhibit any trace of structure; and I am disposed to conjecture that they are artificial products, resulting from the action of the chromic acid on the interstitial albuminous substance. (Fig. 5).



Fig. 5.

But, besides the formed elements just described, there occur in the foetal corpus vitreum *other elementary parts of the highest physiological importance*—large nucleated cells, which are most abundant upon and near the hyaloid capsule and around the central canal, but which are also found throughout the whole organ. Most of them have a simple round or roundly oval shape; some are fusiform and branched. All are distinctly nucleated. Their diameter ranges between 1-4300th and 1-860th of an inch.

In the human adult's vitreous body, the foetal fibrillary net steps into the background; but it does not wholly disappear, for portions of it persist even to old age; and it is replaced by delicate membranes of such extreme tenuity, and differing so little in their refraction from that of the fluid substance of the organ, that they would elude detection, but for the presence of folds and the adhesion of minute impurities to them. The arrangement of these membranes is not yet certainly known; and, in truth, their very existence is doubted by some anatomists.

The cleavage of the vitreous humour in flakes parallel to its outer surface, when artificially hardened, has been adduced in support of a concentric lamination of the organ, but without sufficient proof that these cleavage-planes coincide with membranous septa. Hannover—I think, with a nearer approach to demonstration—thinks that the membranes radiate from the axis towards the surface.

Beyond all doubt, the most important constituents in the adult's corpus vitreum are the large nucleated cells which I mentioned as occurring in the foetus. These embryonal cells persist throughout life; and they are the starting-point of many of the morbid changes to which this organ is subject.

One consequence of the apparent want of structure is, that not a few practitioners regard the vitreous humour as an inert, scarcely vitalised mass, hardly, if at all, susceptible of the many manifestations of dis-

turbed nutrition to which all the other ocular tissues are liable. Were this not so, we should not continually hear, as we do, every sort of opacity that we see in it with the ophthalmoscope at once attributed to some extraneous source, such as the irruption of blood from a burst choroidal or retinal vessel; or to an exudation—a term which, in view of the non-vascularity of the organ, implies a foreign origin. No doubt, many of its opacities are correctly referable to these sources; but I am confident that more of them are derivatives of its normal formed elementary tissues; and, in particular, they are products of the persistent embryonal cells.

The vitreous humour offers greater advantages than even the cornea for the study of those phenomena of cell-life which manifest themselves in structural change, because its simple texture is highly favourable for the early recognition of such delicate alterations; and it is not only non-vascular, but also nerveless, and completely isolated from the neighbouring vascular and nervous parts by two structureless membranes—the capsula hyaloidea, and membrana limitans interna retinae. The hyaloid capsule and the internal membranous septa must be lacerated whenever blood bursts into the vitreous humour from the choroid or retina; they are torn, and often wondrously wrinkled, during the progress of changes originating in the nucleated cells; and they are also frequently dotted over with molecular impurities, some of them fatty and earthy products of the disintegration of blood-clots, of exudations, and of the mucin-holding fluid which fills the loculi of the organ. In one of these ways are formed the excessively delicate gauzy membranes which we perceive with the ophthalmoscope; but all these alterations are wrought upon these hyaloid membranes from without: theirs is altogether a passive rôle. Small effusions of blood into the vitreous humour disappear in the course of a week or two, but large extravasations very slowly; and, in diabetic patients, crimson blood-clots will sometimes remain in the vitreous, as also in the aqueous humour, during several months, without undergoing any noticeable change.

But, if the other elementary tissues are passive, the nucleated embryonic cells, which dot the hyaloid membranes at every age, are endowed with an extraordinary formative energy, normally latent, but promptly responsive to an appropriate stimulus, the nature of which determines the dynamical direction this energy takes—tending in one instance to the evolution of a granulation-tissue; in another instance, to the formation of pus; in a third, of fibrine or sarcoma; in a fourth, of cancer; and so on. Anatomically, this excessive formative energy principally manifests itself in two ways—one marked by a remarkable extension and fission of the cell-wall and contained protoplasm; the other characterised by inordinate proliferation of the nucleus. The first produces, in its most complete form, very finely fibrillated tissue. (Fig. 6.) In some examples



Fig. 6.

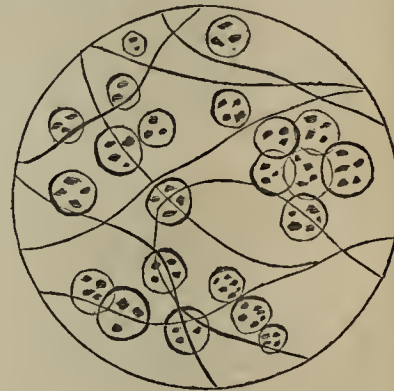


Fig. 7.

of this, I have noticed a definite arrangement of the cells, and a dominant direction of the fibrillation; the cells being grouped in lines vertical to the hyaloid capsule, and most of the fibrillae running parallel to this. Where the fission of the cell-wall is carried to a less degree, it produces open fibre-cell-nets of coarser texture, which are often combined with corrugated hyaloid membranes.

Proliferation of the nucleus in a minor degree is common in association with chronic irritative affections of the vascular coats—*e. g.*, chronic glaucoma and the late stages of posterior staphyloma, in which we find the cells larger than normal, but still retaining their simple forms, and containing two, three, or several nascent cells, instead of a single nucleus. But it is in suppuration that proliferation is carried to its highest development. Advanced cases, where the entire corpus vitreum is changed into a tough yellowish substance, are not suitable for the demonstration of this; but, before its metamorphosis is complete, at an earlier stage, in which the opacity due to the presence of pus diminishes from the exterior towards the still transparent centre of the organ, all the intermediate phases between the simple mononucleated embryonal cell and perfect pus are easily traceable. (Fig. 7.) The enlargement of the

nucleus and cell; the segmentation of the former; the endogenous evolution of a brood of young cells; the distension of the parent cell by an ever increasing progeny; and the escape of this by the disappearance of the primary cell-wall or capsule, in the form of corpuscles undistinguishable from pus,—may all be observed. I have not yet traced out completely the development of cancer and allied neoplasms in this organ; but I have very little doubt that the process is essentially similar to suppuration.

NOTES ON ECZEMA.

By H. S. PURDON, M.D.,

Physician to the Belfast Dispensary for Diseases of the Skin, etc.

UPON the subject of eczema, much has already been written; and, although I may not be able to bring forward anything new, still I hope to record in the following remarks some of the peculiarities that have been observed in this disease when occurring in the aged. The notes that I have made are derived from two principal sources, viz.:—The Belfast Dispensary for Diseases of the Skin, and the Belfast Charitable Institution, the latter of which has an annual number of upwards of one hundred aged inmates, being all above fifty years, and who, being admitted for life, are consequently under observation for several years. Amongst these individuals (especially females) eczema is a common complaint. Now, in old age, the epidermis is rough, dry, and impermeable. As remarked by Dr. Day, "it almost acts as a foreign body and keeps up a perpetual irritation on the subjacent papillæ in the true skin." In these cases, the application to the skin of a common pitch-plaster, or a stimulating ointment, is frequently sufficient to occasion an amount of local irritation which rapidly ends in an eczema.

In the young as well as in the aged, the eruptive lesions of eczematous inflammations select the orifices of hair-follicles, or gland-ducts, or other vascular spots. Crusts, which may be either plastic or purulent, also form on the external surface. In the aged, the inflammation usually ends in subcutaneous infiltration and becomes chronic, and the discharge from the affected part tends also to increase the extent of the disease; as remarked by Hebra, "the eczematous group is distinguished by more or less profuse excretion, which oozes from the skin-surface." Itching is likewise a constant symptom.

When eczema attacks the legs, usually their anterior surfaces, which in many cases is occasioned by the common practice of old people—viz., constantly sitting close to the fire—the legs become inflamed, stiff, and itching, the skin is usually red and glazed-looking, the cuticle also exfoliates; finally, an exudation takes place into the subcutaneous tissue, this latter state arising from the cells in the cutis, which have become enlarged and swollen from inflammation, pouring out an exudation from their walls, or, according to other pathologists, owing to direct transudation from the capillary vessels. In such cases, the primary eruption may be either vesicles or pustules, or both combined, having a tendency to end in superficial ulceration. On this point, Mr. Milton thinks "that we might include under the head eczema, an exceedingly obstinate affection, attacking the legs and running into ulceration, a complaint generally seen in persons of advanced life. On as good grounds as any often urged for giving a name, this variety might be called ulcerative eczema." I described two cases in the *Medical Circular* for April 12th, 1864, under the name *eczema ulceratum*; since which date, I have constantly met with this affection in elderly people, usually of the poorer class. Eczematous ulcers of the lower extremities are, as a rule, only met with in those of advanced years, usually women who have borne many children, accompanied by a varicose state of the superficial veins, which gives rise to stagnation of the contained blood and congestion in the affected part. Mr. Paget, in Holmes's *System of Surgery*, thus describes their origin, as commencing in a slight injury: "The surrounding inflammation assuming an eczematous, instead of a common character, the skin becoming punctate or vesicular, or cracking, and exuding an adhesive ichor, with constant itching; but they are often spontaneous, the ulcer taking place in the middle of a patch of acute eczema." In the treatment of this form of ulceration, water-dressings, or a weak solution of nitrate of silver, are the applications recommended by Mr. Paget. Ointments are seldom tolerated.

A chronic eczema of the leg presents the following characters. The affected skin is infiltrated, hard, and thickened to the touch; and, in neglected cases, tubercular, being what is called by Mr. Hutchinson "elephantoid (papillary) hypertrophy." Itching is also a constant symptom, which occasions the patient to tear and scratch himself, thus causing excoriations. The skin of the affected part eventually becomes darker than natural. The bowels are generally costive; and,

finally, after a certain time, the constitution may be affected; the digestive organs become deranged, and general debility ensues. The following cases are abbreviated.

CASE I.—Mrs. F., aged 53 years, of a full plethoric habit, consulted me on December 27th, 1866, suffering under eczema of the right leg, complicated with ulcer of two years' duration. No varicose veins were apparent; she had always enjoyed good health; and could not attribute the present disease to any cause. The affected skin was red and glazed-looking; and, to use her own words, "watered"; bowels costive; appetite bad; and she was troubled with pyrosis. In this case, I considered the eczema to be due to plethora and mal-assimilation. The treatment adopted was as follows. Infusion of gentian, soda, and hydrocyanic acid were given internally; with a pill, containing podophyllin and compound aloes pill, at night, which acted both on the liver and rectum; locally, a mixture of olive oil and oxide of zinc was applied with the best results. After the eczema and ulcer were cured, the latter, after the inflammation was subdued, being treated by strapping, an extensive eruption of lichen appeared, which, for a long time, proved obstinate to treatment.

CASE II.—M. S., aged 60 years, an inmate of the Belfast Charitable Institution, was first seen by me on September 9th, 1867, suffering under acute eczema of the left leg, complicated with ulcer. The leg was greatly swollen and painful; the disease extended from the knee to the ankle; the ulcer was very irritable, causing loss of sleep at night. The treatment adopted consisted in the local application of soothing remedies, as poppy fomentations, followed by "Carron oil." Internally, the patient was ordered a mixture, consisting of infusion of calumba, sulphate of magnesia, sulphate of iron, and sulphate of quinia, with a grain of opium at night, to procure sleep. This latter drug is of the greatest value in various forms of ulceration.

Occasionally, when the disease is verging towards a cure, an eruption of furunculi make their appearance, usually around the margins of the diseased part. The patients generally look on this in the light of carrying off some peccant matter from the blood; an opinion, I believe, held formerly by the humoral pathologists. Rayer has remarked that, in "infancy and youth, eczema appears more particularly on the head; in riper years, on the breast and belly, but especially on the genital organs; and in advanced life, on the lower extremities and about the margin of the anus." This latter affection first attracts attention by the itching it occasions, being frequently accompanied by constipation and hæmorrhoids, due to derangement of the liver and congestion of the portal system. Those who "live well" and indulge freely at the table, are the usual sufferers from this complaint. I may remark, in passing, that I have derived benefit from the administration of the confection of black pepper, and the local application of dilute citrine ointment in this form of the disease. Old men are subject to eczema intertrigo of the inside of the thighs and scrotum, accompanied by incontinence of urine. In these cases an absorbent powder dusted on the affected part is necessary; and one consisting of powdered starch and oxide of zinc, as recommended by Hebra, answers very well. Eczema capitis is occasionally met with in elderly people; it usually commences by the formation of scurf and itching, the hairs eventually falling out. From a state of alcoholism, the subjects of which appear prematurely old, a cutaneous eruption usually appears on the most exposed parts of the body, as the face; and Mr. Erasmus Wilson considers "gutta rosacea" to be a form of eczematous inflammation. These individuals are liable to constant tremor of the hands and loss of appetite. For the former affection, the oxide of zinc has been recommended by Dr. Marcet.

As is well known, old people are frequently asthmatic, the lung-tissue being usually emphysematous; such individuals occasionally suffer from eczematous eruptions, probably arising from improper aëration of the blood. The following case occurred about two years since.

J. S., aged 70 years, for a considerable time an inmate of the Belfast Charitable Institution, formerly by occupation a gardener, since his admission, suffered more or less from asthma; when he was free from this, an eczematous eruption appeared on the extremities, and continued till the next attack. A few months before his death, herpes zoster took the place of the eczema, appearing on the left side of his thorax.

According to Trousseau, in his *Clinical Lectures*, translated by Dr. Victor Bazire, old people, who are asthmatic, exhibit in their youth eruptions of an eczematous nature. "Indeed, nothing is more common than to find herpetic, rheumatic, gouty, and hæmorrhoidal affections transform themselves into asthma..... Thus eczematous eruptions, rheumatism, and gout, are complaints which may be replaced by asthma, and may replace it in turn." Eczema seems occasionally to depend upon a rheumatic diathesis. Lumbago is also sometimes present; and I have derived considerable benefit from the administration of the tincture of *actea racemosa*, combined with Fowler's solution, in this form of eczema. The popular remedy known as the "Chelsea Pensioner", is

likewise useful, especially when the eczema is chronic, the bowels constive, and rheumatic pains complained of. The sulphur contained in this preparation is given off by the skin in the form of sulphuretted hydrogen; thus, in the most natural manner, coming into contact with the diseased surface.

Mr. B., aged 62 years, of a gouty family, has been all his life a martyr to this disease. At the early age of ten, the patient states that he had his first attack in the foot; and that he has always lived well. At the present time (December 1867), the various joints of the hands and feet are distorted, with tophaceous deposits. He has usually three attacks of gout in the year, the worst being always in autumn; the affected joints become swollen and erythematous, which, in many instances, has assumed a vesicular character. I may remark that the patient derives considerable benefit from the application of hydrocyanic acid, painted on the affected part once or twice in the day, cotton wool being afterwards applied.

In cases such as the above, depending on a gouty diathesis, the wine of colchicum, Fowler's solution, and equal quantities of carbonate and sulphate of magnesia, in peppermint-water, form an useful mixture, the proportions of the various ingredients being increased or diminished according to circumstances. According to Dr. Smith, *Journal of Cutaneous Medicine*, No. 1, "Indican is met with in the urine of eczema. Indican is supposed to indicate a retardation in the process of declension from the complex to the more simple of the products of function and secretion, and is probably due to accumulation of urea and other products of waste in the blood, arising from deficient renal excretion." From the above, it is evident that the occasional use of a diuretic is of advantage.

The chronic forms of eczema are usually those met with in the aged; and, as it is generally necessary to prescribe arsenic, the preparation which is less liable to disagree with the stomach is the one to be selected. In the administration of this remedy to those advanced in years, who so frequently suffer from dyspepsia, the best preparation I know of is the liquor soda arseniatis. Arsenic acts as a tonic to the capillary system, stimulating it to remove hypertrophy, allays excessive sensibility, and is recommended by Trousseau in asthma, thus fulfilling two objects in the treatment of eczematous patients afflicted with asthma. For flatulence, loss of appetite, and depression of spirits that the aged frequently suffer from, an excellent remedy is twenty grains of quinine dissolved in an ounce and a half of the ammoniated tincture of valerian, of which the dose is a teaspoonful three times a day in a wineglassful of water; or the syrup of the phosphate of iron, quinia, and strychnia, is extremely valuable, as also cod-liver oil.

The absence of reaction in old people occasions it to be hazardous to apply "strong remedies" towards the curing of an eczema. I particularly refer to blistering fluids, solutions of potassa fusa, which, although of the highest value in the treatment of the various chronic forms of eczema occurring in younger individuals, are, when applied to the skin of the aged, productive of suppurative inflammation, arising from diminished vitality of the cuticle, especially of the lower extremities, which are farthest from the centre of the circulation. Troublesome ulcers may also ensue, which have occasionally ended in gangrene. I have had shortly since under my care a female, aged 94 years, suffering from chronic eczema of the anterior surface of both legs, which I considered to be due to a languid circulation, depending on impaired nervous "power", as her brain is in a state of softening, and her mind wanders; indeed, the patient is in what is commonly called a state of "dotage."

When the disease is of an acute nature, the skin red, glazed, and covered with an adherent crust, soothing applications are the best; a very simple and useful one is the glycerole of starch kept constantly applied. When small superficial ulcers, usually of an indolent nature, are present, "Turner's cerate", to which a little castor-oil and balsam of Peru have been added, is a gently stimulating ointment. In the chronic and declining stage of eczema, "Hebra's tincture", recommended by Dr. McCall Anderson, and which is composed of equal parts of tar, black soap, and rectified spirit, is an excellent preparation; this tincture is to be firmly rubbed into the affected part night and morning, and washed off with soft soap before being re-applied. In private practice, the oil of cade diluted with glycerine is a more suitable application, and in place of the soft soap the juniper tar soap may be used instead. In very inveterate cases, I latterly use a solution of chromic acid, usually of the strength of twenty grains to the ounce, to be applied night and morning; this dissolves the hardened cuticle very rapidly. Old people require a good nutritious diet, with a moderate allowance of wine: sherry or claret are to be preferred. When varicose veins are present, a carefully adjusted bandage ought to be constantly worn. To allay the excessive itching, the part may be occasionally bathed with butter-milk, in which a handful of water-

crosses have been boiled; this remedy has been recommended by Dr. Graves, and is very efficacious, and well suited for the poor.

In many cases, it is not always safe to suddenly cure a long standing eruption, as the following case illustrates. C. M., aged 74, of a debilitated constitution, a servant by occupation, was admitted at the Belfast Dispensary for Skin-Diseases during the winter of 1866, suffering under chronic eczema of both legs, extending from a little below the knee to the ankle; the skin was thickened and infiltrated; the duration of the disease was three years. In this case, I administered the tincture of the perchloride of iron, as recommended by Mr. Milton; and, to prevent costiveness, ordered the confection of sulphur. After this treatment had been pursued for about two months, the disease yielding to the above remedies and the external use of fumigations of the iodide of sulphur, I was sent for one evening to see this patient, who had been during the day attacked with paralysis.

Rayer has mentioned a case in which insanity followed the disappearance of the eruption; and the following case was related to me by a medical gentleman residing in Belfast, as having occurred some years ago. The Rev. Mr. C., aged about 59 years, a Wesleyan clergyman, suffered from an extensive eczema of both legs for some years, after the healing of which he became insane, and continued so for several years, eventually dying in a private asylum. No madness was in his family, and every method of treatment tried in his case was unavailing. On this point, the following authorities may be quoted. Devergie states that, at a certain period of life, eczema becomes a drain, which must not be meddled with. Dr. Tilbury Fox considers the curing of long standing eruptions fraught with danger. Mr. E. Wilson recommends a counter-discharge; and Mr. Paget states that there is sufficient reason to believe that the cessation or cure of an established eczema has been attended with serious disease of the brain or other internal organ. I agree with Mr. Milton, who states "that, if dangerous results ever followed from curing eczema, the records and case-books of those who have paid so much attention to diseases of the skin would surely long before this have yielded some decisive evidence." And although the various theories advanced against curing long standing eruptions are quite feasible, still the proofs brought forward are only isolated examples. On this subject we require further statistics to elucidate the matter, as the evidence is not conclusive.

THE TREATMENT OF SYPHILIS BY THE HYPODERMIC INJECTION OF THE SALTS OF MERCURY.

By THOMAS JAMES WALKER, M.D.LOND.,
Surgeon to the Peterborough Infirmary, etc.

IN the number of the JOURNAL for March 27th, 1869, is a paragraph taken from the *Wochenblatt der Gesellschaft der Aerzte*, calling attention to the cases of syphilis published by Professor Sigmund of Vienna, in which he had made use of the hypodermic injection of the bichloride of mercury. Before the appearance of that paragraph, this short paper had been written, in order to bring before the notice of the profession in England this method of administering mercury, which is advocated by its originator, Dr. Lewin of Berlin, and by others of our continental brethren who have adopted the plan, as more efficient, and at the same time safer, than any other method of employing the drug. It is especially desirable that the method should be fairly tried by those who, from their connexion with institutions specially devoted to the treatment of the maladies in which it is supposed to be useful, have the opportunity of proving, by experiments on an extensive scale, the value of the method.

Notwithstanding the opinion so strongly expressed by many eminent men against the use of mercury in syphilis, we find this remedy steadily holding its ground; and it is still regarded, not only by the vast majority of the medical profession, but also by the most experienced and most scientific of the specialists in this branch of medical science, as by far the most valuable remedy which we possess to combat the malady; and this fact is the more striking, since all admit the bad results which follow the abuse of the drug, and since, moreover, its administration is, as I believe, conducted by most practitioners on an entirely erroneous principle—that, I mean, which is inferred in the rule usually laid down that mercury, when administered for the cure of syphilis, should be given *until the gums are touched*.

The impression that the beneficial effect of mercury is not obtained until this so-called physiological effect is observed, and that, when this is observed, the full benefit of the drug has been derived, prevails, I believe, almost universally through the profession, and detracts most powerfully from the remedial value of the drug. The occurrence of

salivation, or even tenderness of the gums, must be regarded as an accidental complication of the use of mercury, which is of importance only as being a thing to be avoided if possible, since the injury to health caused by salivation—that is, by the stomatitis, etc., produced by the use of mercury—is so great, that the disuse of the drug is indicated on the first indication of this complication. In administering mercury for the cure of syphilis, the object always should be to avert any affection of the mouth, or any other physiological action of the drug, the occurrence of which will necessitate our discontinuing the remedy before it has exerted its curative influence on the disease. The occurrence of tenderness of the gums and salivation is no criterion of the amount of mercury absorbed into the system, or of the remedial power of the drug; and it would be desirable generally, in cases where no precaution to prevent salivation is taken, to continue the use of mercury far longer than the occurrence of this complication admits of. It is a mere fortuitous circumstance, depending in a great measure on the state of the patient's mouth and gums, and upon other circumstances unconnected with the drug. The mercurial treatment should be continued until it has done its work with the disease; and the occurrence of any accident which necessitates its cessation, before this end is attained, should be avoided if possible. It was from Professor Sigmund, while following his *clinique* in Vienna, that I learned how completely the occurrence of salivation might be avoided by diligent attendance to the cleanliness of the mouth, and by the constant use of alum. I usually direct my patients to carry a little piece in their pockets, and to suck it every hour or two for two or three minutes at a time. If patients pay strict attention to these directions, the occurrence of either tenderness of the gums or salivation is an exception to the general rule; and I have frequently, in obstinate cases of syphilis, been able to continue the rubbing in of mercurial ointment daily for months, and until every symptom has disappeared, without the occurrence of salivation, or even of tenderness of the gums.

I do not desire to enter here, however, into the question of the propriety of the mercurial treatment of syphilis: I assume that mercury is a proper remedy to use for the cure of syphilis. But I take the opportunity of pointing out what I consider the erroneous principle by which the administration of the drug is usually regulated, and at the same time to indicate what I consider the correct principle; viz., to administer the drug until the disease for which it is given is cured, and to avoid every complication which may necessitate the discontinuance of the remedy before this object is attained.

The method of administering mercury which enables us to cure the disease with the smallest quantity of the drug, and which at the same time is freest from the risk of the complications to be avoided, is the best. Hitherto, I have always been in the habit of using the mercurial inunction, guarded by the use of alum, as mentioned above. The following cases may assist the profession in coming to a conclusion how far the hypodermic injection of the bichloride or other salt of mercury may be likely to fulfil the indications required; and doubtless, when the method is once brought before the notice of our associates, the plan will be subjected to more extensive experiment, furnishing more decided results. The preparation which I have used in the following cases is a solution of 5 grains of the bichloride in 250 minims of water, with 250 minims of glycerine. This mixture is of such a strength that 100 minims contain 1 grain of the bichloride; and of this I inject 10 minims, or one-tenth of a grain of the salt, and upwards. The injection almost always causes more or less pain, and usually, though not invariably, is followed by slight inflammation and exudation at the seat of puncture. In one case, mentioned below, this was sufficient to cause slight ulceration of the skin—a result which I attribute, however, in part to the fact that the injection was performed by an assistant, who states that, having had but little experience in the matter, and fearing to pass his needle too deep into the cellular tissue, he believes that he forced the injection actually into the tissues of the skin. The infiltration usually disappears in from three to six days. The dose has been repeated every second or every third day in most cases; and the situations in which I have made the injection have been various, most frequently over the abdomen, occasionally in the cellular tissue of the arms or thigh. I have usually injected alternately on opposite sides; and I have certainly observed that the various forms of skin-affection, etc., disappear more rapidly in the immediate neighbourhood of the seat of puncture.

Dr. Zuelzer of Berlin has recently sent me a small pamphlet, forming the inaugural thesis of Dr. Adolf Gelber, in which the use of the kinate of mercury (*Chininsäure Quecksilberoxydul*) is recommended as the best salt of mercury to use for injection. It is readily soluble in water, and is, according to this author, less liable to give rise to pain, inflammation, or any other untoward complication, than any other preparation of mercury. The dose which he recommends is one-sixth of a grain.

Without occupying space with further remarks, I shall give brief notes of each case which I have treated by the method of hypodermic injection. The notes of the cases, more especially of their progress, should be more full; but I hope that, when once the notice of the profession in this country is directed to this system of treatment, fuller and more complete evidence of its efficacy will be afforded by those whose facilities for collecting and recording information are greater than those which a general practitioner in busy practice can possess.

[To be continued.]

OBSTETRIC MEMORANDA.

SUPPOSED AMPUTATION OF THE FINGER OF A CHILD IN UTERO BY THE FUNIS.

By EDWARD CHEATLE, L.R.C.P. Edin., Revesby, Boston.

ON June 8th, I attended Mrs. R. in her third labour. The labour was natural, with the exception of the funis firmly encircling the neck and left arm, the pressure being so great that I had to resort to artificial respiration for some minutes, which, after a time, was successful. While I was using means for resuscitation, I noticed the absence of the second finger of the left hand; and, on a more careful examination, I found a distinct cicatrix at the end of the metacarpal bone, presenting the appearance as if amputation had been performed at the metacarpo-phalangeal articulation, the same wide space being left as would occur when the head of the metacarpal bone is not removed. The idea occurred to me that it might have been amputated by the funis, as that encircled both arm and neck.

TURPENTINE IN UTERINE HÆMORRHAGE.

By EDWARD GARRAWAY, Esq., Faversham.

MR. BRADLEY, of Martley near Worcester, a few years since published some very valuable records of the utility of turpentine in hæmorrhages of all kinds. As a restorative in certain states of prostration, specially such as occasionally arise during the puerperal state, it is no less serviceable. Sometimes after a severe labour, accompanied or not with hæmorrhage, great debility will ensue about the third day, characterised by a rapid pulse, tympanitic abdomen, and other symptoms not connected with peritoneal or other fever, yet threatening the advent of a typhoid condition. Here turpentine, both as an injection and by the mouth, is invaluable.

A recent case, in which the patient was apparently snatched from the jaws of death by the timely administration of this remedy, may be worthy of record.

Mrs. —, aged 28, in her first labour, was confined of twins on May 3rd. She was quite exhausted after the birth of the first child, and the uterus was only roused to expel the second by giving ergot, after which no further contractions occurred. No compression nor kneading of the organ would induce it to throw off the placenta. An hour elapsed; and not liking to give more ergot, I passed my hand into the uterus, and found both placentæ entirely adherent. They were removed easily, and no blood was lost, though, subsequently, there was some slight hæmorrhage. Mrs. — remained weak, and was ordered a more liberal dietary than was usual.

On the third morning, I was sent for to see her dying. My first impulse on entering the room, was to call her husband upstairs to take leave of her; my second, to attempt her restoration. She was bathed in a cold sweat, perfectly insensible, and breathing by hurried gasps; her pulse, 140, was just perceptible; one hand was becoming blue and shrivelled. The tale they told me was this. Mrs. — had been permitted, contrary to my orders, to put the children to the breast. An hour and a half afterwards, the nurse perceived—as she termed it—“a great change,” and sent for me. Having a stomach-pump and turpentine with me, I immediately passed the œsophagus-tube as far as possible up the rectum, and injected an ounce or more of turpentine diffused in mucilage, and, at the same time, covered the abdomen with hot flannel sprinkled with turpentine. In four or five minutes, the respiration became freer, an occasional sigh was heaved, which appeared to do immense good by more fully inflating the lungs. Soon, the eyes opened and wandered round the room. Deglutition now became possible, and a teaspoonful of brandy with ammonia was got down, followed quickly by an egg, beaten up with brandy, sugar, and milk; and now the patient fairly rallied. I left her in an hour or two. At my next visit, she had not the slightest recollection of my having seen her or done anything for her that day. I believe the injected turpentine lighted up the dying embers, and enabled the stomach to receive the subsequent fuel which was laid on, of course with no unsparing hand.

WATER-ANALYSIS FOR SANITARY PURPOSES.

IV.

IN the foregoing consideration of the various methods adopted for examining water, only those results have been referred to which indicate more or less thoroughly the actual condition of water at the time it is examined. The mere fact that those results are at best imperfect, is in itself calculated to suggest the necessity for taking into account the antecedents of water in regard to contamination, so as to supplement the results representing its actual condition with some knowledge of its previous history, and thus to give them greater significance than they might otherwise appear to possess. This necessity becomes still more evident when it is considered that rain is more or less directly the source of all natural fresh water, and that, in its passage from the surface where it has fallen, to those points where it accumulates sufficiently to furnish the supply of towns, etc., it is liable to contamination of various kinds, partly in virtue of its solvent action on decaying refuse, and partly by the admixture of drainage from houses, middens, cesspits, factories, etc. In the ordinary course of nature, the organic impurities that water thus acquires are afterwards destroyed or transformed, either during that natural filtration water undergoes in traversing permeable strata before reappearing in springs and wells, or by the atmospheric oxidation that the flowing water of rivers is subject to. Consequently water, obtained from either of these sources, is generally less impure than it has been at some previous time. In either case, the organic impurities collected by the water are gradually oxidised, and ultimately converted into carbonic acid, water, ammonia, and nitric or nitrous acid. This change, however, is an affair of time, and the time it requires will vary according to the impurity of water, so that although natural conditions are often sufficient to render water free from any trace of organic impurity, they may sometimes be quite inadequate to effect thorough purification and to render water wholesome, especially if its contamination has been considerable and recent. The nature of the contamination itself may also affect the result; for there is every reason to believe that organised germs or ova would so far resist the oxidising action by which purification of water is effected, as to retain their vitality under conditions that would determine the destruction and transformation of dead organic substances. Consequently, the well water of towns, the water of rivers fed by the drainage of populous districts, and, in some cases, even spring water, may contain objectionable organic impurities that render it unwholesome and dangerous. The more considerable and the more recent the contamination of water has been, the more likely would this be, especially in regard to the possible presence of organised germs or ova in the water. This is the danger attending the use of water that has been polluted with sewage or with the drainage from cesspools, and it is one that is universally felt to be serious. In reference to this danger, Dr. Letheby has, in an official report on the subject, dwelt strongly on the probability that, in such cases, impurities may pass unchanged into water, and become "a source of quick and certain injury", illustrating that opinion by a case of water pollution that had perhaps been going on for years without any apparent manifestation of injury to health, until a slight excess of organic impurity brought out its dangerous properties by causing a fatal outbreak of cholera. Considering these facts, and the opinion now generally entertained as to the propagation of certain forms of disease by spores or germs originating from excremental materials, it would seem that a knowledge of the antecedents of water is almost of more importance, in a sanitary point of view, than the results of any chemical examination as to its actual condition; for, so far as it is known, they may be quite inadequate to indicate the presence of dangerous impurity, since these spores or germs are so minute as to be quite beyond the range of detection by chemical means. Thus Dr. Franklyn has shown that the addition of one part of the rice-water evacuation of a cholera patient to 1000 parts of Thames water could not be detected by chemical analysis. It is for this reason in the highest degree desirable to have some means of ascertaining to what extent water has been subject to contamination, and whether that contamination has been recent.

Dr. R. Angus Smith, who was one of the first chemists to direct attention to this point, proposed to take the presence of chlorine in water as the index of its contamination with animal refuse, since common salt is a constant and tolerably uniform constituent of animal excretions. But the chlorine in water may sometimes be derived from other

sources, and it is necessary to have regard to this fact. Near the sea, fresh water generally contains chlorides derived from that source. This is often the case even with rain-water some distance inland, when the wind blows from the sea, and in the neighbourhood of towns, factories, etc. The chlorine in water may in some cases also originate from the strata traversed by the water. But notwithstanding this, Dr. Smith considers that the average amount of chlorine referable to such sources in the water of any district may, with proper care, be ascertained, and that any amount above that average may be regarded as almost certain proof that the water has been contaminated with animal refuse in the form either of sewage or its equivalent, while the absence of chlorine may always be held as conclusive against such contamination having taken place.

Among the products resulting from decomposition of organic substances in the natural purification of water, only the nitric or nitrous acid and the ammonia can afterwards be identified in the water as having originated in this way; and the presence of these substances constitutes a record of contamination from which the water has been freed, quite independently of its actual condition. Consequently the presence of nitrates, nitrites, and ammonia, in water has long been regarded as affording an indication that it has been at some time contaminated with animal refuse derived from sewage, or from some similar source. This indication may be of no importance in itself as regards the quality of water; for, so far as contamination is represented by the nitrates, nitrites, and ammonia, it is to be regarded as having been counteracted by subsequent purification, and as being no longer of any influence on the quality of the water in a sanitary point of view. But it is only to this extent that water containing nitrates, etc., can be regarded as pure and wholesome, or that the source such water is obtained from can be regarded as unobjectionable. For though the presence of nitrates in water is in itself of no great account, and is in fact evidence that the organic impurity from which they have originated has been converted into harmless products, it affords no evidence that the whole of the organic impurity in the water has undergone such change; but, on the contrary, since the presence of nitrates is an index of the contamination water has been subjected to, it likewise indicates at least the possibility that such water may also contain spores, or germs, or other organic impurity in progress of decay; and it further indicates the possibility that at some time or other the water may, under certain conditions, become exceptionally impure.

So far back as 1850, Mr. Simon pointed out the significance, in this respect, of the presence of nitrates in water, expressing his fear that water, subject to contamination, might often contain materials still in progress of decay, because the oxidation of organic impurities might not always be so complete that those impurities should be represented only by the presence of nitrates. Dr. Letheby, referring to this opinion with the object of illustrating the danger implied by the presence of nitrates in water, stated, in another official report, that "it is the merest chance whether the glass of water raised to the mouth shall be fraught only with saline results of decomposition—in itself an unobjectionable issue—or shall contain organic refuse in the active and infectious stage of its earlier transformation."

Dr. Frankland has also been induced, by the consideration of these obvious probabilities, to regard the accurate determination of the nitrogen present in water in the state of nitrates, nitrites, and ammonia, as being one of the most important data in water analysis for sanitary purposes. With this view he has devised a method of determining the amount of nitrates and nitrites; and he has adopted the Nessler method of determining the ammonia actually existing in water. Upon the basis of these determinations, he estimates the degree of contamination water has undergone, and the extent to which that contamination has subsequently been neutralised by the purifying influences the water has been subjected to. With the assumption that average filtered sewage contains .01 per cent., or seven grains per gallon of nitrogen in various states of combination, the result thus obtained is expressed in terms of sewage, as the "previous sewage contamination" of water, this form of expression being adopted because sewage is the chief source of contamination of water. The actual results thus obtained in different instances may be of very unequal value in a sanitary point of view, and for that reason they require to be considered in connection with other results indicating the actual condition of the water. A very considerable degree of contamination may have been so remote and so entirely counteracted by subsequent purification as to have no present effect on the quality of water, while the effect of a less degree of contamination of more recent date and of a more dangerous character may be such as to render water unwholesome and dangerous. But a large amount of previous sewage contamination would give to the ascertained presence of organic impurity a significance it would not otherwise possess; and even a small amount might, in such a case, be reasonable

ground for suspecting the quality of water. The presence of ammonia may also be regarded as indicative of recent contamination. But the chief utility of this estimation lies in the probability that the purification of water subject to contamination may not always be complete, for although impurity may have been removed, during a certain period, so as to be represented only by the presence of nitrates, it by no means follows such will always be the case. It is for this reason that Dr. Frankland considers, in accordance with the opinion expressed by Mr. Simon, that previous contamination of water should be, to some extent, regarded as indicative of possible actual contamination at some future time. That there is a reasonable ground for this opinion may be seen from the statement made by Mr. Hawksley, that some rivers, as for instance the Trent before reaching Nottingham, are subject to admixture with sewage to the extent of one-sixth their volume; and it may well be, for this reason, that the Registrar-General has continued to report the indications of such contamination in the case of the London water supply, notwithstanding the repeated solicitations of Mr. Smee that these reports should be suppressed. This view of the subject is, moreover, quite in accordance with that officially put forward by Dr. Letheby in the reports before referred to, where, in speaking of the presence of nitrates in water as being remarkably suggestive of animal excreta and of the decay of organic substances, he says, "although the presence of ammonia and saltpetre tells us of an ultimate process of decay, yet it also indicates the more than possible danger which accompanies it", and then asks, "Who is to say when the filtering and transmuting power of the soil may fail, and the organic refuse pass into the water in its most dangerous state of active decomposition?" adding, "that we have ample proof such has often occurred, and may again happen." On what ground Dr. Letheby now asserts that a flow of ten or twelve miles in a river is sufficient to counteract the contamination of water with five per cent. of its bulk of sewage, and to render it wholesome, he does not state; and it would be difficult to find a better reason for this assertion than Mr. Hawksley's statement that the water of rivers, such as the Irwell, Mersey, Darwen, and Trent, becomes drinkable shortly after receiving immense quantities of sewage. But that statement begs the whole question; and no one has been more emphatic than Dr. Letheby in denouncing the "dangerous fascinations" of water subject to such contamination, or in proclaiming the danger attending its use, and the "more than possible danger" indicated by the nitrates, resulting from such contamination. The inconsistency of Dr. Letheby's present assertions with the opinions he has before officially put forward, is however rendered still more striking by his practice, and by the fact that he has for the last year officially reported the amount of nitrates, nitrites, and ammonia, in the water supplied to London, though it is difficult to imagine what can be the use of such reports if the amount of those substances does not indicate the previous contamination of water.

In taking the nitrates, nitrites, and ammonia in water, as a measure of its previous contamination, some slight correction of the observed results must be made, to allow for the nitrogen in those forms that may have been derived from atmospheric sources. The amount of these substances in rain-water has been the subject of careful observation by Mr. Lawes, Dr. Gilbert, and Mr. Way; their results showing that, on the average, the nitrogen in those forms amounts to .0673 grain per gallon. The amount of ammonia supplied to river-water from this source must be very small; for only a small proportion of rain falls directly into rivers, and water is rapidly deprived of ammonia by contact with ordinary soils. For the same reason, the ammonia would be still less in the water of springs and wells. Nitrates and nitrites are also abstracted from water by vegetation; and in this way the amount of those substances in rain-water would be reduced, either by plants growing on the land where it fell, or by aquatic vegetation in the rivers. Consequently, there is reason to expect that only some portion of the nitrates and nitrites originating from atmospheric sources would ever remain in the water of rivers, springs, or wells, to augment the amount resulting from oxidation of nitrogenous organic substances. According to the above named observers, the amount of nitrogen present in these forms in rain-water is, in this country, only .0224 grain per gallon. Consequently, that is the utmost that natural water can, on the average, derive from atmospheric sources; and that is the amount to be deducted from the nitrates and nitrites found in water when estimating its previous sewage contamination. The amount of nitrogen usually present in these forms, in water of tolerably good character, varies from a mere trace to about .6 grain per gallon; and, in water that has been highly contaminated, it is sometimes as much as three or four grains per gallon. In river-water, it is generally less during the summer months than during winter, owing to the different activity of vegetation; and any circumstance that favours vegetation, such as the storage of water in reservoirs, also tends thereby to reduce the amount of nitrates;

so that the previous contamination thus estimated must always be regarded as a minimum result, and as being to that extent imperfect. For this reason, a comparison of the result thus obtained with the amount of chlorine in water will often be serviceable; and this plan has recently been adopted by Dr. Frankland. At present, there is no better means, nor, in fact, any other means, of ascertaining the previous history of water by chemical examination.

The objections raised to this estimation of the previous contamination of water are based chiefly on the assumption that the nitrates may originate from other sources besides the decomposition of excrementitious substances carried into water by sewage, cesspit-drainage, or otherwise; and partly also on the ground that the expression, "previous sewage contamination", is calculated to excite in the minds of the public alarm that is unnecessary. It is very remarkable, that Dr. Letheby takes the lead in urging these objections, since they are not only unsupported by any evidence, but are quite inconsistent with the opinions he has officially expressed on several occasions. The idea that the nitrates, nitrites, and ammonia in water are derived from rain, is so opposed to all observation on this subject, that it does not merit notice, more than the suggestion lately offered by a sagacious custodian of public health, that they are referable to skylarks; and the assumption that they originate from fossil remains is equally unsupported by either evidence or probability. On the contrary, the fact that, in most instances, the amount of these substances is tolerably constant, or varies only within narrow limits, even in the water of Artesian wells, tends to show that, like the water itself, they originate from some continuous source of supply, such as the contamination of rain-water at the surface with sewage, cesspit-drainage, or other animal refuse, which is subsequently oxidised, more or less completely, as the water penetrates the underlying strata. Moreover, in the case of river-water, there is, independently of the disturbing influence of vegetation, a marked relation between the average amount of nitrogen present as nitrates, nitrites, and ammonia, and the degree of contamination that it is otherwise known to have been subject to in different instances. Thus, while the water of mountain-streams and lakes rarely contains more than a mere infinitesimal trace of combined nitrogen in these forms, the water of rivers into which sewage is discharged always contains a sensible amount, varying, on the average, from .1 to .25 grain per gallon.

As to the objection, that the term "previous sewage contamination" is calculated to excite alarm, it would appear that if it has any foundation at all, that is merely misinterpretation, opposed to the obvious meaning of the term, and involving a disregard of the explanation given by Dr. Frankland when he first introduced the term, and since repeated month by month in the reports published by the Registrar-General, stating that it represented merely such part of the contamination the water had undergone, as had been counteracted by gradual oxidation, partly in the soil, partly in rivers, and partly in reservoirs, filters, and conduits, and converted thereby into comparatively innocuous products—viz., the nitrates, nitrites, and ammonia. But, if there be real grounds for deprecating any alarm that might arise from the use of this expression, it should at least be satisfactorily proved that there is no reasonable cause for alarm in the fact that water is contaminated with excremental refuse, by admixture of sewage and other surface-drainage. If that could be proved, it would seem entirely to negative the opinions which Dr. Letheby has officially put forward on this subject previously. But if, instead of dogmatically asserting such alarm to be unnecessary, that that cannot be done, if there be reason to apprehend danger attending the use of water polluted with sewage or the drainage from cesspools, and if there be any ground for the opinions entertained as to the action of spores or germs in propagating disease, then there is indeed sufficient cause for alarm, and every inducement to take advantage of any means which can serve to indicate the possible presence of the materials which Dr. Ballard has described as being likely to occur in water that has been polluted in such a manner. It is not very evident why Dr. Ballard should object to the chemical facts relating to sewage and to the contamination of water being expressed in the terms used by chemists. It is scarcely to be supposed that the language of chemistry is so strange to medical officers of health, that they desire to ignore the chemical aspect of this subject, or refuse to consider those chemical results which it is the business of the medical man to interpret. It is a mistake to suppose that the dicta of chemistry are intended to be the final result of science in relation to subjects affecting health and disease. The province of the chemist in regard to such subjects is merely to furnish data for medical science to use in elucidating the problems it has to deal with. It may thus be shown that chemical data are sometimes insufficient for this purpose; but that cannot be any reason for considering the data furnished by delicate and precise chemical research as being less adapted to the requirements of medical science than those obtained by rougher and ruder methods of inquiry.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 10TH, 1869.

REPRESENTATION OF THE PROFESSION IN THE MEDICAL COUNCIL.

THE Lord President of the Privy Council has consented to receive a deputation from the Committee of the British Medical Association on the Direct Representation of the Profession in the Medical Council, and from the Committee of Council and members of the Association, in favour of direct representation, at the Privy Council, on Monday next, July 12th, at 3 P.M. The Committee on Direct Representation are invited to meet at 59, Brook Street, at twelve o'clock; and the Committee of Council, the Presidents as well as the Secretaries of the Branches, the Parliamentary Committees, and others in favour of the question, at the same place, at one. The members of the Association are earnestly requested to obtain the attendance of as many members of Parliament as possible to accompany the deputation at three o'clock.

THE SESSION OF THE MEDICAL COUNCIL.

WE give at another page a concise but sufficient abstract of the proceedings of the Medical Council up to Wednesday. On Thursday, the Council met for a short time, transacted some formal business, and then resolved itself into Committees, with the view of expediting business.

The most notable subject before the Council has, of course, been the letter from the Lord President of the Privy Council. This has been referred to a Committee, which has been taking the matter put before it into anxious consideration, and whose report is looked for with much interest. *Apropos* of the motion for referring the letter to a Committee, Dr. Andrew Wood took occasion to comment on Sir John Gray's exaggerated statement as to the deficiencies of medical education—which statements, however great may be the deficiencies still existing, could only have been the result of inaccurate information. Certainly, the faults of our Licensing Boards ought not to be described as greater than they really are.

The reception, on Wednesday, of the deputation from Birmingham, to present a memorial signed by upwards of five thousand medical practitioners, was very satisfactory. Very little was required to be said to explain the memorial; and what was necessary was said by the members of the deputation in terms brief and to the purpose. We could indeed wish that some members of the Council, who are rather too fond of rhetorical display, would take example from the manner in which Mr. Gamgee explained the meaning of some parts of the memorial.

After the reception of the deputation, the report of the Committee on State Medicine was brought up by Dr. Acland; and a discussion on it was commenced, and then adjourned till Friday. This important document will demand our attention in another number.

We believe that the Council is not likely to complete its business until next Tuesday.

CANVASSING AT THE ROYAL COLLEGE OF SURGEONS.

THE anxiety and excitement attendant on the election of members of the Council of the Royal College of Surgeons having now ceased, we will make some comments, as we said a fortnight ago we should probably do, on the practice of canvassing for the office of Councillor. The letter of Mr. Henry Lee in the JOURNAL of June 12th, and the correspondence between Mr. Berkeley Hill and Mr. Pollock, published in the JOURNAL of June 26th, have put the question openly before the profession; and rumour says that canvassing, both personal and indirect, was very extensively carried on in connexion with the recent election. Of the personal matter discussed in the letters of Mr. Hill and Mr. Pollock, we shall say nothing more than that we have very good reason for believing that Mr. Berkeley Hill's well meant but injudicious intention was unknown to Mr. Erichsen until it was carried out; and that other Fellows of the College have taken the same view of Mr. Hill's proceeding as Mr. Pollock has done.

A Councillorship in the Royal College of Surgeons is too important, too responsible, we may almost say too sacred, an office to be subjected to the caprices of a canvass. The election of a Councillor ought to be entirely beyond the suspicion of being a game to be won by those who, by themselves, or by others acting with or without their knowledge, are enabled to gather a sufficient number of votes by mere personal influence, with or without regard to qualification for the office. We do not say that, on the recent occasion, votes were claimed as a matter of mere personal favour, rather than on the ground of fitness; but in any case the canvassing system is utterly wrong. It is wrong, because, among other reasons, the constituency which elects the College Council is one, each member of which ought to be capable of judging for himself as to the merits of the several candidates, especially when, as was done on the recent occasion, the candidates make public declaration of their views on College politics. If canvassing be right, then all the attempts made in this JOURNAL, by contemporary periodicals, and by certain Fellows of the College, to obtain for the mass of the Fellows greater power in the management of the College affairs, are a mistake—because it is implied that the Fellows cannot be trusted to exercise the privileges which we would have conferred on them. If it be right, again, then the movement now being so vigorously made for the direct representation of the profession in the Medical Council is a mistake; for how can the power of judicious selection be assumed for the members of the profession at large, while its existence in the Fellows of the College of Surgeons is virtually denied? It may be argued, that the throwing open of the College franchise to all the Fellows, and the admission of the whole profession to vote for representatives in the Medical Council, would create such large constituencies as to render canvassing cumbersome and impossible. We admit the truth of the argument—which, indeed, we have already used; but it does not in the least alter the aspect of the question. Canvassing by or for candidates must cause a doubt whether the election is not founded on personal favour rather than on merit; and, if it can be defended on the ground of securing the best qualified candidates, then it follows that the constituency cannot judge for themselves, and that the less power they have placed in their hands without guidance, the better.

Those candidates for Councillorships in the College who carry on a system of personal canvassing, we must leave to judge for themselves whether, after they have made a plain declaration of their opinions through the usual channels of professional information, they show by their conduct either a proper regard for their own dignity or for the intelligence of the Fellows of the College. Sometimes the candidate himself does not canvass, but some over-zealous friend solicits for him the votes of the Fellows—of those, even, whom he does not know, and who may be much better judges than he is of the merits of the candi-

date, or at least as good. In such a case, we heartily pity the candidate, whose success may be even endangered by this zeal without discretion. He may well say, "Save me from my friends, and I can deal with my enemies." No one can be surprised that men who, like Mr. Pollock, have lived a public life in the College, and may be presumed to be capable of forming a correct judgment of the claims of the various candidates for seats in the Council, should feel offended at having their duty pointed out to them by others, perhaps juniors, with whom they have seldom or never come into contact; or that the attempt to guide their judgment should prejudice them against the candidate whose claims are pressed on them, even though he be most deserving of election.

We quit this subject, trusting that another year may see the canvassing for Councillorships abolished. When a candidate for a seat in the Council comes forward, let him state, as publicly as may be in the profession, what are his claims, and what are his opinions. This is enough; all else is superfluous, and ought not to be done.

Mr. W. FAIRLIE CLARKE is a candidate for the vacant assistant-surgeoncy at the Westminster Hospital.

A GRAND fête and fancy fair will be given at the Cedars, Hammer-smith, on July 15th and 16th, in aid of the funds of the West London Hospital.

CHOLERA has again broken out in Her Majesty's 58th Regiment at Allahabad, in the new barracks. The regiment has, in consequence, been broken up into detachments.

IT is said that small-pox is making ravages at Siniscola, in Sardinia; and that the epidemic attacks both children and adults, even those who have been vaccinated.

WE see, by our advertising columns, that the St. Andrew's Medical Graduates' Association are promising themselves a pleasant day amongst the objects of interest at St. Alban's, on July 20th.

A CONCERT in aid of the funds of the Middlesex Hospital was given in the Queen's Concert Rooms, Hanover Square, on Wednesday evening. Madame Rudersdorff, Miss Katherine Poyntz, Mr. W. H. Cumming, and other well known vocalists, kindly gave their services gratuitously.

AT the competitive examination held in June for the prizes in Botany, annually given to medical students by the Society of Apothecaries, the successful candidates were:—1. Ebenezer Geer Russell, Guy's Hospital, Gold Medal; 2. Alexander Wynter Blyth, King's College, Silver Medal and Book.

WE are requested to announce that the directors of the Grand Hotel, Scarborough, liberally propose to invite one hundred and fifty members of the Association to dinner at the Hotel, on Saturday, July 31st. The invitation will include a free pass by railway from Leeds to Scarborough and back on that day, allowing an hour at York to inspect the Cathedral on the way to Scarborough.

THE *Indian Daily News* says that from all parts of the country comes news of the intense heat. Fatal cases of apoplexy are daily occurring; and in the more central stations, where the heat is most intense, the cases reported in European regiments are very numerous. Cholera, in several stations in the Central and North-West Provinces, has been adding to the mortality.

WE are informed that Dr. Heaton, the President of the Philosophical and Literary Society of Leeds, intends giving a *conversazione* to all members of the Association in the Philosophical Hall, on Friday evening, July 30th, when the extensive museums of natural history, geology, and antiquities, and the library of the Society, will be open for examination. As this gathering will be confined to gentlemen, it is

hoped that it will afford an agreeable opportunity for final converse amongst the members of the Association before their departure from Leeds.

EXHIBITION OF HOSPITAL APPLIANCES IN HOLLAND.

THE Central Committee of the Dutch Association for the Care of Sick and Wounded Soldiers has resolved to hold, at the Hague, in September, an exhibition of objects connected with the transport, treatment, victualling, and lodging of sick and wounded persons; and invites both contributors and visitors to it. Contributors should give notice to Dr. L. H. Verney, Secretary of the Association, of the objects they may intend to send, before August 4th. The European Statistical Congress is to be assembled at the Hague on September 6th, and the hospital exhibition is intended to be opened at the same date.

THE CAMP AT WIMBLEDON: APPOINTMENT OF A FULL SURGEON OF VOLUNTEERS.

AFTER a long fight, the Council of the National Rifle Association, having at last acceded to one of the demands made by the Volunteer Surgeons, that they should be represented at Wimbledon by a Full Surgeon, have appointed Dr. Lavies of the Queen's Westminster Rifles to take charge of the Volunteer Hospital. This recognition of Volunteer Surgeons, which the Volunteer Medical Association and this JOURNAL have done so much to obtain, will, no doubt, go far to produce a more cordial feeling between them and the Council of the National Rifle Association; but this will of course entirely depend on the Volunteer Surgeon being granted full charge of his own patients, and being left to decide as to the desirability of calling in the assistance of the army medical officers. If this be done, the Council will, we are sure, have no cause for anxiety on the subject. Mr. George Pearse, Assistant-Surgeon of the Queen's, although not officially on duty, relieves Dr. Lavies during his temporary absence. We hope, however, to see next year an Assistant-Surgeon, in addition to a Surgeon, officially appointed. The health of the camp has hitherto been excellent, only a few slight cases—chiefly of diarrhoea and prostration from exposure to the sun—having come under observation. Orders have been issued that no admission to the Volunteer Hospital will be granted without the permission of the Volunteer Surgeon in charge.

HINTS FOR VOLUNTEERS IN WARM WEATHER.

UNTIL the last few days, there appeared every reason to believe that the year 1869 would boast of no summer at all, or at the most, "three days of sunshine and a thunderstorm"; but, no sooner had our volunteers set themselves down on Wimbledon Common, than the temperature rose, and during the week we have been exposed, off and on, to a close, damp, unpleasant, muggy heat. It is gratifying to see the increased precautions which the experience of former years has taught many of the volunteers to adopt against the evil effects of sun and heat. The white muslin band around the cap, or, more simple still, the white pocket-handkerchief, so fastened as to protect the back of the neck, will avert many a headache, if not more serious illness. A flannel shirt worn next the skin both day and night is advisable: it is a bad heat-conductor, and protects the spine against the direct rays of the sun, and the chest and body against chill. It would be well if dark green, blue, and black coats, were, when possible, put aside, and light-coloured, and more especially cotton, clothes worn instead. Heavy meals in the morning, before exposure and fatigue, are injudicious. Over-fatigue in the sun is one of the most frequent causes of sun-stroke and heat-apoplexy. Alcoholic drinks in the early part of the day should be specially avoided. Attention should be at once given to slight indisposition, and especially to diarrhoea. A cold bath in the early morning is refreshing and invigorating: it increases the action of the skin, and thus protects from the heat important vital organs. Attention to such simple precautions as these will greatly help to diminish the sick list this year, and increase the enjoyment and store of health to be derived from a fortnight's outing under canvas.

THE CHAIR OF PHYSIOLOGY IN KING'S COLLEGE.

As we expected, Dr. Rutherford of Edinburgh has been unanimously appointed Professor of Physiology at King's College. We congratulate the Council on securing a physiologist and teacher of such promise.

MERCANTILE HYGIENE.

DR. W. DOMETT STONE, F.R.C.S., whose admirable papers on this important subject, published in the *Times* and in this and other medical journals, obtained for him commendable notices in our distinguished contemporary, has just sailed in the Cunard steamer *Tripoli* for New York, to pursue his inquiries on a subject of so much importance to our mercantile marine.

THE TONBRIDGE WELLS CONVALESCENT HOME.

We understand that this charity is now in working order, and that the Committee are prepared to receive patients at the very moderate sum of four shillings per week. The institution is supplied with thoroughly trained nurses from the East London Hospital for Children; and we are confident that the undertaking will meet with large support from the metropolis.

QUEEN'S COLLEGE, BIRMINGHAM.

ON July 2nd, the students of this College presented a testimonial and address to their Warden, the Rev. T. E. Espin, B.D., who has for many years presided over this valuable institution. The Rev. A. Macdonald, B.A., read the address, which he accompanied by a few remarks expressive of the sense of gratitude with which the Warden is regarded by those whose education he has directed. The Rev. Mr. Espin, in returning thanks, declared that he would always value the testimonial and address as an expression of the attachment of the students.

SANITARY CRUISE.

A NOVEL experiment is, we understand, about to be attempted for the benefit of invalids requiring change of scene and climate. Captain Gray, of the Royal Naval Reserve, proposes to cruise in a first-class clipper in the southern latitudes during the winter months, starting from Plymouth about the 15th of October; taking a favourable wind to run down to Cadiz; avoiding Lisbon, on account of the difficulty of the harbour; thence to Gibraltar and Malaga; the Mediterranean being of capricious climate, to turn and bear away south by the Canaries and Cape de Verde Islands; crossing the Equator to reach the south-east trades winds; to visit Ascension, St. Helena, Rio de Janeiro, the Cape of Good Hope, the Island of Trinidad in the South Atlantic (not in the West Indies); and to return home by the Western Islands (St. Michael's) about the middle of May. In the region of the south-east trade-winds, there is uniformly a steady breeze; the weather is exceedingly mild, the thermometer ranging between 75 and 70 deg. Fahr. At favourable points, a stay of a week or fortnight would be made, so as to permit excursions into the interior. As the expense will be very moderate, we have no doubt that many invalids will be only too glad to take the opportunity of thus avoiding the rigors of an English winter.

THE AMENDMENT OF THE MEDICAL ACTS.

A MEETING of members of the medical profession—Dr. Bell Fletcher in the chair—was held at Birmingham on Saturday last, to consider the question of the amendment of the Medical Acts. The memorial to the Medical Council, of which a copy appeared in the *JOURNAL* of June 26th, was read; and it was stated by the President, in his opening remarks, that 3,241 signatures had been received. The President said he had received a letter from Dr. Francis Hawkins, stating that the Medical Council would receive the deputation on July 7th; and that he had received other letters which showed that the memorial met with general concurrence. Mr. Gamgee gave a very able exposition of the points referred to in the memorial, urging that the contemplated changes were as much for the good of the public as of the profession. In concluding, he said: "They asked for no exceptional legislation; they pleaded for those who cannot help themselves—for the protection of

the public health and the removal of disabilities; and, in conclusion, he said all they wanted to ensure success was to be true to the principles they had adopted, true to themselves, laying aside the smallnesses of personality, and going forward for the good of themselves, of learning, and the community." On the motion of Dr. Heslop, seconded by Dr. Leslie, the memorial was unanimously adopted. Dr. Bell Fletcher was directed to apply to the Medical Council for a copy of the Medical Acts Amendment Bill.

KING'S COLLEGE HOSPITAL.

ON the 25th ult., the old students of this hospital dined together at the Freemasons' Tavern. Professor W. A. Miller, F.R.S., ably filled the chair, and was supported on his right by Professors Sir W. Fergusson, Bart., Cartwright, and others; and on his left by Professors Partridge, Bentley, etc. Covers were laid for over fifty. One interesting feature of these meetings is the presence of many country practitioners, who, at great personal sacrifice, take advantage of the opportunity afforded of renewing friendships formed long ago, when the stern realities of the world were scarcely appreciated. The provincial element was on this occasion well represented. Amongst others were present, Drs. Allfrey (St. Mary Cray), Brace (Bath), Bradley (Greenwich), Bridgwater (Harrow), Tonge (Harrow), Playne (Maidenhead), Rhodes (Huddersfield), Walters (Reigate); Messrs. Swain (Devonport), Jackson (Nottingham), etc. Numerous London men attended; and we observed many who have already earned for themselves honourable places in the profession. The evening passed off most harmoniously. Several songs were admirably given, with pianoforte accompaniments. The entire arrangements were under the excellent management of Dr. Buzzard and Mr. Francis Mason, who, as heretofore, kindly acted as honorary secretaries, and who were loudly called for at the close of the evening. Each responded with a few appropriate remarks, and the company separated about eleven o'clock.

ELECTION OF OFFICERS: ROYAL COLLEGE OF SURGEONS.

THE annual election of officers took place on Thursday last, when Mr. Edward Cock, Senior Surgeon and Lecturer on Clinical Surgery at Guy's Hospital, was elected President, in the vacancy occasioned by the retirement of Mr. Quain; and Mr. Samuel Solly, F.R.S., Senior Surgeon and Lecturer on Surgery at St. Thomas's Hospital, and Sir William Fergusson, Bart., F.R.S., Surgeon and Professor of Surgery at King's College Hospital, were elected Vice-Presidents of the College. At this meeting of the Council, Messrs. John Gay, Senior Surgeon to the Great Northern Hospital, and Mr. J. E. Erichsen, Senior Surgeon and Professor of Clinical Surgery at University College Hospital, the recently elected members of the Council, were sworn in and took their seats. Mr. John Birkett, Surgeon to Guy's Hospital, was elected Professor of Pathology and Surgery. Mr. Flower, Conservator of the Museum, Professor of Comparative Anatomy and Physiology; and Mr. Hulke, Assistant-Surgeon to the Middlesex Hospital, Lecturer on Anatomy. Drs. Peacock and Wilks were re-elected Examiners in Medicine; and Drs. A. Farre, Barnes, and Priestley, were re-elected Examiners in Midwifery.

THE BRIGHTON SANITARY ASSOCIATION.

THE Ninth Annual Report of this useful Association has just been issued. Its objects are to remove the ignorance of the laws of health, to which much of the debility, disease, and premature mortality in this country are attributable, and to aid all classes, especially the poor, to improve their sanitary condition. The progress of the Society appears to be on the whole encouraging; although a supply of funds is needed for maintaining it in working order.

"Your Committee have noticed with pleasure the amount of sanitary progress made in Brighton, through the action of the local authorities, during the past few years. Its effects are already perceptible in the improved health and diminished death-rate of the town; and, although much yet remains to be done, some things to be reconsidered and revised, others to be perfected, and the most approved practical

results of science to be applied in such sort as to produce the greatest amount of health and comfort for the money spent, and the thought, time, and trouble taken, the Committee are now in hopes that the sanitary improvement of Brighton, thus begun in earnest, will never again be allowed to stand still, while anything remains to be done. The Committee have endeavoured to foster the movement for establishing an Economic and Sanitary Department in the town Museum. Every one of the articles comprised in the collection is calculated to make people know the best and wholesomest way of living, managing, and providing for others. The sanitary instruction thus conveyed is likely to reach several classes of society which are not influenced by visiting agents and tracts. During the summer and autumn months from 300 to 600 visitors a week are admitted by payment to the town Museum. Besides these, on the first Monday in every month, when the Museum is open, free of charge, to the rate-payers and their families, 500 or 600 people often visit the rooms in the course of the morning. The visitors comprise all classes, and schools frequently go in. The sanitary collection will thus be brought under the notice of some thousands of people in the course of every year, and if conversational explanations of it can be given, it bids fair to become a very efficient means of diffusing instruction in the laws of health."

We wish the Committee of the Brighton Sanitary Association all success in their praiseworthy efforts.

EDUCATION IN NATURAL AND PHYSICAL SCIENCE IN INDIA.

THE *Indian Medical Gazette* of June 1st expresses a belief that the Asiatic Society of Bengal is endeavouring to move Government to provide facilities for the teaching of natural and physical science in the schools and colleges of general education in India. The *Gazette* rightly regards this step as most important in the training of the members of the medical profession, and urges the necessity of appointing a teacher of natural science in each of the larger schools and colleges. It says further that, when this advance in primary education shall have been made, the University should demand, after a reasonable time, a knowledge of natural and physical science at the entrance examination in Arts.

AMPUTATIONS BY THE ÉCRASEUR.

M. BARDINET of Limoges, in the *Bulletin Général de Thérapeutique* for June 15th, recommends the *écraseur* as a means of performing amputation of the limbs, and states that he has in this way removed the leg. In operating, he first cuts through the skin, and then divides the tissues, in separate portions, by the *écraseur*, from within outwards. Lastly, the bone is sawn through. M. Chassaignac, in a note to the editor of the *Bulletin*, says that, though he has used the *écraseur* successfully in two cases of amputation of the thigh, he does not consider this instrument suitable for amputations in general, inasmuch as it is not capable of ready application in all cases.

SCOTLAND.

FIRE AT THE CONVALESCENT HOSPITAL, DUNDEE.

A SERIOUS fire broke out, on Wednesday of last week, in the Convalescent Hospital, Dundee. The roof was entirely destroyed, and the attics and rooms below considerably damaged by water. The loss will, we are happy to hear, be covered by insurance.

THE CHAIR OF PATHOLOGY IN THE UNIVERSITY OF EDINBURGH.

WE understand that a memorial requesting Dr. W. Rutherford Sanders to become a candidate for the chairs of Pathology in the University of Edinburgh has already been signed by over two hundred of the students of the Edinburgh Medical School.

THE EDINBURGH CHAIR OF CLINICAL SURGERY.

PROFESSOR SYME has intimated his intention to resign the Chair of Clinical Surgery, which he has held with so great distinction for many years. Dr. Joseph Bell, Mr. Lister of Glasgow, Mr. Spence, and Dr. P. Heron Watson, are candidates for the appointment. A requisition, signed by two hundred medical students in Edinburgh, has been sent to Mr. Lister, requesting that gentleman to become a candidate for the

chair. Similar requisitions, we believe, have been signed in favour of Mr. Spence and Dr. Watson.

DAY NURSERY AT EDINBURGH.

A DAY nursery, originated by the Hon. Mrs. Dalrymple, was opened on Monday in the Cowgate. The institution is, says the *Scotsman*, to be in charge of a respectable matron, assisted by a servant—both, of course, being intended to do the duty of nurses. Children of respectable parents will alone be received, and these only on being certified by Dr. Burns Thomson, of the Cowgate Medical Mission, as free from infectious disease. Once accepted as an inmate, a child will be received daily, except on Sundays. Parents going early to work may take their children to the nursery as early as six in the morning. The children will be bathed, and dressed in frocks belonging to the establishment, their own clothes being put aside for the day. They will be provided with breakfast, dinner, and supper, all of wholesome substantial fare. In fine weather, they will be taken to the Meadows, while indoors a number of young ladies have kindly undertaken to cater for their amusement. After being in this manner taken care of during the day, they will be restored to their parents in the evening. In the event of sickness or death in a family, an arrangement may be made for retaining a child at the nursery during the night. For board and management such as we have described, the charge proposed to be made is 4d. per day for each child. In the case of several children belonging to one family, some deduction will be made; three, for example, may be received for 9d. It will be readily understood that such rates will not suffice to meet the expenditure incurred. The payments from parents must be supplemented by contributions from the benevolent public, if the institution is to be successfully carried on. We heartily wish success to this admirable undertaking. The Committee have, we think, acted wisely by introducing the provident element.

IRELAND.

THE LYING-IN HOSPITAL.

DR. EVORY KENNEDY's reply to the speakers of the Obstetrical Society on the hygiene of Midwifery Hospitals will be read on Saturday evening, at eight o'clock, at the College of Physicians.

MATER MISERICORDIÆ HOSPITAL.

IN anticipation of the enlargement of this Hospital, Dr. Hayes, whose services as Demonstrator in the Catholic University for nine years have fully entitled him to promotion, has been appointed one of the Surgeons.

THE DUBLIN HOSPITALS.

THE following correspondence has been published in the *Dublin Freeman*.

"125, Stephen's Green, 9 A.M., July 3, 1869. Dear Mr. Wharton,—Four issues of the morning papers having appeared without your reply to my charges against the Meath Hospital elections, I write to urge its publication. My appeals at the meeting to have it read, and my request that you would publish it, when I called on you next day, may be enough to prove that I do not desire suppression. But lest anyone might suspect that it contained unanswerable personal charges, I beg of you to publish it in Monday's papers, or in the corrected report which Messrs. Fannin will issue on the 6th. If you do not, I will publish a copy of this letter on Tuesday. With the highest respect and warmest esteem, which this transaction has in no way lessened, believe me to remain, yours faithfully, E. D. MAPOTHER. To J. H. Wharton, Esq., F.R.C.S., Secretary Medical Board, Meath Hospital, and County Dublin Infirmary."

"27, Upper Merrion Street, 4 P.M., July 3, 1869. Dear Dr. Mapother,—I hasten to acknowledge your communication of this morning. I do not propose to publish my paper either in 'Monday's papers' or in the corrected report which Messrs. Fannin will issue on the 6th.' As this determination will necessarily involve the publication of your letter now before me, I must ask you to publish this my reply. Yours very faithfully, J. H. WHARTON. Dr. Mapother."

THE GENERAL MEDICAL COUNCIL ON EDUCATION AND REGISTRATION.

SESSION 1869.

THURSDAY, JULY 1ST, 1869.

THE PRESIDENT, Dr. BURROWS, took the Chair at 2 P.M. The meeting was attended by Dr. Risdon Bennett, Mr. Cæsar Hawkins, Mr. Cooper, Dr. Acland, Dr. Paget, Dr. Embleton, Dr. Storrar, Dr. Alex. Wood, Dr. Andrew Wood, Dr. Fleming, Dr. Macrobin, Dr. Thomson, Dr. A. Smith, Mr. Hargrave, Dr. Leet, Dr. Apjohn, Sir D. Corrigan, Bart., Dr. Sharpey, Dr. Parkes, Dr. Quain, Dr. Rumsey, Dr. Christison, Dr. Stokes; and Dr. Francis Hawkins, Registrar.

The order of Her Majesty in Council, appointing Dr. John Macrobin, Professor of Medicine in the University of Aberdeen, to be the representative of the Universities of Edinburgh and Aberdeen in the Council, was read; and Dr. Macrobin was introduced by Dr. Alexander Wood and took his seat.

The PRESIDENT delivered an address, of which the following is an abstract.

The interval between the two sessions had been somewhat longer than usual, because no pressing public business had compelled him to summon the Council at an inconvenient season. The recess, however, had not been a period of inactivity. The Committee upon Medical Education and the Committee on State Medicine had continued their labours throughout the interval. They comprised fourteen members of the Council, and their labours had been incessant, and had been continued up to the very hour of meeting. They had collected a vast amount of information; heterogeneous, and perhaps in some points actually discordant; so that it must require great discrimination and labour to draw up a report which would form the basis of future action. Among the duties deputed last year to the Executive Committee was the responsible one of communicating with the Government upon the Medical Amendments Act. When this question was brought before the Executive Committee, he had thought it right to press upon their attention the views which he had expressed at the opening of the last session, to the effect, that it was more within the province of the President of the Privy Council than of the Home Secretary to undertake the required legislation for the amendment of the Medical Acts, inasmuch as the Privy Council and the Medical Council had been associated with the Legislature in the work of the Act of 1858; and, moreover, it appeared that there was a greater probability of successfully initiating medical legislation in the House of Lords than in the House of Commons. The Executive Committee appointed a deputation to wait upon the Privy Council. He put before the Government the reasons why they applied to the President of the Privy Council for his assistance in Parliament, and pointed out the urgent necessity for some amendment of the Medical Acts. The account of that interview might almost be stereotyped—a courteous reception, an attentive, and apparently a willing, listening to a rather long statement and to many arguments, ending with an expression of profound regret that the pressure of business would not allow of medical legislation in the present session. After some further pressure upon the President of the Council, Dr. Burrows subsequently received a letter from the medical officer of the Privy Council, written by the direction of the Lord President, and announcing the intention of the Government to go, during the next session of Parliament, more deeply into the question of medical legislation than was implied by the mere amendment of the Medical Act of 1858, as had been suggested by this Council. The letter would be laid before the Council. On Monday the Council would be called upon to exercise a most delicate and responsible function—to decide whether an individual, whose name was upon the *Medical Register*, had been guilty of infamous conduct, so as to deserve the erasure of his name. This function, he said, must always be exercised with the greatest prudence, and only under the guidance of sound legal advice. No public body in this country ought to be exempt from criticism; and the Medical Council could not expect to be an exception. Those who had only an imperfect knowledge of the state of medical education, and of the examinations carried on by the boards of the licensing bodies, when the Council commenced its labours, could form no just estimate of the beneficial influence which had been exercised upon medical education, both preliminary and professional, and upon examinations throughout

the United Kingdom. There must be few, he thought, who would not candidly admit the value of the suggestions made by visitors from the Council upon the mode of conducting examinations. It has been inferred, he said, that the Council had not done its duty, and had not brought the standard of education up to the point which they all should desire to see attained. Those who arrived at such a hasty conclusion could know but very little of the practical working of the medical schools and other places of education. A system of education might be good; the teachers might be zealous and efficient and highly informed; but regard must always be had to the material on which they had to work. A large number of those entered as pupils would not be students. Many must necessarily fail in examination; and those of such classes who were fortunate enough to pass had probably gone through the ordeal of “cramming” or “coaching.” The Medical Council, or any other public body, had no power to make the young men industrious and zealous; and all regulations and plans of education, and defined modes of teaching, would, unaccompanied by other measures, always fail with young men who were unfitted for their profession. The most successful method for accomplishing the object would, in his opinion, be the establishment of a joint examining board for each division of the United Kingdom; and the institution of examinations requiring the amount of knowledge which every candidate for a licence to practise medicine ought to possess. Although rules and regulations and curricula of study might be properly laid down, examination would alone establish the standard of knowledge among the candidates. If the examinations were complete, efficient, and well conducted, those who were desirous of passing them successfully would resort to those sources where they could most certainly obtain instruction. On the other hand, those, who were anxious to collect around them a body of students, must necessarily make such arrangements, and afford such instruction, as would enable industrious students to obtain the wished-for knowledge. It was not by precise and defined methods of teaching particular branches of science, that the standard of knowledge of medical students would be improved. Much liberty might be allowed in methods of teaching, and still more in methods of learning. There must be a certain liberty also allowed in the details of the curriculum of study. He had arrived at the conviction that, even if the Council were armed with more extensive and arbitrary powers, it would be impossible to accomplish all those improvements in preliminary and professional education and examinations which were required. The most simple and the most certain method of effecting this great object would be the establishment of one joint public examining board in each division of the kingdom. He found, on perusing a draft report of the Committee on Medical Education, that he had arrived independently at a conclusion similar to that contained in the document. The list of agenda was a long one, embracing many large and comprehensive subjects. He suggested that there should be a tacit, but well-understood, agreement that each member, in addressing the Council, should endeavour to condense his observations as far as possible. He made these observations as *amicus curiæ*, and with a desire to facilitate the transaction of business, and also with the desire, if possible, of enhancing the reputation and authority of the Council with the profession and with the public.

The Office of President.—Sir DOMINIC CORRIGAN raised a discussion as to the Presidency of the Council. He had understood that Dr. Burrows had been elected to hold office only to the commencement of the present session.

Mr. CÆSAR HAWKINS, Dr. ANDREW WOOD, Dr. AQUILLA SMITH, and the PRESIDENT, explained that the election had been altogether unconditional.

Committees.—The following committees were appointed:—*Business Committee:* Dr. Andrew Wood, *Chairman*; Dr. Embleton, Dr. A. Smith, Mr. Cæsar Hawkins, Dr. Leet. *Finance Committee:* Dr. Sharpey, *Chairman*; Dr. Quain, Dr. A. Smith, Dr. Fleming, Mr. Cooper. *Committee on the Registration of Medical Students, and the Returns from the Bodies in Schedule (A), of Professional Examination and their results:* Dr. Embleton, *Chairman*; Mr. Hawkins, Dr. Fleming, Dr. Thomson, Dr. A. Smith, Dr. Sharpey.

Amendment of the Medical Acts.—The following letter was read:—

Medical Department of the Privy Council Office, May 14th, 1869.
SIR,—With reference to the Draft Bill which you recently brought under the Lord President's notice, as proposed by the General Council of Medical Education and Registration, for amendment of the Medical Act, 1858, his Lordship directs me to inform you that, with every wish to assist the Medical Council in accomplishing its important duties, he does not feel that he could undertake to bring the proposals of the Draft Bill separately before Parliament, as a measure recommended by the Government, unless he regarded them as covering all the ground where amendment of the Medical Act is wanted; for, considering that the Act

has at present been more than ten years in operation, the Lord President presumes that a fair judgment can now be formed on its success and merits as a whole, and he thinks that a judgment of this more comprehensive sort must be the basis of any amending Bill to be introduced on the part of the Government. The Lord President would be glad to have the fullest possible explanations with the General Council on this larger aspect of the case; and, though the requisite consideration could not be given to the subject in time for legislation in the present far-advanced session of Parliament, his Lordship would hope to be able to deal with it next year in the light of such information as he may meanwhile receive.

On the present occasion, the Lord President does not propose to enter minutely on the question of the working of the Medical Act, but there is one point which his Lordship would wish to bring specially under your attention. His Lordship is advised that the Act is seriously defective, as not providing for a satisfactory and uniform minimum standard of admissibility to the *Medical Register*, and as not enabling the General Council to issue regulations in this respect. The state of the law in the United Kingdom (unlike that which obtains generally in Europe in the same matter) allows a minimum qualification in Surgery to be registered without any qualification in Medicine, and similarly a minimum qualification in Medicine to be registered without any qualification in surgery; and, so far as may be judged from a recently published analysis of titles contained in the *Medical Register*, it would seem that persons practising on those half-qualifications are to be counted by thousands in the United Kingdom. Cases are not infrequently brought under his Lordship's official notice where persons possessing only such half-qualifications undertake nevertheless to act in all departments of professional practice, and even obtain engagement as salaried attendants on the sick poor in relation to whatever diseases or injuries may affect them. The Lord President regards this state of things as open to serious objection, and his Lordship doubts whether Government could sanction any amendment of the Medical Act which should leave so great an existing evil undealt with. The Lord President is, of course, aware that at the present time most of the Examining Boards which confer half-qualifications voluntarily extend their examinations beyond the limits of their titular qualification: but his Lordship doubts whether that mode of action, at its best, can supply more than a very imperfect substitute for complete legal qualification; and whether, if it were universal and permanent, it would not itself tend to develop considerable new difficulties.

The Lord President understands that the General Council will now very shortly enter upon its annual session in London, and he accordingly directs me to suggest that, perhaps, you would bring the above branch of the subject under the particular consideration of the Council, with a view to his being favoured with any recommendation which the Council may be disposed to make in regard of it.

His Lordship further directs me to suggest that the same opportunity would be favourable for eliciting the opinion of Members of the Council, whether, if new legislation is to take place, it would be desirable to change in any respect the constitution of Council which the Act of 1858 established.

I have the honour to be, Sir, your obedient Servant,

(Signed) JOHN SIMON.

Dr. Burrows, F.R.S., President of the General Medical Council.

Dr. QUAIN moved, Dr. STORRAR seconded, and it was resolved—"That the communication from the Lord President of the Council be entered on the minutes."

Representation of the Profession in the Medical Council.—A letter, signed by Dr. J. Struthers, on behalf of the Garioch and Northern Medical Association, was read; and, on the motion of Dr. A. SMITH, seconded by Sir D. CORRIGAN, was ordered to be entered on the minutes. The letter urged the importance of making provision in any amendment of the Medical Act for the direct representation of the profession in the Medical Council; and expressed an opinion in favour of having the representatives of each of the corporations elected by the members or graduates, instead of by the governing bodies.

A communication from Dr. Prosser James, on the same subject, was also read.

A letter from Dr. Bell Fletcher of Birmingham, requesting that the Council would receive a deputation with a memorial on the necessity of amending the Medical Act, was also read. It was moved by Dr. PAGET, seconded by Dr. STORRAR, and agreed to—"That the request of Dr. Bell Fletcher be acceded to, and that the deputation be received by the Medical Council on Wednesday, July 7th, at 3 P.M."

Reduction of Printing Expenses.—A series of recommendations from the Executive Committee, having for their object the reduction of the expenses of the Council in printing, was presented and adopted.

Preliminary Education.—The following list of examining bodies whose examinations fulfil the conditions of the Medical Council, as regards preliminary education, was read.

I. UNIVERSITIES OF THE UNITED KINGDOM.—*Oxford*: Examination for a Degree in Arts; Responsions; Moderations; Local Examinations (Senior), Certificate to include Latin and Mathematics.—*Cambridge*: Examination for a Degree in Arts; Previous Examination; Local Examinations (Senior), Certificate to include Latin and Mathematics.—*Durham*: Examination for a Degree in Arts; Examination for Students in their second and first years; Registration Examination for Medical Students; Local Examinations (Senior), Certificate to include Latin and Mathematics.—*London*: Examination for a Degree in Arts; Matriculation Examination.—*Edinburgh, Glasgow, Aberdeen, and St. Andrews*: Examination for a Degree in Arts; Preliminary Examination for Graduation in Medicine or Surgery.—*Dublin*: Examination for a Degree in Arts; Entrance Examination.—*Queen's University (Ireland)*: Examination for a Degree in Arts; Entrance Examination; Examination for the Diploma of Licentiate in Arts; Previous Examination for B.A. Degree.

II. OTHER BODIES NAMED IN SCHEDULE (A) TO THE MEDICAL ACT.—*Royal College of Surgeons of England*: Examination conducted under the Superintendence of the College of Surgeons by the Board of Examiners of the Royal College of Preceptors.—*The Society of Apothecaries of London*: Examination in Arts.—*Royal College of Physicians, Edinburgh*; and *Royal College of Surgeons, Edinburgh*: Preliminary Examination in General Education, conducted by a Board appointed by these two Colleges combined.—*Faculty of Physicians and Surgeons of Glasgow*: Preliminary Examination in General Literature.—*Royal College of Surgeons in Ireland*: Preliminary Examination, Certificate to include Mathematics.—*Apothecaries' Hall of Ireland*: Preliminary Examination in General Education.

III. EXAMINING BODY, IN THE UNITED KINGDOM, NOT INCLUDED IN SCHEDULE (A) TO THE MEDICAL ACT.—*Royal College of Preceptors*: Examination for a First Class Certificate.

IV. COLONIAL AND FOREIGN UNIVERSITIES AND COLLEGES.—*Universities of Calcutta, Madras, and Bombay*: Entrance Examination, Certificate to include Latin.—*University of McGill College, Montreal*: Matriculation Examination.—*Universities of Toronto*; *King's College, Toronto*; *Queen's College, Kingston*; *Victoria College, Upper Canada*: Matriculation Examination.—*University of King's College, Nova Scotia*: Matriculation Examination; Responsions.—*University of Fredericton, New Brunswick*: Matriculation Examination.—*University of Melbourne*: Matriculation Examination, Certificate to include all the subjects required by the General Medical Council.—*University of Sidney*: Matriculation Examination.—*Codrington College, Barbadoes*: 1. English Certificate for Students of two years' standing, specifying the subjects of Examination. 2. Latin Certificate, or "Testamur."—*Tasmanian Council of Education*: Examination for the Degree of Associate of Arts, Certificate to include Latin and Mathematics.

Reports from the Branch Council, in pursuance of the following resolution passed in the last session of the Council, were read.

"That it be remitted to the Branch Councils to consider and report how far it would conduce to a more efficient and satisfactory system of conducting the examination of students in preliminary education, if a board was appointed by the General Medical Council, or by each Branch Council, to arrange and conduct, under their supervision, these examinations; and that, should the Branch Councils approve of such a system, they be requested to indicate any difficulties which may stand in the way, and the method by which they would propose to carry it out. The reports to be transmitted to the Executive Committee at least one month before the next session of the Council."

The Branch Council for England simply reported—"That, in the opinion of this Branch Council, it would not conduce, in England, to a more efficient and satisfactory system of conducting the examination of students in preliminary examination, if a board were appointed by the General Medical Council, or by this Branch Council, to arrange and conduct, under their supervision, these examinations."

The Branch Council for Scotland made an elaborate report, from which the following is an extract.

"It appears to this Branch Council that many of the imperfections attending the preliminary examinations arise from difference, both as to the subjects of examination and the modes of conducting it, existing at the different recognised boards. The Educational Bodies recognised by the Council are too numerous, and the certificates they grant are based upon standards, in some cases higher, in others lower, than are recommended by the Council. It thus appears that equality in the standard of proficiency cannot be obtained with so great a variety of boards, implying also so great a variety of judges. Under the system in operation, it is impossible to secure that the nature of the questions

set, even on the same subject, at the various boards, can be of similar value; or that the opinions of the examiners, as to the merit of the answers, can so harmonise that an approach to an equal or balanced estimate of proficiency can be looked for. It is evident from the reports on preliminary education, that none of the boards, except those specially instituted by the licensing bodies, have made any attempts to adapt their examinations to what the Council require from intending medical students. It has been proposed, as a means of ascertaining that the recommendations of the Medical Council are carried out by the national educational boards, to institute a system for visiting and reporting on the examinations conducted by them, similar to that which has been adopted for the preliminary and professional examinations of the licensing bodies. When it is borne in mind, however, that these boards hold a position quite independent of the Medical Council, there can be little doubt that many of them would decline to admit any extraneous supervision; but, in any case, the exercise of a supervision so extensive would involve serious difficulty and expense. In these circumstances, the Scottish Branch Council suggest that the General Council should recommend to the licensing bodies a system over which direct control could be exercised, and which might from time to time be adapted to the proper standard of preliminary education. The Branch Council are of opinion that in Scotland there are no insuperable difficulties in the way of establishing a joint board, such as is here proposed; and, if the Medical Council shall think that such a board would constitute a more convenient and efficient means of conducting the preliminary examinations than at present exists, the Branch Council have to suggest that the licensing bodies in each division of the kingdom should be invited to express their opinion on the subject of the contemplated recommendations."

The Branch Council for Ireland reported—"That this Branch Council is of opinion that it might be very desirable, if the legal rights and privileges of the several licensing bodies permitted it, were the preliminary examinations conducted by an examining board for each division of the United Kingdom."

The following *Report from the Branch Council for England* was also read—"That this Branch Council, while recognising the advantage of instruction in logic as part of the education of a medical man, does not recommend the introduction of logic as a necessary subject of the preliminary examination of the medical student."

Dr. FLEMING moved, and Dr. ALEXANDER WOOD seconded—"That a Committee be appointed to consider the Reports of the Branch Councils, on the subject of a board or boards for conducting preliminary examinations, and to report their suggestions on the subject."

Dr. ANDREW WOOD remarked that the English Branch Council gave no reasons for their recommendation. He agreed to the proposal which had been made on previous occasions, that the Council should get rid of the work of the preliminary examinations; but, this should not be until there was something better than a long list of examining bodies over which the Council had no control. The time had come for taking into consideration the subject of forming a board for preliminary examinations; and a provision for this ought to be introduced into any Bill for the amendment of the Medical Acts.

Mr. HARGRAVE supported Dr. Fleming's proposal.

Dr. STORRAR defended the English Branch Council for not stating their reasons *in extenso*. The practice of that Branch Council had been to deliberate with patience and judgment; but it was not expedient to give more than a simple expression of opinion.

Dr. RISDON BENNETT thought it would be a mere work of supererogation to form a common board of preliminary examination for this division of the kingdom. The Council had all the control over the various boards that was necessary; and they were worthy of the fullest confidence of the Council. At the same time, it was necessary to make some distinction between the boards. He was persuaded that it would not be politic for the English Branch Council to take preliminary education into its own hands, in the face of the extensive system of local examinations carried on by the Universities and the knowledge possessed by the Council regarding them.

SIR DOMINIC CORRIGAN said that it appeared perfectly impossible to come to an unanimous result. It had been said that the Council had no control over the colonial examinations. Did not this shew that the Council ought not to recognise the examinations of boards over which they had no power, and who might at any time alter their schemes of examination? The solicitors and lawyers in Ireland did not receive certificates of preliminary education from any other body except their own. Sir Dominic here read a series of questions proposed to candidates for the engineering establishment in public works in India, as evidence, in the construction of the questions themselves, of a want of general education. It was objected that the expense of coming to a central Board of Examination would be great; but surely young men who desire to enter the medical profession could pay a pound or two;

or the Board could meet in different parts of the kingdom. Above all, the Council ought to keep the preliminary examination in its own hands and under its own control.

Mr. CÆSAR HAWKINS said that, although the Council had no direct control over the colonial examining boards, it knew quite well what curricula they laid down.

Dr. PARKES said that it was not quite correct to say that the Council had no control over the Boards which examined in the subjects of preliminary education. The Council had received copies of questions and answers from the College of Preceptors; and expected similar documents in relation to the Oxford and Cambridge local examinations.

After some remarks from Mr. COOPER,

Dr. STOKES said that for some years past there had been a great improvement in general education in Ireland; but he would not decide to what cause this was to be attributed. He would not say that the examining boards were corrupt; but the preliminary examination of medical students should be above suspicion. For those medical students who were not students of Art in an University, there could be no greater safeguard than that each Branch Council should appoint its own Board of Examiners in Arts. He hoped that the Council would agree to this plan if it were brought forward.

Dr. EMBLETON thought that the centralisation of the preliminary examinations in one Board would not be wise. There was no doubt that the examinations required by the Council were such as could be trusted. The Council had great control over them; either by direct visitation or by inspection of the questions and answers. The Council ought to carry out the principle agreed on some years ago, that the preliminary education should be left to the various educational bodies in the country.

Dr. PAGET said that the Council had the power of striking from the list any of the examining bodies whose curriculum of preliminary examination was insufficient.

Dr. Fleming's motion was then carried by a majority of 14 against 7; and the Committee was appointed to consist of Dr. Alexander Wood, *Chairman*, Dr. Bennett, Dr. Paget, Dr. Storrar, Dr. Fleming, Dr. Leet, and Sir D. Corrigan, *Bart*.

Secondary Education.—A petition which had been presented to both Houses of Parliament in favour of improved secondary education was read. It has already been published in the JOURNAL.

FRIDAY, July 2nd, 1869.

Dr. BURROWS took the Chair at 2 P.M.

Amendment of the Medical Acts.—Dr. ANDREW WOOD moved—"That a Committee be appointed to consider the question of the Amendment of the Medical Acts, and that to this Committee the communication from the Government on the subject be referred." He called attention to the fact that the Government had from time to time put off the solicitations made to them by the Medical Council in regard to an amendment of the Medical Acts; but now, for the first time, the Privy Council had referred special points to the Medical Council for consideration. The present was an appropriate time for explaining the working of the Medical Act, especially as a furious attack on the Council had been lately made by Sir John Gray, in his speech in the House of Commons on the Medical Officers' Superannuation Bill. That the Council was aware of the imperfections of the Act, was evident from the fact of their always having endeavoured to amend it. It ought to be remembered, that the main object of medical legislation was to benefit not only the profession, but the public. The Medical Act was often attacked as the Bill of the Corporations. It was not so; it was passed in spite of the Corporations. The Bill generally known as Mr. Headlam's, was in reality the Bill of the Corporations; and if this had been passed, it would have been a great advantage. Sir John Gray, in his speech in the House of Commons on the Superannuation Bill, brought forward the whole subject of the Medical Council and medical education. If, however, he had first taken a little trouble to ascertain facts, he would not have misled Parliament as he did. Dr. Andrew Wood, reading from a copy of Sir J. Gray's speech as reported in the *Freeman's Journal*, said that Sir John asserted that the Medical Act had failed to ensure sufficient tests of practical knowledge on the part of those who were to be allowed to make experiments on the lives of Her Majesty's subjects. He then complained of the licensing bodies; and said that the Army Board indeed accepted the registered diplomas, but, before they allowed the holders to make experiments on the lives of the soldiers, they examined them at the bedside. Sir John Gray complained that the Medical Council did not enforce on the licensing boards the duty of practical examination; but, if he had studied the Medical Act, he would have seen that the powers given to the Council were not so great as he supposed. He also said that the Medical Council had com-

pletely neglected the visitation of examinations. Dr. Andrew Wood thought that the best answer to this would be to send to Sir John Gray a copy of the reports of visitation of examinations, to be read by him from beginning to end. These visitations had had the effect of producing great improvement in the examinations. The Medical Council had done that which Sir John Gray said they had not done. Sir J. Gray said that the late Sir B. Brodie had denounced the imperfect education of the profession in his day. No doubt the education of the profession, especially as regarded preliminary education, was then in a disgraceful state; but that was not the state of things now existing. The Medical Council had laid down a series of regulations for preliminary examinations. The British Medical Association (Dr. Wood said) regarded the standard as too low, and would have it raised to the level of the matriculation examination of the University of London. This would be totally out of the question. If the standard were pitched too high, the examination would either become a sham, or it would prevent the public from having a sufficient supply of practitioners. He hoped, however, that in a few years the Council would be able to insist on a more extended education. Two or three years ago the Council adopted a resolution that Greek should after 1870 be one of the compulsory subjects. This was a rather hasty resolution, and he was glad that it was withdrawn, because that which was sought could not be got. Sir J. Gray had also accused the Council of not persuading the Boards to adopt clinical examinations. Here, also, he was wrong. There was scarcely one board in Scotland that had not adopted clinical examinations—they were carried on by the Colleges of Physicians and Surgeons, the Glasgow Faculty, and the Universities of Edinburgh, Aberdeen, and Glasgow. From a want of knowledge, Sir John Gray had misled Parliament. He would now come to the question, whether there was need of an amended Act, and if so, what it was that required amendment. Last year, the Council had principally endeavoured to amend Clause 40, and to introduce a clause for the registration of colonial practitioners. There had been a great outcry that the Act did not sufficiently protect medical practitioners. It was not intended to protect practitioners against quacks; but, on the other hand, the wording of the Act was so obscure as to cause miscarriage of justice. Men might offend against the spirit of the Act without rendering themselves liable to be convicted according to its letter. He believed that this would have been remedied by the clause which the Council drew up last year. He also alluded to the clause relating to colonial graduates. But unquestionably more amendment of the Act was required. The communication from the Privy Council pointed to a very important matter—the amalgamation of examining boards. This had been provided for in former bills, but had not been carried out in the present Act. The combination of boards had been provided for in a permissive clause only; and hence had been but very partially carried out. He was fully satisfied that there was now but one opinion, that there should be only one way of entering the profession. It would be of great advantage to have some compulsory power in a new bill, and to have a clause enabling the formation of a central board in each division of the kingdom. He thought that the present boards were not anxious to retain their power of licensing the general practitioners. With regard to the constitution of the Council, he would say very little, except that they must be now prepared to give an answer to the Privy Council; either that they believed the Council to be at present in a perfect state, or that it required modification, and if so, in what respect. He thought that a committee should be appointed to consider Mr. Simon's letter. He trusted that the Government would show itself to be in earnest in bringing out a thorough scheme of medical reform, but that it would not take such steps as would cripple or destroy those valuable institutions the colleges, which, notwithstanding all the abuse heaped on them, had been of much benefit to the profession.

Mr. CÆSAR HAWKINS seconded the proposal. He did not, however, think that it was necessary to have one portal for the entrance of all practitioners—of those, for instance, who would become graduates of our university. The letter sent from the Privy Council complained that there were practitioners who held but one qualification; but, as he pointed out, the licensing of members of the College of Surgeons alone, without a medical licence, would not occur again. He did not think that it was necessary to have a special double qualification.

After some remarks from Mr. COOPER,

Sir DOMINIC CORRIGAN would support the proposal for the appointment of a committee. The Government had asked the Council to give whatever aid it could: and it should be met in the spirit in which it applied to the Council. He did not think there would be a dissentient voice against the proposal. He was sorry, however, that Dr. Andrew Wood had attacked Sir John Gray as he had done, in his absence. Sir John was a warm friend of the profession; and, if he had made some errors in his remarks, they should be attributed not to him but to the sources from which he had derived his information. He

could not endorse the statement that the Medical Act was a "perfect" failure; but, if it were not a failure, why were attempts made to amend it? It was the case, as Sir John Gray had stated, that the Council had failed in proving the qualifications of practitioners, and that the Army and Navy Boards threw aside the diplomas obtained by examinations at other boards. Sir John Gray had charged the Council with not enforcing their recommendations. He had heard it again and again stated that the Council had this power; and, if this were so, Sir John Gray was right in charging the Council with dereliction of duty. There was scarcely an examining board that had not laughed at the regulations of the Council. The examining bodies told the Council they would do as they pleased; and, during the eleven years of existence of the Council, it had never dared to go to the Privy Council to represent the misconduct of any one board. The visitation of examinations was not laboriously and efficiently carried out. There was no record of the number of visits, nor of the visitation of the special examinations instituted by some of the boards. As to preliminary examinations, the Council had lowered the standard; inasmuch as it had decided on not enforcing Greek, which had been required by the Apothecaries' Hall of Ireland for the last seventy years. He was surprised that Dr. Andrew Wood, a highly educated man, should have said that the preliminary examination should not be pitched too high, lest there should not be a sufficient supply of men for appointments of the country. Was the Council to lower the standard to meet boards of guardians, who would not hesitate to supply to the poor that medical aid which they would not employ themselves? The standard should be high; and if the guardians will not pay well educated men, they should not have a supply of ill educated. The late Abraham Collis, when asked whether there should not be a special education for practitioners to attend on the poor, replied that he knew no treatment of the poor different from that of the rich. As to examinations in Clinical Medicine and Surgery, he would ask whether there were not at least one University—that of St. Andrew's—which granted degrees without examination? There was in St. Andrew's no teaching body; the examiners were not resident on the spot; and there was not a hospital in the city.

Dr. ALEXANDER WOOD defended the course taken by Dr. Andrew Wood with regard to Sir John Gray. He thought Sir Dominic Corrigan's speech deficient in logical sequence; and reminded the Council that it was Sir Dominic himself who refused to obey the regulations, and then taunted the Council. It was to Sir D. Corrigan and to Ireland that the Council must look for examples of defiance. As to the charge that the Council had lowered the standard of preliminary examination, it must be remembered that they had added modern languages to the curriculum. As to Greek, it was in evidence that the Council could not get a knowledge of this language; but it had sent up petitions in favour of an improvement in secondary education. He agreed with Sir D. Corrigan in one point—as to not lowering the standard of qualification for the purpose of increasing the number of practitioners. The Council wanted to have every man ready to treat disease, whether in the rich or in the poor. He protested against the use of the returns from the medical departments of the Army and Navy to show the state of education. If any such had existed ten years ago, they also should be brought forward. The University of St. Andrew's did not confer degrees without an examination. It was allowed to confer the degree of M.D. each year on ten practitioners above forty years of age; but this was not done until after a careful examination; in addition to which, evidence of respectable character in the profession was demanded. Dr. Wood here referred to the reports on the examinations made by Mr. Syme and Dr. Fleming, who spoke of them in terms of approval.

Dr. ALLEN THOMSON read the regulations of the St. Andrew's University as regarded candidates above forty years of age.

Dr. LEET protested against the insinuation that the professional education of the Apothecaries of Ireland was inferior. The examiners of the Apothecaries' Hall had sometimes found deficiency in candidates holding the diplomas of the Edinburgh colleges.

Dr. CHRISTISON said, with reference to the statement that there was no clinical examination at St. Andrew's, that the relations of St. Andrew's with the Dundee Infirmary were such that a clinical examination could be readily carried out.

Dr. ANDREW WOOD explained that he had lately become acquainted with Sir John Gray, and had informed him that he was about to criticise his speech; whereon Sir John provided him with a copy of the *Freeman's Journal*, in order that he might have an accurate report.

The motion was carried unanimously. The committee was appointed to consist of the President, Dr. Bennett, Mr. Hawkins, Dr. Paget, Dr. Andrew Wood, Dr. Apjohn, Sir D. Corrigan, Bart., Dr. Parkes, Dr. Quain, and Dr. Christison.

On the motion of Dr. PAGET, seconded by Dr. ANDREW WOOD, the

communication from the Garioch and Northern Medical Association, and the letter of Dr. Prosser James, were referred to the committee.

Preliminary Education.—Letters were read in reference to the following resolutions passed in July 1868 by the Council—"That the Registrar be requested to address a letter to those licensing bodies in Ireland which do not require the preliminary examination to be passed before medical study is begun, representing that throughout England and Scotland a complete uniformity has been brought about by the adhesion of the licensing bodies to the recommendation of the General Medical Council in this respect, and that it is highly desirable that students in all the three divisions of the kingdom should be placed on the same footing, by the Irish licensing bodies using every means to obtain the necessary powers to enable them to require that preliminary education and examination shall be really preliminary to medical study."

The first letter was from the Registrar of the King and Queen's College of Physicians in Ireland, enclosing the following resolution—"That the Council is in error in representing that throughout England and Scotland a complete uniformity has been brought about by the adhesion of the licensing bodies to the recommendation of the General Medical Council; viz., that 'the preliminary examination should be passed before medical study is begun'; and, moreover, that the College is of opinion that the plan proposed by the General Medical Council, of substituting a preliminary examination to be undergone previously to the commencement of professional study, instead of encouraging an education in arts carried on for one or more years, is not calculated to advance the acquirement of a good general education."

The second letter was from the Rev. Dr. Haughton, Medical Registrar of Trinity College, Dublin, enclosing the following reply in reference to the communication from the Registrar of the General Medical Council—"The Board of Trinity College, having consulted with the King and Queen's College of Physicians, is not at present prepared to recommend a change in the existing arrangements in the subject of preliminary education. The Board desires also to direct the attention of the Medical Council to the following resolution of the College of Physicians: 'The College is of opinion that the plan proposed by the General Medical Council, of substituting a preliminary education to be undergone previously to the commencement of professional study, instead of encouraging an education in arts, carried on for one or more years, is not calculated to advance the acquirement of a good general education.'"

The Secretary of the Queen's University wrote as follows: "Sir,—In reply to your letter of the 22nd of August, 1868, enclosing a resolution of the Medical Council of the 6th of July, 1868, respecting preliminary education, I am desired to express the opinion of the Senate that a mere preliminary examination is not a sufficient test of extra professional education. I may also observe that the matriculation examination passed by the medical students of this University, constitutes only a part of the test in general education to which they are subjected.—I am, etc."

The three letters were severally ordered to be placed on the minutes. A letter from the Medical Registrar of Trinity College, Dublin, was also read.

SATURDAY, JULY 3RD, 1869.

The PRESIDENT took the Chair at 1 P.M.

State Medicine.—Dr. ACLAND presented the Second Report of the Committee on State Medicine, with an Appendix.

Petition.—A petition from the Lothians' Medical Association, for an Amendment of the Medical Acts, was read. On the motion of Dr. PAGET, seconded by Dr. ANDREW WOOD, it was ordered to be received and entered on the minutes, and referred to the Committee on the Amendment of the Medical Acts.

The Army and Navy Boards.—Returns of Examinations from the Medical Departments of the Army and Navy, and from the India Office, were laid before the Council, and were ordered to be entered on the minutes. The return from the Army Medical Board shewed that there had been 37 candidates for 20 vacancies; that 21 were returned as having passed successfully (the last two being equal); and that, of the unsuccessful candidates, 11 would have been accepted had there been vacancies for them.

The Report from the Medical Department of the Navy stated that, in 1868, 43 examinations were held, and 35 admissions were granted. There were, in all, 37 candidates, of whom one, rejected in 1866, was found sufficiently qualified, and 36 were freshmen. Of these 36, 28 succeeded on their first examination, and 8 were remanded to their studies. Of the last 8, 6 passed on second examination, and 2 did not reappear. The causes of rejection were general professional deficiencies, especially in anatomical and practical knowledge. Of the 37

candidates, seven were found well acquainted with the Latin language; but the greater majority of the remainder declined to undergo any examination in that language.

In the Medical Department of the Indian Army there were, in February 1868, 24 candidates, of whom 20 passed; in August, there were 22, of whom 10 were successful and 12 failed. The principal cause of failure was deficiency in surgery and anatomy.

The Council then adjourned, with the view of expediting the business of the Committees.

MONDAY, JULY 5TH, 1869.

The PRESIDENT took the Chair at 2 P.M.

Preliminary Examination.—The following report from Dr. Storrar, on certain papers on general preliminary education, was ordered to be entered on the minutes and referred to the Committee on Preliminary Examinations. "Of the papers applied for by the Registrar, those relating to three only of the recognised examinations have been received, viz.:—The Cambridge Local Examinations, Senior; the College of Preceptors, First Class Certificate; the Royal College of Surgeons of England, Preliminary Examination. As regards the papers sent from the College of Preceptors, the Chairman, finding they were not in sets, and otherwise not such as were wanted, returned them through the Registrar; but no others have as yet been forwarded in their place. The papers of the Cambridge Local Examinations, Senior, comprised—English, Latin, Greek, French, German, Mathematics, Geometry, Algebra, and Arithmetic. The examination represents a high standard. The best answers are excellent, and even the worst afford proof of fair knowledge acquired through systematic training. The composition and spelling of English are good. The papers of the Royal College of Surgeons of England (Preliminary Examination) comprised—Dictation, English Grammar and Composition, English History, Geography, Latin, Greek, French, German, Arithmetic, Euclid, Algebra, Mechanics, Chemistry, and Natural History. The standard of this examination is not a high one, but the questions are good, and would, if well answered, be an adequate test. The best answers are generally good; some of them excellent. The worst are, however, often bad—some so bad that it is not easy to see why they should have been held to be sufficient, the spelling being often bad, and the answers frequently such as to show an absence of all real knowledge of the subjects to which the question relate.—JOHN STORRAR, Chairman."

On the motion of Dr. PAGET, seconded by Dr. STORRAR, a Committee, consisting of Dr. Paget, Dr. Embleton, Dr. Fleming, and Dr. Leet, was appointed to rearrange the recommendations and opinions of the Medical Council on education, examinations, and registration.

Dr. MACROBIN was added to the Committee on Preliminary Education.

On the motion of Dr. CHRISTISON, seconded by Sir D. CORRIGAN, it was resolved:—"That the Edinburgh University Calendar for Local Examinations for 1868 be submitted to the Committee on Preliminary Examinations, with a view to the Council receiving the Report of that Committee as to the sufficiency of the said Local Examinations to qualify students to commence their medical studies."

Visitations of Examinations at the Queen's University in Ireland.—A Report from Dr. Leet, on the Examinations in Medicine for the *Primary Part*, and for *Degrees*, in June, was read. He reported that "The questions were judicious and well diversified, and the answers in general were very good; but in the absence of practical tests from important subjects, it is difficult, if not impossible, to say whether the candidates possessed 'the requisite knowledge and skill for the efficient practice of their profession.' This University still permits students to enter upon their medical studies without having passed an Examination in Arts; and with regard to the recommendations of the General Medical Council 'as to the method of conducting professional examinations,' I find that those numbered respectively 1, 7, 8, with the former part of number 4, are followed at these examinations, and that those numbered 2, 3, 5, 6, with the latter portion of number 4, have not been adopted."

With regard to the Pass Examination for the Degrees of M.D. and M.Ch., held in September and October, Dr. Leet reported:—"The questions were clear and definite in form, and afforded a fair test of the theoretical knowledge of the candidates. There is more of the practical element than formerly introduced into these examinations, but it is desirable that it should be extended to other important subjects, especially to medicine; and I think, that until adequate means are available for conducting examinations at the bed-side, certificates from clinical teachers in hospitals should not be received, unless they testify for the proficiency of the candidate in the diagnosis and treatment of disease."

Dr. PAGET asked whether there was any examination in the Colleges affiliated to the Queen's University, which might be received as a preliminary examination.

Sir DOMINIC CORRIGAN said that the Queen's University had no control over the Colleges, and never trusted to the College examinations alone. The University recommended the students to go through an education and examination in Arts.

Dr. RISDON BENNETT said that the answer was not satisfactory, as it showed that the Queen's University did not carry out the recommendations of the Council. This was a case in which it became a question whether a representation should not be made to the Privy Council.

After some remarks from Dr. ALEXANDER WOOD, the reports were ordered to be entered on the minutes.

Removal of a Name from the Register.—Dr. John Pattison, of 10, Cavendish Road, St. John's Wood, had been summoned to appear before the Council to answer a charge of infamous conduct in a professional respect, in sending a certain letter, and paper enclosed, to Mr. Charles Hay Frewen. This case has lately been noted in the public papers. A rule, calling on Dr. Pattison to show why a criminal information for libel should not be filed against him, was heard in one of the courts of law, but was withdrawn, on an apology being made by Dr. Pattison.

Mr. OUVRY, the legal adviser of the Council, attended, and read a copy of the summons which had been served on Dr. Pattison.

Dr. Pattison having failed to appear before the Council, Mr. OUVRY read at full length the evidence in support of the charges, and also the answers to them which Dr. Pattison had addressed to the Council as his defence. The following resolutions were then passed.

Moved by Sir D. CORRIGAN, and seconded by Dr. RUMSEY—"That John Pattison, of 10, Cavendish Place, St. John's Wood, M.D., is judged by this Council, after due inquiry, to have been guilty of infamous conduct in a professional respect."

Moved by Dr. BENNETT, and seconded by Mr. HAWKINS—"That the said John Pattison having been judged by the General Council, after due inquiry, to have been guilty of infamous conduct in a professional respect, the General Council do hereby adjudge that the name of the said John Pattison be erased from the *Register*; and do by this order direct the Registrar to erase his name from the *Register* accordingly."

Moved by Dr. STOKES, and seconded by Mr. HARGRAVE—"That a copy of these orders, signed by the President in the Chair, and countersigned by the Registrar, be transmitted to the said John Pattison."

Vaccination.—A communication from the Secretary of the Royal College of Surgeons of England, dated November 18th, 1868, was read, stating that the Council of the College, having fully considered the recommendations issued by the Medical Council relating to vaccination, adopted them, and at the same time resolved that the regulation restricting the grant of the certificate of instruction and proficiency in vaccination to surgeons holding the appointment or possessing the opportunities enumerated in the second recommendation, be applicable to candidates commencing their professional education for the diplomas of this College, on or after the 1st October, 1868. The communication was received, and ordered to be entered on the minutes.

A Communication from the Medical Teachers' Association of London was read, and ordered to be referred to the Committee on Medical Education.

Erasure of a Qualification from the Register.—A certified extract having been read from the minutes of a meeting of the Royal College of Physicians of Edinburgh, at which meeting Lima Abraham La'Mert was deprived of the licence of the College, it was resolved, on the motion of Dr. ALEXANDER WOOD, seconded by Dr. EMBLETON, "That the Registrar do forthwith erase from the *Medical Register* the qualification of Lima Abraham La'Mert as a licentiate of the Royal College of Physicians of Edinburgh."

Applications for Restoration to the Register.—An application from Mr. George Peterson Bernard to be reinstated on the *Medical Register*, from which his name had been removed through an erroneous report of his death, was ordered to be complied with.

Applications from Mr. Evan Thomas and Mr. Thompson Whalley, that their names might be replaced on the *Medical Register*, were not complied with.

Christ's College, New Zealand.—On the motion of Dr. ACLAND, seconded by Dr. PAGET, an application from the Bishop of Christ Church, New Zealand, made through Dr. Acland, to have the Arts Examination of Christ College, New Zealand, recognised by the Medical Council, was referred, with the documents which accompanied the letter, to the Committee on Preliminary Examinations.

TUESDAY, JULY 6TH, 1869.

The PRESIDENT took the Chair at 2 P.M.

Communications.—An application, dated 11th June, 1869, from the Principal and Vice-Chancellor, and the Dean of the Faculty of Medicine of the M'Gill University, for recognition of the degrees of that University, similar to that granted to the University of Melbourne by the General Medical Council during its last session, was read.

Mr. CÆSAR HAWKINS moved, Dr. SHARPEY seconded, and it was resolved—"That the Principal and Vice-Chancellor, and the Dean of the Faculty of Medicine of the University of M'Gill College, be informed that they have not correctly understood the proceedings of the General Medical Council in its last session relative to the University of Melbourne; that the Council have no power under the Medical Act to place on the *Register* the graduates in medicine of any foreign or colonial University, not practising medicine or surgery in the United Kingdom before the passing of that Act, but that should such power be conferred on the Medical Council, the claims of the graduates of M'Gill University will receive due consideration."

A letter from the Parliamentary Committee of the British Medical Association was read; and, on the motion of Sir D. CORRIGAN, seconded by Dr. PAGET, was referred to the Committee on Amendments of the Medical Acts.

The Case of L. A. La'Mert.—Mr. CÆSAR HAWKINS moved, Dr. PAGET seconded, and it was resolved—"That Mr. Ouvry be requested to examine the evidence on which Mr. Lima Abraham La'Mert, Lic. Soc. Apoth. Lond., 1860, of 37, Bedford Square, London, W.C., had been deprived of his diploma by the Royal College of Surgeons of England, and of his licence by the College of Physicians of Edinburgh, in order to ascertain whether this Council will be authorised to erase his name from the *Register* under the 29th Clause of the Medical Act."

Dr. BENNETT moved, Dr. ALEXANDER WOOD seconded, and it was resolved—"That the standing orders of the Council, in reference to the removal of a name from the *Register*, be suspended, and that Mr. Ouvry be at once consulted, with a view to ascertain whether the Council could not proceed to strike Mr. Lima Abraham La'Mert's name from the *Register* during the present session of Council."

Letters.—A letter from Dr. Bulmer respecting Registration of Canadian Degrees, and one from Dr. Forster respecting Registration in the Channell Islands, were read; and, on the motion of Dr. ANDREW WOOD, seconded by Dr. FLEMING, were referred to the Committee on the Amendment of the Medical Acts.

Danish Pharmacopœia.—A copy of the *Pharmacopœia Danica*, recently revised and republished, was presented to the Council by direction of the Danish Government, through His Excellency the Danish Minister in this country. It was moved by Dr. EMBLETON, seconded by Mr. COOPER, and agreed to—"That the best thanks of this Council be given to the Danish Government for the presentation of a copy of the new Danish *Pharmacopœia*, kindly made through His Excellency the Danish Minister."

A Communication from the Royal College of Surgeons of Edinburgh was read. In it, the College expressed opinions, of approval or disapproval, of certain proceedings of the Council.

Dr. ALEXANDER WOOD said that the right of bodies or of individuals to address the Council was undeniable; but there was great inconvenience in the course taken by the Edinburgh College of Surgeons. There was a most able representative of the College in the Council, who could give, when necessary, the views of the body to which he belonged. He hoped that the communication would not be printed.

Sir D. CORRIGAN moved—"That the communication just read from the Royal College of Surgeons of Edinburgh be inserted in the minutes of Council." He said that Dr. Alexander Wood's desire was that the Council should place itself in a position above that of the Houses of Lords and Commons. An individual had a right to memorialise the Council; and surely a chartered institution had the right. He thought that the course followed by the Edinburgh College of Surgeons was very complimentary to the Council.

Dr. AQUILLA SMITH seconded the motion.

Dr. ANDREW WOOD was obliged to Sir D. Corrigan for replying to the attack made by Dr. Alexander Wood. Any one had a right to send a memorial to the Council. The College of Surgeons of Edinburgh had sent a memorial comprising observations on lunacy certificates, vaccinations, visitation of examinations, publicity of examinations, the army and navy returns, diplomas in state medicine, and preliminary examination. There was nothing disrespectful in the memorial. He would like to see similar documents sent to the Council from the Royal College of Physicians of Edinburgh and from other bodies.

Dr. RISDON BENNETT would not object to the insertion if the College

of Surgeons were likely to be dissatisfied at its absence from the minutes; but, on the whole, he thought that it should not be printed.

Dr. ANDREW WOOD had been indifferent as to what might be done with the communication; but, after the remarks made, it was absolutely necessary to put it on the minutes.

Dr. FLEMING said that, if all the bodies represented sent like documents, it would be very inconvenient, and likely to be attended with any but beneficial results.

Dr. ALEXANDER WOOD had not said that the document was disrespectful, but that it was inconvenient to inaugurate the system of printing such in the minutes. He had great respect for the Edinburgh College of Surgeons; but it was his duty to stop this proceeding. At the same time, he did not wish to prevent memorials from being sent to the Council.

Dr. CHRISTISON thought that only the use of very strong language on the part of the Edinburgh College of Surgeons would justify the Council in refusing the insertion of the memorial. The refusal could only be interpreted as an act of censure on the College. At the same time, he felt with Dr. Alexander Wood that great inconvenience would be liable to follow.

Dr. STORRAR said that the insertion of the memorial would be a precedent for flooding the minutes with similar documents, and thereby increasing the printing expenses of the Council. He would encourage the several bodies to represent their views to the Council; but the Council ought to exercise a discretion as to what they inserted in the minutes.

Sir D. CORRIGAN having replied, the motion was put to the vote and lost; 10 voting for and 9 against it.

Lunacy Certificates.—A letter from Dr. Philip MacLagan of Berwick-on-Tweed, was read and ordered to be entered on the minutes. In it, he said:—"A few months ago, having a patient afflicted with insanity whom I wished to place under treatment in an asylum near Edinburgh, I filled up the usual certificate, the second certificate being written by a medical practitioner in Edinburgh who saw the patient *in transitu*. A few days after, I learned, much to my surprise, from the Superintendent of the Asylum, that my certificate, on being presented to the sheriff (by whom, as you are aware, warrant for detention in an asylum is granted), was rejected, on the ground of my non-residence in Scotland; and in reference to the Board of Lunacy, this decision was confirmed. A third practitioner had, in consequence, to be called in to examine the patient, who, meanwhile, had been illegally detained for three days." He then narrated a second instance; and continued, "I need not point out the extreme inconvenience of this state of the law. From the proximity of this town and the adjacent part of Northumberland to Edinburgh, the practitioners of the district have been hitherto almost universally in the habit of sending insane patients there; and, in fact, unless the existing regulations be of very recent date, many persons must, at this moment, be illegally confined in Scottish asylums by virtue of certificates granted by medical men residents in England. But, independently of considerations of mere convenience, this law seems perfectly inconsistent with that equality of privilege which the Medical Act was believed to confer. Registered practitioners who are daily exercising every branch of the profession on both sides of the Tweed—who hold Poor-law and other public appointments, both in England and Scotland—who are called upon to give medical evidence in the law courts of both countries, and who of course have to give evidence *there* on questions of sanity or insanity, are yet, for some inscrutable reason, placed at a disadvantage on this single point."

Dr. ANDREW WOOD moved, Dr. BENNETT seconded, and it was resolved: "That a communication be made to the Home Secretary in reference to the present state of the law, regarding Lunacy Certificates; that there be transmitted to him a copy of the letter drafted last session (*vide* Minutes, 2nd July, 1868), as also the letter of Dr. MacLagan; and that, previously to making this communication to Government, the President be requested to communicate on the subject with the English and Scottish Lunacy Commissioners."

Alleged Misconduct.—A communication from practitioners in Lanarkshire respecting the misconduct of a registered practitioner was submitted to the Council. The reporters were requested to retire during the reading of the document. It was resolved, on the motion of Dr. STORRAR, seconded by Sir D. CORRIGAN, "That it be remitted to the Branch Council for Scotland to proceed in this case according to the standing orders of the Council."

The Queen's University in Ireland.—Dr. PARKES moved: "That the Registrar be requested to write to the Secretary of the Queen's University in Ireland, asking for the Report of the Committee of the Queen's University, to which the Report of the Committee of the Medical Council on the Visitations of Examinations was referred, and if the reply be, that the Committee has not reported, that the Registrar be instructed to write and inquire for a definite reply to the passage in the Report of the

Committee on the Visitation of Examinations which referred to the Preliminary Examination of the Queen's University."

Dr. EMBLETON seconded the proposal.

Dr. STORRAR said that the time for such a proposal as that of Dr. Parkes had gone by. The fact was known, that the Queen's University in Ireland allowed medical study to be commenced before the Arts examination had been passed. The recommendation of the Council was carried out in England and in Scotland, but not in Ireland. Either the Council or the Queen's University was wrong; and the matter ought to be settled in one way or the other. He proposed as an amendment—"That this Council having issued recommendations to the Bodies enumerated in Schedule (A) of the Medical Act; viz., 'that no medical student shall be registered until he has passed a preliminary examination, as required by the General Medical Council,' and 'that no licence be obtained at an earlier period than after the expiration of forty-eight months subsequent to the registration of the candidate as a medical student;' and this Council having learnt that the regulations and practice of the Queen's University of Ireland are not in accordance with these recommendations, the Council request the attention of the Queen's University to this want of accordance, and express the hope that before the next annual meeting of the Council, the University may be able to announce to them that their regulations and practice are in conformity with the aforesaid recommendations, and thereby avoid the necessity of a representation being made by the Council on this subject to Her Majesty's Most Honourable Privy Council, under the 20th section of Medical Act."

Dr. RISDON BENNETT seconded the amendment. The question of preliminary education was a very important one. There was no cause of complaint against the licensing bodies in general, who had carried into effect the recommendations of the Council; but the Queen's University in Ireland had distinctly refused, and had repudiated a regulation which the Council considered essential. He trusted that Sir Dominic Corrigan and the other Irish members would see the necessity of carrying out the recommendations of the Council, so as to prevent the matter from being brought before the Privy Council. He was quite sure, however, that if it were necessary to take this step, the Council would have the support of Parliament and of the profession.

Sir DOMINIC CORRIGAN would not have made any remarks on Dr. Parkes's proposal. But, with regard to the amendment, he accepted the challenge as the representative of the Queen's University. Both in the Council and at home he would refuse to accede to the desire of the Council; because the University believed the Council to be in the wrong. He advised the Council to be cautious in making a representation to the Privy Council. The question would arise, not whether the recommendations of the Council were disregarded—for there could be no penalty for not carrying out a mere recommendation—but whether the plan proposed by the Council was better than that followed by the Queen's University. The returns from the Army and Navy Boards showed that no graduates of the Queen's University had been rejected.* The Queen's University had sent back a candidate for a year because he was deficient in general education. Was this neglecting the extra-professional education? No candidate was allowed to pass the examination for a degree in medicine who had not passed an examination in Arts. The Council received certificates of preliminary examination from various bodies; and, to show of what a nature those examinations were, he would refer to the Cambridge local examinations, which could be passed by boys under fifteen years of age, and in which part of one of the questions was, "Give the feminine of heifer." He would take issue on the question whether the plan of the Queen's University was better or worse than that of the Council. From the Cambridge local examinations report, it seemed that three boys and two girls among the candidates who passed the senior examination were under fifteen years of age; and in the Oxford examination no age was specified. And these were the examinations which the Council wished to substitute for the Arts examination of the Queen's University. Trinity College in Dublin was in the same predicament as the Queen's University. The Council did not bring other bodies before the Privy Council for not carrying out their recommendations. Sir Dominic here referred to the proceedings of the Council in reference to the University of Edinburgh and the Royal College of Surgeons of England. The Council had lowered the standard of education in the profession by establishing a minimum; for a minimum must become a maximum, when any wretched preliminary examination passed before any one of fifty examining bodies was received as sufficient evidence of general education.

* At the meeting of the Council on the following day, Sir D. Corrigan corrected this statement. He said that he had found that, while none of the Queen's University graduates had been rejected by the Medical Board of the Navy, six of those who were candidates for Army appointments had been rejected during the last five years.

Dr. ALEXANDER WOOD would omit reference to extraneous matter, and speak merely as to facts. There was no room for rhetorical display or for an exhibition of personalities. The Council had all but unanimously come to the resolution that a preliminary examination must be passed in all cases before the professional education was commenced; because it was important that the minds of students should have undergone a certain amount of training before they entered on their medical studies. The Queen's University had acted well in instituting an arts examination before a degree in medicine was granted; and he would be glad to see a similar plan carried out by other boards. But the Queen's University should not have omitted the preliminary examination. Dr. Alexander Wood then entered at some length on a discussion of the accuracy of some of Sir Dominic Corrigan's remarks, and of the course which Sir Dominic had taken.

The further discussion of the subject was then adjourned.

WEDNESDAY, JULY 7TH, 1869.

The PRESIDENT took the chair at 2 P.M.

The Case of L. A. La'Mert.—The PRESIDENT informed the Council that Mr. Ouvry, as directed at the last meeting, had been consulted, and had advised that the Council could not, by any suspension of its standing orders, proceed with Mr. Lima Abraham La'Mert's case during its present session.

Sir John Gray's Question in the House of Commons.—Dr. ALEXANDER WOOD put the following question to the President. "That, as it appears that a question regarding the General Medical Council had been put last night to the Home Secretary, in the House of Commons, by Sir John Gray, and replied to by the Right Honourable Mr. Bruce, it is desirable that this Council be informed whether the Home Secretary had applied to the President or to any of the officials of this Council for information, before replying to the question."

The PRESIDENT replied that he had not received any communication from the Home Secretary, or from any other member of Her Majesty's Government, since he received the letter from the Privy Council, which was laid before the Council on the first day of the session, and was read by the Registrar.

The Queen's University in Ireland.—The adjourned debate on this subject was resumed.

Dr. EMBLETON defended the University of Durham as being loyal to the Council.

Dr. PAGET said that the papers of the local examination of the University of Cambridge for senior candidates had been examined and approved of by the Branch Council for England. He thought it a pity that the time of the Council should be taken up by such remarks as those made by Sir D. Corrigan, some of whose observations were applicable only to the examinations that were not recognised by the Council.

After some remarks from Dr. ALLEN THOMSON, Mr. HARGRAVE, Dr. ANDREW WOOD, and Dr. PARKES, the amendment proposed by Dr. Storrar was then put to the vote, and lost—fourteen voting for, and five against it. Dr. Parkes's motion was then carried *nem. con.*

DEPUTATION WITH MEMORIAL ON AMENDMENT OF THE MEDICAL ACT.

At three o'clock the Council received a deputation of members of the profession who had come from Birmingham for the purpose of presenting the memorial on medical legislation, a copy of which appeared at page 593 of the JOURNAL for June 26th. The deputation consisted of Dr. Bell Fletcher, Senior Physician to the Queen's Hospital, Birmingham; Sampson Gamgee, Esq., Surgeon to the Queen's Hospital; Arthur Oakes, Esq.; and D. C. L. Owen, Esq.

The PRESIDENT, addressing the deputation, said that the Council was desirous that they should bring forward what arguments they pleased with regard to the statements contained in the memorial.

Dr. HAWKINS, the Registrar, read the memorial.

The PRESIDENT then invited the deputation to make any observation in explanation of the memorial. They might express themselves freely on any point that required fuller information than was contained in the memorial.

Dr. BELL FLETCHER asked to be permitted to read a statement which he had prepared. It was as follows. "To the General Council of Medical Education and Registration of the United Kingdom: Mr. President and Gentlemen,—Mr. Gamgee, Mr. Oakes, and Mr. Owen, who accompany me, as a deputation, have, with myself and others, performed the duty of drawing up and obtaining signatures to this memorial, which we have now attended your Board to present. We vouch for the truth of all the signatures, all of which we have witnessed ourselves. There are already upwards of 5,200 names appended to this

memorial, and I have reason to believe that in the course of a few days several thousands more will be added, as for some days we have received 500 assents on the average a day. The memorial is so explicit and the signatures to it so influential and numerous, that we feel no words can add to its importance. If, however, you have any questions to address to us, or desire information explanatory of the objects of the memorial, we shall endeavour to comply with any request with which you may honour us."

The PRESIDENT again invited the deputation to speak further on any of the points presented in the memorial.

Dr. FLETCHER said that there was really nothing to add to the memorial. No addition, in the opinion of the deputation, was necessary.

The PRESIDENT said that, taking the clauses in their order, he found that the first stated that the Act of 1858 was "practically inoperative". It had been suggested to him, and he thought it necessary, that the Council should have more information with respect to this statement. Were the memorialists not aware that a *Register* was kept of those persons belonging to this profession who had received the proper education and had passed the necessary examination?

Dr. FLETCHER said that the *Register* did not contain all the names of qualified men, and was, therefore, not perfect.

Mr. GAMGEE said that one great reason why medical registration had failed was, that it was not compulsory; and the fact that a name was not on the *Register* was not evidence of the practitioner not being a qualified man. He referred then to the questions connected with the number of qualifications, and said that it was unquestionable that a vast number of men were practising medicine all over the country without any qualification under the *Register*. He wished to call attention to the fact that men were practising under the names of other men, and with complete impunity. Then, too, the magistrates would not, except very rarely, convict in cases where the law had been infringed; and, in a case where a conviction had been obtained from a stipendiary magistrate, the conviction had been quashed by the superior court. Even where a conviction had been obtained, the penalty inflicted was so small, and the costs of the prosecution were so comparatively large, that persons carried on these practices without hardly any control.

The PRESIDENT then called attention to the sixth clause, on which, he said, another question arose. The clause stated that it was "necessary to substitute for the present system of examination, and for the many forms of licence to practise now granted, one high and uniform standard of examination and one legal qualification." The Council would like to know whether the deputation who had now presented the memorial, and who represented so large and influential a part of the profession, would suggest that all the higher branches of medicine and surgery should be abolished, and that all practitioners should have simply one qualification—whether the degrees granted by Universities should be done away with by the profession.

Mr. GAMGEE said there was no wish to take away from Universities their privileges; but what they held was, that there should be but one high and uniform standard of examination, in order that persons should not obtain admission to the profession who possessed but a superficial knowledge of medicine. It was desired that a surgeon should know all his subjects; and that it should be no longer possible to say, when a man was admitted as a surgeon, that he did not know what he ought to do. By one legal qualification, it was meant that there should be only one entrance to the profession, no matter how many degrees a man might in other ways obtain.

Mr. OAKES supported the views of the previous speaker, and alluded to the difficulty of obtaining assistants who were really qualified; and he mentioned a case of one obtained from the London University, the holder of which showed great deficiency in some elementary matter.

The PRESIDENT then asked a question concerning the clause on certificates of death, and put a supposititious case, that, if a man died three or four miles from a medical man's residence, that medical man should go that distance to certify the death without pay.

Mr. OAKES answered that he thought the medical man should not do this without payment; and while they affirmed this as a principle, they left it to the Council to carry out.

The PRESIDENT then stated that he was requested to ask the deputation whether they were aware that the Sanitary Commissioners were now examining witnesses in order to ascertain how an exact registration might be effected; and to ask them also whether they did not consider it advisable to leave the questions on registration until after the Commissioners had made their report. The President then turned to the last paragraph but two in the report. It was—"It is respectfully, but very earnestly, submitted that the influence and power for good of the General Medical Council would be greatly extended with the profession and the public if provision were made in a new Act of Parliament for the representation in the Council of the general

body of practitioners of medicine and surgery, who are now for the most part deprived of any professional franchise." The Council desired some further exposition of the manner in which the influence of the Council could be greatly extended.

Mr. GAMGEE replied that the influence and power for good of the Council could only be strengthened by an active alliance with the general body of practitioners. The condition of the general practitioners in this country was almost exceptional in comparison with that of the medical profession abroad. The general body of practitioners here had no professional franchise whatever; and if they had the franchise, they would take a greater interest in this Council, and the Council would find in their constituents a body of educated men who would aid in enforcing the views set out in the Council. He believed it would be difficult to point to a reason why the practitioner should not possess the professional franchise. The deputation approved the principle, and left the practical details to be considered by the Council.

The PRESIDENT then said there appeared to be no more questions to be asked, and it only remained for him to assure the deputation that the memorial should be received with the consideration which was due to so large a number of the profession. Every possible attention would be paid to it. There had not been that explanation of some of the points which it was thought likely would be given; but he was very glad they had taken the trouble to come in order to present a memorial signed by so many influential names.

Dr. BELL FLETCHER said that he had been directed to apply for a copy of the Medical Acts Amendment Bill drawn up by the Council.

The PRESIDENT, in reply, informed Dr. Fletcher of the receipt by the Council of a letter from the Lord President of the Privy Council, on the subject of medical legislation; and said that there was no Bill which could be supplied to the deputation.

Dr. BELL FLETCHER thanked the Council for the kind attention which they had given to the matters presented by the deputation.

Dr. PAGET moved, Mr. HARGRAVE seconded, and it was resolved—"That this memorial, stated by the deputation to have been signed by 5,200 members of the medical profession, be entered on the minutes; and that it be referred to the Committee on the Amendment of the Medical Acts."

The Army and Navy Returns.—It was moved by Dr. STORRAR, seconded by Dr. MACROBIN, and agreed—"That the best thanks of the Council be given to the Director-General of the Army Medical Department, to the Director-General of the Navy Medical Department, and to the Right Honourable the Secretary of State for India, for their kindness in furnishing to the Council the returns of the examinations of candidates for the respective Medical Services of the Army, Navy, and India."

Preliminary Education.—It was moved by Dr. EMBLETON, seconded by Mr. HARGRAVE, and resolved—"That the lists of Examining Bodies whose examinations have been adopted by the Medical Council, as regards preliminary education, be printed with 'The Form of Application for Registration as a Medical Student', and sent to the licensing bodies, medical schools, and hospitals."

A Report from the Committee on State Medicine was then read by Dr. ACLAND, who moved—"That, in any amended medical bill which may be prepared for Parliament by the Council, it is desirable that the requisite permissive clauses for providing a qualification in State Medicine be inserted."

Dr. CHRISTISON seconded the motion.

Dr. ANDREW WOOD moved as an amendment, and Mr. HARGRAVE seconded—"That the Council come to no decision in the present session as to the desirability of inserting in any amended medical bill permissive clauses for providing a qualification in State Medicine, but that the matter be delayed till next session; and that during the recess the report of the Committee on State Medicine, with the evidence appended, be sent down to the licensing bodies for their consideration."

The debate was adjourned to Friday.

ASSOCIATION INTELLIGENCE.

METROPOLITAN COUNTIES BRANCH.

THE seventeenth annual meeting of the above Branch will be held at the Star and Garter Hotel, Richmond, on Monday, July 12th, at 3 o'clock P.M.; JOHN E. ERICHSEN, Esq., in the Chair.

Dinner at the Hotel at 5.30 P.M. Tickets (exclusive of wine), 10s. 6d. each.

A. P. STEWART, M.D. } *Honorary Secretaries.*
ALEXANDER HENRY, M.D. }

75, Grosvenor Street, June 1869.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-seventh Annual Meeting of the British Medical Association will be held in Leeds, on Tuesday, Wednesday, Thursday, and Friday, the 27th, 28th, 29th, and 30th days of July next.

President—H. W. ACLAND, M.D., LL.D., F.R.S., Regius Professor of Medicine in the University of Oxford.

President-Elect—CHARLES CHADWICK, M.D., F.R.C.P., Senior Physician to the Leeds Infirmary.

An *Address in Medicine* will be delivered by Sir WILLIAM JENNER, Bart., M.D., F.R.S., Physician in Ordinary to Her Majesty, and Physician to University College Hospital.

An *Address in Surgery* will be delivered by THOMAS NUNNELEY, Esq., F.R.C.S., Surgeon to the Leeds Infirmary.

An *Address in Midwifery* will be delivered by T. E. BEATTY, B.A., M.D., Dublin.

The business of the meeting will be conducted under five sections:

Section A. MEDICINE.—*Presidents*, W. T. Gairdner, M.D. *Vice-Presidents*, J. T. Banks, M.D.; and J. D. Heaton, M.D. *Secretaries*, T. Clifford Allbutt, M.D., 38, Park Square, Leeds; H. Charlton Bastian, M.D., F.R.S., 81, Avenue Road, London, N.W.

Section B. SURGERY.—*President*, William Hey, Esq. *Vice-Presidents*—George Southam, Esq.; and W. Stokes, jun., M.D. *Secretaries*, W. Fairlie Clarke, M.B., 1, Curzon Street, Mayfair, London, W.; and T. R. Jessop, Esq., 32, Park Square, Leeds.

Section C. MIDWIFERY.—*President*, Arthur Farre, M.D., F.R.S. *Vice-Presidents*, S. Berry, Esq.; and W. O. Priestley, M.D. *Secretaries*, G. H. Kidd, M.D., 17, Merrion Square East, Dublin; and J. Thorburn, M.D., 333, Brighton Place, Oxford Street, Manchester.

Section D. PHYSIOLOGY.—*President*, J. Hughes Bennett, M.D., F.R.S. *Vice-Presidents*, Lionel S. Beale, M.B., F.R.S.; and A. T. H. Waters, M.D. *Secretaries*, E. Chapman, Esq., M.A., Frewen Hall, Oxford; H. Power, M.B., 45, Seymour Street, Portman Square, London, W.

Section E. PUBLIC MEDICINE.—*President*, W. Farr, M.D., D.C.L., F.R.S. *Vice-Presidents*, E. D. Mapother, M.D.; and A. P. Stewart, M.D. *Secretaries*, G. H. Philipson, M.D., Saville Row, Newcastle-on-Tyne; and A. Wiltshire, M.D., 8, Richmond Terrace, Whitehall, S.W.

TUESDAY, July 27th.

1 P.M.—MEETING OF COMMITTEE OF COUNCIL—Town Hall.

3 P.M.—MEETING OF GENERAL COUNCIL—Town Hall.

8 P.M.—FIRST GENERAL MEETING—Lecture Room, Philosophical Hall.—The retiring President, Professor ACLAND, M.D., F.R.S., will resign his office.—The new President, Dr. CHADWICK, will deliver his Inaugural Address.—The Council's Report will be read, and discussion taken thereon.—Election of General Secretary.—Election of Auditors.—The Report of the Medical Benevolent Fund will be read.—Any motions of which notice may have been given.

WEDNESDAY, July 28th.

8.30 A.M.—PUBLIC BREAKFAST of the Association—Town Hall.

9.30 A.M.—MEETING OF NEW COUNCIL—Town Hall.—Special business: To elect new President of the Council.

11 A.M.—SECOND GENERAL MEETING—Lecture Room, Philosophical Hall.—Appoint Place of Meeting in 1870 and President-elect.

12 A.M.—Address in Medicine, by Sir W. JENNER, Bart., M.D.

2 P.M.—MEETINGS OF SECTIONS—Town Hall.—Adjourn at 5.30.

8.30 P.M.—President's *Soirée*—Victoria Hall, Town Hall.

THURSDAY, July 29th.

10 A.M.—THIRD GENERAL MEETING.—Town Hall.—Reports of Committees.—Dr. E. Waters will present a Report from the Representation Committee.—Captain Galton's paper on Hospital Construction, with discussion.

2 P.M.—Address in Midwifery, by Dr. BEATTY—Lecture Room, Philosophical Hall.

3 P.M.—MEETING OF SECTIONS—Town Hall.—Adjourn at 5.30.

6 P.M.—PUBLIC DINNER of the Association—Victoria Hall, Town Hall.

FRIDAY, July 30th.

10 A.M.—FOURTH GENERAL MEETING.—Address in Surgery, by THOMAS NUNNELEY, Esq., F.R.C.S.—Lecture Room, Philosophical Hall.

11 A.M.—MEETINGS OF SECTIONS—Town Hall.

3.30 P.M.—CONCLUDING GENERAL MEETING—Town Hall.

Reception Room.—A room will be opened in the Philosophical Hall, Park Row, as a reception room on Tuesday, July 27th, at 10 A.M., and on the following days at 8 A.M., for the issue of tickets to members, and for supplying lists and prices of lodgings, and other information.

Members and others who require information with respect to the meeting are requested to make application in this room.

Gentlemen are requested to proceed direct to this room immediately on their arrival—to enter their names and addresses, and to obtain the tickets necessary to secure admission to all the proceedings.

Letters, parcels, etc., may be left in this room, in the care of the clerks.

Arrangements will be made for the receipt and postage of letters in this room.

The General Post-office and the several Telegraph Offices are in Park Row, close to the reception room.

Editor's and Secretary's Room.—A room for the use of the Secretary and the Editor will be provided in the Town Hall.

Gentlemen wishing to communicate with these officials, are requested to make application in this room.

Hotels.—The following are the principal Hotels in the town: those at the head of the list being the most commodious. The Queen's, attached to the Wellington Station; Great Northern, attached to the Central Station; White Horse, Boar Lane; Victoria, Great George's Street. Close to the Town Hall—Bull and Mouth, Briggate; Gill's West Riding Hotel, Wellington Street; Andrews' Boarding House (Temperance), 20, Park Place; Beecroft's, Bishopgate Street; Golden Lion, Briggate.

Gentlemen wishing for accommodation in the above, should communicate *without delay* with the managers of the respective houses.

Lodgings.—Members requiring private lodgings, are requested to apply *at once* to Dr. Eddison, Park Square, Leeds, stating the required number of sitting-rooms and bed-rooms, and *about* the terms expected, when the Local Committee will do their best to secure what may be desired.

Places of Meeting.—All Council, General and Sectional Meetings, will be held in the Town Hall, by the kind permission of the Mayor and Town Council of Leeds.

The General Addresses will be delivered in the Lecture Theatre of the Philosophical Hall.

The Annual Public Breakfast, Public Dinner, and President's *Soirée*, will be held in the Victoria Hall, Town Hall.

A *Soirée* will be given by Dr. Heaton, President of the Leeds Literary and Philosophical Society, in the rooms of that Institution, on Friday evening, the 30th.

The Annual Museum and the Annual Library, together with the Exhibition of Surgical Instruments, will be held in the Leeds School of Medicine, Park Street, close to the Infirmary.

Papers.—Gentlemen desirous of reading papers, cases, or any other communications, are requested to give notice of the same to the General Secretary, at their earliest convenience. All papers must be in the hands of the General Secretary, or of one of the Secretaries of the Sections to which the paper belongs, on or before Saturday, July 24th.

Authors are requested to prepare beforehand short abstracts of their papers for publication. The papers (and abstracts) read in the different Sections are to be handed to the Secretaries of the Sections for publication in the JOURNAL of the Association. If, owing to want of space, any papers read cannot be printed in the JOURNAL, they will be returned on application to the office, 37, Great Queen Street, London, W.C.

No paper shall occupy more than *twenty* minutes in delivery. All subsequent speakers not to exceed *ten* minutes.

Gentlemen intending to visit Leeds during the Meeting are requested to send their names *without delay* to Dr. Eddison, Park Square, Leeds.

Annual Museum: Notice to Exhibitors.—Rooms will be provided at the School of Medicine for the Museum, in which it is intended to exhibit all new objects of interest to the profession, such as: 1. New Instruments and Appliances in Medicine and Surgery. 2. New Drugs and new Preparations. 3. New Books—English and Foreign. 4. Pathological Preparations. 5. Photographs, Drawings, Casts, and Models of Pathological Specimens. 6. Models of New Inventions relating to Public Health, etc. 7. New Preparations of Food. The Museum will be opened on Tuesday Morning the 27th, and will remain open until the Evening of Friday the 30th. All objects intended for exhibition must be addressed "*Care of Dr. Eddison, the School of Medicine, Leeds:*" and be delivered on or before Monday the 19th, and must be removed from the Museum on Saturday the 31st July, or not later than Monday the 2nd of August. No object can be exhibited unless it is accompanied by a written or printed description, and a short reference for insertion in the Catalogue. Intending Exhibitors are requested to apply to Dr. Eddison for any information they require, and to inform

him as soon as possible what they intend to exhibit, and how much space they are likely to need. In case any members prefer bringing preparations with them, they are particularly requested to forward short descriptions beforehand, in order that they may appear in the Catalogue. Adequate space and the necessary fittings for properly exhibiting the objects sent will be provided; but all expenses connected with packing and carriage, and all risk from injury or loss, must be borne by the Exhibitors.

Notices of Motion.—The following notices have been given.

Dr. DAVEY: To alter Law VIII, by substituting the word "twenty" for "ten" members, to be elected members of the Committee of Council.

Mr. GAMGEE: That a Committee be appointed to inquire into the income and expenditure of the British Medical Association, with a view to ascertain if its resources admit of being more efficiently employed, than they now are, for the advancement of science and for the promotion of the material and social interests of the medical profession.

The Rev. Dr. BELL has given the following notices.

1. To move that, if the first general Meeting for business be held in the evening, it be adjourned at ten o'clock, if the business be not concluded by that hour.

2. To call attention to the "Financial Statement" given in the JOURNAL of 17th April: (a) in relation to the items of expenditure and income in the publication of the JOURNAL; (b) the stipends of the officers, especially that of the General Secretary.

3. To ask, in reference to the Meeting of the Committee of Council of 9th June, 1869, second resolution (a) whether the cheque books of the Local Secretaries, as well as of the General Secretary, be included in the audit; (b) in whose name the General Secretary keeps the banking account of subscriptions received by him.

4. To move that the Ten (or Twenty, according to Dr. Davey's notice) elected members of the Committee of Council, be not eligible for re-election, after serving two (or three) years, in greater number than one-half, until they have been non-members for a like period.*

5. To draw attention to the propriety of not electing an Editor of the JOURNAL on the eve of the Annual General Meeting, and making arrangements for alterations in the JOURNAL;† also to the advisability of nominating at the previous General Annual Meeting the Gentlemen who are to read Addresses at the next Annual Meeting.

6. To suggest that the Notices of motion for the General Annual Meeting be sent direct to the Editor instead of through the General Secretary.

Papers.—The following Papers have been promised:—

S. Hey, F.R.C.S. On the Beneficial Results of Undesigned and Accidental Hæmorrhage in certain cases.

P. C. Little, F.R.C.S.I. On Railway and other Accidents; with Cases and Observations.

E. Gaylor, L.R.C.P. On the Professional and Commercial Abuses of the Club System.

Lawson Tait, L.R.C.P.Ed. On Fungous Tumour of the Dura Mater. On Idio-Muscular Contraction.

J. Braxton Hicks, M.D., F.R.S. On the Use of the Intra-Uterine Douche in Offensive Lochia, as a rule of practice. Cases showing the use of Perchloride of Iron in Flooding.

T. P. Heslop, M.D. How do the Sick Children of the Poor obtain Medical Attendance?

R. Hibbert Taylor, M.D. A case of Poisoning with Extract of Belladonna; with detailed account of *post mortem* appearance.

Wm. Squire, L.R.C.P. On the Temperature-Variations occasioned by Vaccination, and its effects upon the Health of Infants.

A. S. Myrtle, M.D. On Hydro-Therapeutics—the resources of Harrogate specially considered.

Vincent Jackson, M.R.C.S. On the Hypodermic Administration of Alcoholic Stimulants.

John Birkett, F.R.C.S. On the Causes of Death after Amputations of the Limbs in Hospitals.

C. B. Fox, M.D. Remarks on Ear-Cough, and its mode of production.

J. M. Fothergill, M.D. On Uræmic Diarrhœa.

R. Elliott, M.D. On the Adaptation of Vision to Different Distances.

F. E. Anstie, M.D. On the Limits of Stimulation.

* This is an alteration of one of the Laws of the Association, and therefore cannot be brought forward without giving two months' notice, in accordance with Law 21:—"Any member wishing to propose a new law, or an alteration of an existing law, must send notice to the Secretary at least *two* months previous to the annual meeting, and specify the change proposed. The Secretary shall immediately cause such notice to be published in the JOURNAL, which publication shall be repeated three times at least, and it shall be announced in the Report of the Council."—T. W. W.

† This is already provided for by a resolution of the Committee of Council, passed at their meeting on June 9th. The election of Editor will take place after the Leeds meeting, at a time to be there announced.—T. W. W.

J. Russell Reynolds, M.D. On Certain Forms of Paralysis depending on Idea.

J. Russell Reynolds, M.D. On the Treatment of Rheumatic Fever by Perchloride of Iron.

J. B. Sanderson, M.D. On the Practical and Pathological Bearing of Recent Researches as to the Artificial Production of Tubercle.

J. B. Sanderson, M.D. On the Various Methods of Measuring and Recording the Movements of the Chest, for the purposes of Clinical Observation.

C. G. Wheelhouse, F.R.C.S. On the Use of the Tube Dilator in Operations Involving the Posterior Portions of the Urethra.

T. P. Teale, M.A., F.R.C.S. A Demonstration of Rectangular Stumps, by Patients, Photographs, and Casts. [Mr. Teale will be glad to receive contributions of patients, photographs, and casts of rectangular stumps from as many different sources as possible].

H. Blanc, M.D. On Animal Vaccination.

W. S. Playfair, M.D. On the Treatment of Chronic Uterine Catarrh.

C. A. Hemingway, M.R.C.S. On the Reduction of Compound Fracture, with Protrusion of Bone, by the Use of the Lever.

M'Call Anderson, M.D. On some of the more recent Methods of Treating certain Diseases of the Skin.

W. H. Broadbent, M.D. A brief account of a recent Investigation of the Structure of the Cerebral Hemisphere, with remarks.

Edward Ballard, M.D. On the Evils arising from the present mode of taking Medical and Scientific Evidence in our Courts of Justice.

James Cumming, M.D. On some Points in the Pathology of Delirium Tremens.

Richard Rendle, M.R.C.S. On the Use of Protoxide of Nitrogen in General Surgery, and on a New Mode of Producing Rapid Anæsthesia.

Holmes Coote, F.R.C.S. On Hospitalism.

T. Holmes, F.R.C.S. On Hospitalism.

W. F. Teevan, B.A., F.R.C.S. On the Early Detection and Treatment of Stricture of the Urethra.

Victor de Méric, M.D., F.R.C.S. On cases of Syphilitic Affection of the Third Nerve, producing Mydriasis with and without Ptosis.

Edward Lund, F.R.C.S. On the Use of Antiseptic Cere-cloth for Covering Wounds.

W. Stokes, Junr., M.D. On Temporary Deligation of the Abdominal Aorta.

W. Stokes, Junr., M.D. On a New Operation for Hare Lip.

* * * No Paper shall exceed *twenty* minutes in the reading, and all subsequent speakers must not exceed *ten* minutes.

T. WATKIN WILLIAMS, *General Secretary*.

13, Newhall Street, Birmingham, June 24th, 1869.

READING BRANCH.

THE annual meeting of the above Branch will be held in the Town Hall, Reading, on Wednesday, July 14th, at 4.45 P.M.

GEORGE MAY, jun., *Honorary Secretary*.

Castle Street, Reading, June 1869.

MEDICO-PARLIAMENTARY.

Tuesday, July 6th.

MEDICAL EDUCATION.—Sir J. Gray asked the Secretary of State for the Home Department whether the General Council of Medical Education and Registration, appointed under the Act 21 and 22 Victoria, cap. 90, had "represented" to the Privy Council that the official reports forwarded to the Council for their information in the years 1865, 1866, 1867, and 1868, by the heads of the Military and Naval Medical Departments, complained of the "ignorance" of a large proportion of the licensed surgeons and physicians who annually presented themselves as candidates for medical employment in the army and navy; and that the returns show that within the period embraced in the reports named more than 150 licensed surgeons and physicians who were entitled to hold any Poor-law or other civil medical appointment in the empire were rejected by the Military and Naval Medical Boards.—Mr. Bruce: No such representations have been made by the Medical Council to the Privy Council either with respect to the medical men, rejected upon examination by the Military and Naval Medical Boards, or with respect to the granting of licences to the 150 rejected candidates; but I have reason to know that the fact has come under the notice of the Medical Council, and excited their serious attention. I am informed that the Privy Council is at the present time in communication with the Medical Council, with a view to considering whether the Medical Act may be so amended as to insure a higher efficiency in the medical profession of the United Kingdom.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopædic Hospital, 2 P.M.
WEDNESDAY...St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

IN consequence of the pressure on our space by the report of the proceedings of the Medical Council, we are compelled to defer several reports of Branch meetings and other matter until next week.

THE BUSINESS OF THE ANNUAL MEETING.

SIR,—In the JOURNAL of the 3rd inst., there is a note from Dr. Bell, which demands some notice from me as regards the first paragraph. If it means anything, it means that I had withheld, for at least one week, a communication which he had sent to me.

As I owe it to all the members of the Association to act *impartially* in my official capacity, they have a right to know how exactly the matter stands. On Thursday, the 24th of June, I received from Dr. Bell a communication, enclosing five questions, to which he would call attention at the Annual Meeting, and requesting me to forward the same, without delay, to the JOURNAL. I wrote to Dr. Bell on the same day to the effect that his communication could not possibly appear that week, as the JOURNAL would go to press that same evening. I will leave it to the members of the Association to decide if my conduct has deserved the *insinuation* contained in Dr. Bell's letter. I am, etc., T. WATKIN WILLIAMS, Birmingham, July 6th, 1869. *General Secretary.*

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, July 7th; The New York Medical Gazette, June 19th; The Parochial Critic, June 30th; The Durham County Advertiser, July 2nd; The Newcastle Daily Journal, July 2nd; The Boston Medical and Surgical Journal, June 17th; The Melbourne Leader, May 1st; The Indian Medical Gazette, June 1st; The Shadow, July 3rd; The Birmingham Daily Gazette, July 5th; The Sussex Agricultural Express, July 6th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. Heywood Smith, London; Dr. Eddison, Leeds; Dr. G. F. Giles, St. Leonards; A Member of the British Medical Association, Hurstpierpoint; Dr. J. Ford Anderson, London; Dr. J. Thompson Dickson, London; Mr. J. A. P. Cartwright, Leintwardine; Mr. E. Smith, London; Mr. H. Taylor, Guildford; Dr. C. Kelly, London; Mr. H. C. Boutflower, Manchester; Dr. F. E. Roche, Chelmsford; Mr. R. Dunn, London; Dr. D. B. Hewitt, Dublin; Mr. Syme, Edinburgh; Dr. W. M. Kelly, Taunton; Mr. C. F. Maunder, London; Dr. Wiltshire, Leeds; Dr. Paul, London; Dr. Miller, Edinburgh; Dr. Sibson, London; Dr. Rutherford, Edinburgh; Mr. T. P. Teale, Leeds; Dr. L. W. Sedgwick, London; Dr. F. Page, Southsea; Mr. Neil McGreevy, Drogheda.

LETTERS, ETC. (with enclosures) from:—

Mr. F. Le Gros Clark, London; Dr. Lawson Tait, Wakefield; Dr. J. Lockhart Clarke, London; Mr. Hulke, London; Dr. Cotton, London; Dr. King, London; Mr. T. Q. Couch, Bodmin; Mr. T. Godfrey, Mansfield; Dr. J. D. Heaton, Leeds; Dr. J. M. Bryan, Northampton; The Honorary Secretary of the Legal, Clerical, and Medical Cooperative Society (Limited), London; F.R.C.S., Leeds; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Mr. Lomax, Stafford; The Registrar of the Medical Society of London; Dr. Lomas, London; Dr. J. W. Johnston, Cork; Dr. R. Douglas Powell, London; The Medical Officers and Lecturers of Charing Cross Hospital; Dr. J. Wallace, Liverpool; The Secretary of the Devonshire Hospital, Buxton; Mr. C. W. Thorp, Todmorden; Dr. C. B. Fox, Scarborough; Mr. T. Longmore, Netley; The Vice-Dean of the London Hospital Medical College; Dr. C. Barham, Truro; Dr. Mapother, Dublin; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. Quinlan, Dublin; Dr. T. P. Heslop, Birmingham; Mr. J. R. Buck, Inkberrow, Redditch; Dr. Blanc, London; Dr. Hall Davis, London; Mr. Heckford, London; Mr. T. Watkin Williams, Birmingham; Mr. T. H. Bartleet, Birmingham; Mr. Nunneley, Leeds; The Honorary Secretary of the Berry Defence Fund; Dr. E. Waters, Chester; Dr. Prosser James, London; Mr. H. M. Morgan, Lichfield.

LECTURES

ON THE

PRINCIPLES OF SURGICAL DIAGNOSIS:

ESPECIALLY IN RELATION TO SHOCK AND
VISCERAL LESIONS.*Delivered at the Royal College of Surgeons of England.*

By F. LE GROS CLARK, F.R.C.S.,

Hunterian Professor of Surgery and Pathology in the College; Surgeon to
St. Thomas's Hospital; and Examiner in Surgery at the
University of London.LECTURE I.—LESIONS OF SPINAL CORD. (*Concluded.*)*Introductory Remarks.—Tetanus: its Varieties, Causes, Symptoms, and Signs.—Comparison with other Convulsive Affections; Hydrophobia, Epilepsy, Chorea, Hysteria.—Acute and Chronic.—Shock.—Tetanus in Lower Animals.—Morbid Anatomy.—Repair of Cerebral Substance after Breach of Texture.—Affinity between different Convulsive Affections of the Cord.—Effects of Spinal Caries on the Cord.—Surgical Operation in Fractures of the Spine Discussed.*

BEFORE quitting this interesting subject I will briefly advert to the morbid anatomy of tetanus, on which considerable light has been recently thrown. The rare occurrence of this malady, as compared with the frequency of such wounds and contusions as are known to be the most rife exciting cause of its existence, would seem to indicate that a variety of concurrent circumstances must be present to determine the development of the disease. No doubt many of these are extraneous and purely accidental; such as season, locality and temperature; or the presence of any depressing external agency. But there must be, also, other and intrinsic predisposing conditions which influence the production of this convulsive affection; and it would appear probable that these reside especially in the nerve-centre itself. I cannot say I have ever attached much importance to the *post mortem* appearances which were supposed, formerly, to be associated with fatal tetanus. As far as I have been able to judge, they are so ill-defined and irregular as to be both unreliable and insufficient—accidental changes which might or might not be associated with the fatal disease. When a nerve of sufficient magnitude has been wounded, and this injury has been succeeded by tetanus, the injured nerve generally betrays signs of inflammation. Flesh-wounds are often angry-looking, especially when the symptoms of convulsion are developed early. But these conditions are by no means necessary or uniform. On the contrary, I have known such a wound, involving the ulnar nerve, entirely healed, before the first indication of tetanus was observed; and flesh wounds will heal kindly during the progress of the disease. We must, therefore, seek for some other explanation of its pathology than can be afforded by the unhealthy or unhealed condition of the wound. The peripheral source of irritation is not necessarily perpetuated, but is transferred to the nerve-centre; and these cases are, perhaps, among the most hopeless, and run their course rapidly. The natural inference under such circumstances is, that some organic change has been established in the nerve-centre, which no longer needs the primary irritation in the circumference to maintain it. On the other hand, such peripheral irritation alone would appear to suffice, in some cases, to excite tetanic convulsion, by reflexion through the cord; and the removal of the offending part will then arrest the disease. Under these circumstances it becomes a matter of vital importance to distinguish such cases as are of a purely eccentric character; for, in such only should an operation be contemplated. Certainly these instances of successful interference are rare, especially where the disease presents itself in the acute form—where there is no remission of symptoms; this, indeed, appears to be the class of cases in which the disease is centric and, probably, as such always fatal. But in subacute and intermittent tetanus, the removal of the injured member, say a finger or a thumb, has been immediately followed by relief. Perhaps a careful analysis of these circumstances, founded on more accurate and extended pathological observation, may lead to more satisfactory results.

To Dr. Lockhart Clarke we are indebted for our acquaintance with those pathological changes in the organic structure of the cord, which are found in fatal cases of tetanus. In several specimens examined by this careful observer, there were noticed extensive areas of disin-

tegration in the gray substance of the cord, especially round the central canal, with softening and exudation of a finely granular fluid, and the *débris* of blood-vessels and nerves in the same locality. Swelling or falling in of the cord at the parts affected was also noticed, and extravasation of blood into its texture. And these changes, though varying in degree in different parts, were not limited to one segment of the cord, but involved the greater part of its extent, from the upper cervical region downwards.



Fig. 1.—Section of spinal cord in tetanus, showing its distortion and falling-in from the fluid disintegration of the grey matter; a condition which prevailed, in this instance, more or less throughout the whole length of the cord. After a drawing by Dr. Lockhart Clarke.

Several inquiries, and of an eminently practical character in relation to diagnosis as well as treatment, are suggested by these facts, and are referred to by Dr. Lockhart Clarke, at the conclusion of his paper on the subject. The first which naturally presents itself is, whether the structural changes observed are present in cases which recover. The reply to this inquiry must necessarily be purely conjectural; but the probability is in favour of the negative. If the positive be assumed, the alternative is implied of entire restoration to a normal condition, or the persistence of some indication of permanent functional nervous derangement. The former is scarcely consistent with our present knowledge of these organic changes in the structure of the cord; and, as regards the latter, I cannot recall any instance in which evidence of such enduring derangement has existed, after recovery from tetanus. It seems more probable that, in such cases, irritation without organic change—an expression which is admissible in the absence of one to which a more definite meaning may be attached—is the explanation of the consequent phenomena.

As regards the relation of these structural changes, as produced by, or the cause of, the tetanic spasms, Dr. Lockhart Clarke remarks that they most frequently occur where the nerve-cells are scanty, and are not found in the anterior gray substance which gives origin to the motor nerve-roots; and that similar lesions are found in those cases of paralysis which are unaccompanied by tetanic convulsion. Moreover, the blood-vessels are often found dilated, and even in a state of disintegration. His conclusion, therefore, is, that the symptoms are due to a morbid state of the blood-vessels, and not to excessive functional activity of the cord. Yet it appears to me that this exalted activity of the cord must exist, albeit as a consequence of such morbid condition of its blood-vessels; and this supposition is consistent with the conjecture that the vascular disturbance, whether functional or organic, does not necessarily imply any structural lesion of the nerve-tissue itself. May it not be that the *rapid* evolution of these organic lesions produces tetanic convulsion, and that their *slow* development causes paralysis, with the accompanying phenomenon so frequently observed, of spasm or twitching of individual muscles? Just as chronic affections of the gray matter of the hemispheres produce dementia, and acute affections produce delirium. Muscular atrophy has also been shown, by the author to whom I was just now referring, to be due to softening and disintegration, chiefly of the gray substance of the cord, and to atrophy of its nerve-cells; accompanied by morbid exudations, and frequently by great dilatation of blood-vessels, the result of inflammatory action; and where paralysis is the consequence of lesions of the gray substance, in any limited part of the cord, reflex action is increased in parts receiving nerves from portions of the cord below the seat of alteration.

Examination of the brain and spinal cord, after death from hydro-

phobia, has failed hitherto in demonstrating any organic change in their structure. The great vascularity and pink hue noticed in their texture may be a consequence rather than a cause of the excited action of these organs.

In epilepsy, Schröder van der Kolk describes dilatation of blood-vessels;* and Dr. Lockhart Clarke has found disintegration of the surface of the fourth ventricle in the same disease.† In chorea, the same author has remarked extensive disintegration of the gray substance, and softening of the white.‡ According to other observers, the sensorimotor ganglia (the corpora striata and optic thalami) at the base of the brain, are the seat of this disease; and embolism of their vessels has been assigned as the actual condition to which it is due. These observations are remarkable, considering the usually curable nature of this affection.

On the other hand, my friend and colleague, Dr. Clapton, suggests that epilepsy is generally a blood-disorder, and that it is dependent on some chemical change, probably the slow abstraction of animal quinine from the system, and its substitution by some morbid matter which exerts its own specific influence on the nervous centres, and gives its peculiar character to the convulsive affection, whether tetanus, hydrophobia, or epilepsy. And he bases this conjecture on the peculiar effect of quinine in large doses—from five to twenty grains—if given in solution during the premonitory symptoms of an epileptic seizure, when they are of sufficiently long duration to administer the draught. In about fifty cases, in which this treatment was tried, it failed in four only; two of these were instances in which the fits followed injury to the head; one was a case of syphilis, and one of tuberculosis.

In connexion with this subject I may allude, incidentally, to an interesting circumstance mentioned to me by Mr. Erasmus Wilson, which seems to suggest the presence of a condition affecting the sensory nerves, analogous to those convulsive affections of the motor nerves which have been under consideration; and identical as regards its causative agency, if we may draw that inference from the efficacy of the remedy. Mr. Wilson has found some most aggravated cases of prurigo and pruritis yield to large doses of quinine, after every other form of treatment which suggested itself had been tried in vain; moreover, the relief proved to be permanent as well as speedy.

The facts which I have mentioned, both pathological and therapeutic, would seem to raise the question whether the morbid changes observed in the spinal neurine, in these convulsive affections, stand in the relation of cause or effect to the phenomena, presented by and characterising this class of diseases. We know that either epileptic or tetanic convulsion may be due entirely to central irritation, as where it is traumatic from the presence of a depressed fragment of bone; and also in some diseases of the brain and spinal cord; and the pathological appearances to which I have referred, as noticed in the tetanic cord, are similar in their nature to those which are observed in the slower disintegration of the cord, in ordinary paralysis and in muscular atrophy: but, in locomotor ataxy, as Dr. L. Clarke has shown, the nature of the lesion is somewhat different, and is always limited to the posterior columns of the cord, and the posterior gray substance.

If we assume that these convulsive affections are usually dependent on blood-poisoning—as they certainly are often influenced by endemic causes operating in conjunction with peripheral irritation—we may the more readily understand how, in certain instances, the malady may continue to be purely functional in all its attendant phenomena; but that organic change in the cord, dependent probably on the intensity and persistent operation of a diseased circulating medium, will react by producing an aggravation of the functional disturbance; and, further, that the disintegration of texture in the spinal cord, noticed in fatal cases of this class, is irrecoverable. On the other hand, in tetanus caused by peripheral lesion, the reflected agency seems to be so clearly established, that it is difficult to evade the conclusion that the central change in the texture of the cord is directly dependent on the peripheral irritation, and is itself the cause of that convulsion. Yet, this does not, in my apprehension, exclude the operation of some morbid condition of the circulation in the production of the disease. In the allied disease of hydrophobia, the agency of a blood-poison seems scarcely to admit of a doubt. In this affection, as I have remarked, the cord does not exhibit any discoverable changes, similar to those which are noticed in tetanus; and it is an interesting fact that strychnine produces no morbid change in the cord: this, I am assured by Dr. Lockhart Clarke is the result of experiments performed by him; and M. Vulpian also has shown that the spinal cord of frogs, kept in repeated convulsions by strychnine for a month, presented no change. (*Archiv. de Physiologie*, 1868). The phenomena of tetanus and those produced by strychnine

are undistinguishable; but the causative influence is different. It seems, therefore, justifiable to infer that the mere occurrence of muscular spasm is insufficient, in the former case, to account for the morbid change in the texture of the cord.

I am disposed, from the foregoing considerations, to draw the following conclusions.

1. That these convulsive affections may all be dependent on blood-poisoning.

2. That the phenomena of rabies are distinctly due to this cause.

3. That even in traumatic tetanus the pathological changes in the cord are probably influenced by a morbid condition of the blood: but this progressive disintegration would appear to be the cause, and not the consequence, of the muscular spasm.

The condition of muscular fibre which had been the subject of tetanic spasm, was first noticed, I believe, by Mr. Busk, and has been commented on by Mr. Bowman in the *Physiological Transactions* (vol. for 1840, p. 490; and vol. for 1841, p. 69). These accurate observers found the fibres echymosed and ruptured, and presenting appearances of disintegration, “to such an extent that, in many parts, neither transverse nor longitudinal striæ could be discerned, but only a confused mass of primitive component particles, held together by the sarcolemma.” This condition I have verified in an acute and rapidly fatal case of traumatic tetanus recently under my care. I may further remark that, in this instance, the extensor muscles of the spine were deeply congested, and presented, in their cellular interstices, numerous broad patches of extravasation of semi-fluid blood and coagulum. The case ran its course in about seventy hours.

We have no very definite information as to the extent to which breach of texture of the cerebral substance may be repaired, and the mode in which such repair is effected. Yet there seems to be no reason why brain texture should be absolutely exceptional in this respect; indeed, instances of restoration of disturbed or interrupted function, after the lapse of time, would seem to indicate that repair is sometimes accomplished. But loss of texture, as in abscess, is not restored by reproduction of nerve-substance, as, in all probability, elementary degeneration, constituting organic change, is not supplanted by new and healthy neurine. In the rare instances in which abscess of the brain does not destroy life, and heals, its walls become thickened and contracted; and with this and inflamed surrounding nerve-substance, a sort of cicatrix is formed; or the space is occupied by a portion of the contents of the abscess becoming mixed with chalky deposit.

In studying the phenomena which accompany and characterise the various diseases of the spinal cord to which I have briefly alluded, and the distinctions on which their diagnosis depends, it is difficult to resist the conviction, as I remarked at an earlier part of this Lecture, that a nearer affinity between them is manifested, as the physiology and morbid anatomy of the nerve-centre become better understood. There can be little doubt, I apprehend, that many of these affections, evincing even aggravated symptoms, and having an eccentric or peripheral origin, are purely functional and therefore remediable; whilst others of the same class, as regards their source, are accompanied by organic change, and therefore resist treatment. But wherever these convulsive affections, whether tetanus or chorea, epilepsy or hysteria, are centric in their origin, and consequent exclusively on central irritation, the cause must be organic change; and recovery, as a rule if not invariably, is hopeless.

Progressive disintegration of any portion of the spinal column, from slowly progressive disease, such as caries, is, in exceptional cases only, accompanied or succeeded by functional disturbance of the cord, and still more rarely by organic disintegration. Permanent loss of texture in the bone and the connecting fibro-cartilage between the vertebræ may entail great distortion, and yet the cord may preserve its functions intact. This destructive process attacks the bodies of the vertebræ and the intervening elastic texture which binds them together; and the superincumbent weight or position acts mechanically in inducing approximation of the adjoining bones, thereby excluding from the canal the disorganised tissues and pus, which find their way to the surface, either in the loins, or, guided by the sheath of the psoas muscle, at the groin. But, in more rapid cases paraplegia may ensue, and then becomes a diagnostic sign, in company with others, of the disease. The contiguity of diseased action, in such cases, to the anterior columns, explains the secondary affection of the nerve-centre; and the paraplegia is due rather to softening or fatty degeneration, similar to the changes which I noticed in a former lecture as occurring in the brain. When the destructive process extends more deeply, anæsthesia also supervenes.

Apart from these decisive proofs that the cord is involved, a distressing sense of tightness and pain, extending round the umbilical or epigastric region, is often complained of in caries, and is very characteristic of the condition of which I am speaking. It is almost

* Spinal Cord. Sydenham Society.

† Beale's *Archives*, No. xiv, 1864.

‡ *British and Foreign Medico-Chirurgical Review*, January and April, 1868.

constant in some cases, and is the principal source of suffering and complaint of the patient. This pain would appear to be due to pressure or irritation of the posterior roots of the nerves distributed to these parts, and of course manifested in their sentient extremities. But I have noticed the same condition in some instances of fracture of the spine, where the paraplegic condition has not been complete. Thus, it was present in a patient of mine whose cervical spine was fractured, and whose chief complaint was pain and tightness across the epigastric region and round the abdomen, and also in the arms and between the shoulders.

I propose closing this lecture, and the present division of my subject, by some remarks on the propriety of interference by surgical operation in cases of fracture of the spine.

The analogy and close alliance between the functions of the brain and spinal cord has led to the inquiry whether there are any diagnostic indications on which dependence can be placed, as a guide to the surgeon in entertaining the proposal to operate, for the purpose of relieving the spinal cord from irritation or pressure; whether there is any condition which can justify an interference so grave in its nature, that it may be regarded as more momentous, in all its risks and bearings, than the corresponding operation of trephining the skull.

This question must be viewed in different aspects, such as the following inquiries embody. What extent and character of lesion demand an operation: how can the surgeon satisfy himself of the nature of the injury and of its position: is it possible to relieve the condition for which the operation is undertaken: what are the risks of the operation: and what consequences beyond those intended may be entailed by interference?

I take it for granted that no surgeon would advocate the performance of an operation, which is to lay open the spinal canal, unless the symptoms are so pronounced as to leave no doubt that the cord is so far compressed or irritated, that there is no reasonable probability of its unaided recovery. The diagnosis in this respect may, no doubt, be affirmative in many instances; but whenever such is the case, I am unacquainted with any sign or symptom by which we can judge that the nature and extent of the injury is not such as to render an operation altogether abortive. This dilemma may result from the aggravated nature of the injury, amounting, perhaps, to complete disintegration or severing asunder of the cord; or it may be the consequence of the position of the injury, which is inaccessible to the operator, as exemplified in a case I related in my former course of lectures, in which a spiculum of bone projected into the cord from the *front* of the canal; and it must be borne in mind that, although fracture of the *arch* of a vertebra is by no means infrequent; the injury sustained by the cord is rarely due to this cause, but to concurrent fracture with displacement of the body of the vertebra implicated. On the other hand, complete paraplegia is not necessarily an irrecoverable condition, even when accompanied by fracture; the prospect of amendment depending on the nature of the lesion, and the extent to which the cord is disintegrated: and these are circumstances of which it is impossible to predicate positively, at such early time as an operation would be proposed. But, it may be urged, does not the doubt justify the interference? This question must be answered by ascertaining what additional risk the operation entails; and, in a proper appreciation of the attendant peril, we have, in my opinion, a practical answer to the inquiry.

The *end* proposed in an operation of this kind is, to remove displaced bone which is supposed to press upon or irritate the cord. But, as I have already remarked, however justifiable, on theoretical grounds, such a proceeding may be, it is most likely to prove abortive from the inaccessibility of the displaced bone. Of the many cases of fractured spine which I have on record, and which I have examined *post mortem*, I cannot recall an instance in which the depression of the arch *alone* sufficed to account for the symptoms. I am aware that such cases are recorded, but I speak only of my own experience, and therefore I conclude that they are rare. Yet, in such recorded fractures, which have been usually in the upper region of the spine, death has almost always supervened speedily; thereby proving the serious and probably irreparable nature of the injury inflicted. The expanded form of the vertebral arch is not favourable to its simple fracture, for such injury, with depression, could scarcely occur except as the result of direct violence. That force directly applied to the back of vertebra is likely to produce fracture of the spinous process I have already shown; and fracture of the arch, as a sequence of fracture of the body, of a vertebra, and the result of overbending of the spine, is a typical form of injury—I should say the most common. But the direct violence which would suffice to fracture the arch and drive the spinous process into the cord, the body of the vertebra remaining unbroken, must almost inevitably prove hopelessly destructive to the nerve-tissue; as is illustrated in a

rare and interesting case recently recorded by Dr. Maccormac of Belfast; in this instance, the cord, "had been compressed, almost to complete division."

Again, the question of time is one which must necessarily press upon the surgeon, in contemplating such an operation. He must ask himself, is it justifiable to operate without waiting to ascertain the amount of permanent injury, which, in some instances, time alone can develop? Yet, if an operation is to be performed, certainly delay diminishes any chance of success that may exist; and thus the surgeon is compelled to risk the consequences of an operation which, if unnecessary, very seriously prejudices the prospects of a patient's recovery.

The mode of proceeding adopted by the advocates of this operation is, to expose and remove a part of the spinal column, and to open the canal containing the cord, perhaps to lay bare the cord itself. A simple fracture is thus converted into a compound fracture, and a communication is established with a canal having the most delicate and susceptible relations, and which must be liable to the intrusion of the products of inflammation during such period as the patient may survive the effort to repair the lesion. If the cord have been crushed, and the operation have been consequently useless, probably life may, thereby, be only curtailed; but if (as must be presupposed for the operation to have a chance of success) the cord be not crushed, it appears to me that the best chance of the patient's recovery is thereby extinguished. Indeed, my conviction is that the operation has been advocated on the erroneous hypothesis that the spinal cord can be compressed, without serious disintegration of its texture. I believe this is scarcely ever the case, unless such pressure result from extravasation of blood—a condition which, if it could be ascertained, certainly would not justify the risk of an operation. In the majority of instances probably the amount of compression witnessed in a *post-mortem* examination, is but an inadequate measure of the disintegrating force which was applied at the time the column snapped under the violence to which it was subjected—violence sufficient not only to fracture the arch, but to break through the bodies of the vertebræ, or to wrench asunder the tough intervertebral substance which connects them together.

It is true that cases are recorded in which amelioration of symptoms is supposed to have followed the operation. But are such indications to be depended on? Unfortunately this is a class of cases in which it is almost impossible to affirm what is due to operative interference, as we cannot estimate or limit the amount of improvement which might have occurred, if no operation had been practised.

Certainly instances occur from time to time, as I have witnessed, in which injury of a very unequivocal character, especially in the lower region of the spine, has not been followed by the result which the decisive symptoms seemed to foreshadow. Life has been protracted, and even great amelioration in the general condition of the patient has occurred, though without any marked change in the paraplegic condition. The management of a patient, under these circumstances, is all-important, and is very influential in protracting life. Rest in a suitable position and on an appropriate couch; attention to the bladder and bowels, as well as to the diet and cleanliness of the patient, should be the constant care of the surgeon; and will accomplish much which might be attributed to an operation, where the same advantages had not been so scrupulously secured previous to such interference.

As regards the diagnosis of the nature and extent of the lesion, my own experience affords me no certain or reliable diagnostic guide, except the completeness of the paraplegic condition. I cannot say I place dependence on the activity of the excito-motor phenomena, as developed in an inverse proportion to the amount of damage of the compressed cord; frequently in the most serious and irreparable lesions, the excited muscular movements are by no means strikingly marked; indeed, they are often almost in abeyance.

A parallel has been drawn between the consequences of pressure from the presence of purulent deposit external to the theca vertebralis, and that resulting from traumatic lesion; and also between the effects of curvature from caries and the sudden distortion of the spine from violence. I think such parallel in either case is unreal. I do not deny that traumatic pressure on the cord, without contusion of its structure or intrusion within its theca, may be relieved, and suspended function be restored, by removing such pressure. But there is a vast difference between the slow and gradual encroachment on the cord by an abscess, or by the yielding curvature of progressive caries, and the sudden and violent consequences of fracture with depression of bone, or of distortion from the same cause. Indeed, recovery from the consequent paraplegia in the former class, when the cause ceases to be operative, and the generally speedy death which ensues in the latter, prove this contrast. There is no organic change in the one instance; but in traumatic pressure, even where there is no change apparent to the naked eye, the microscope reveals organic lesion as the consequence of violence,

and hence the fatal result. But if the pressure be due to extravasation of blood, this may be absorbed; and in such cases an operation would greatly diminish the patient's chance of recovery.

The only supposable form of spinal injury which, in my opinion, might be benefited by operation, is a fracture of the vertebral arch alone, with limited depression, or the recent intrusion of a spiculum of bone within the theca, whereby the cord is pricked and irritated. But where are these cases to be met with, and how are they to be recognised?

I fear we must abandon this operation. I have seen it performed on three or four occasions many years since, but certainly not with such results as to induce me to repeat the experiment: and the recorded advantages of more recent cases do not impress me more favourably. Even admitting, as I have admitted, that certain special features might justify surgical interference, I believe that they are rare, and very difficult of diagnosis, if not absolutely impossible to identify. I am satisfied that the risks attending an unnecessary operation are great: and, in balancing these risks against the possible good which may be accomplished in isolated instances, my conviction is that the preponderance is decidedly in favour of non-interference. I am aware it may be urged that any risk is justifiable where a patient's condition is hopeless. But, I rejoin, how are we to identify the absolutely hopeless cases? Some linger on a long time, and even partial recovery is occasionally witnessed under favouring circumstances; and it is precisely these cases in which interference is likely to prove mischievous, by extinguishing the prospect of spontaneous repair, and the chances in favour of the patient's recovery or protracted survival: for, it can scarcely be alleged by the advocates of this operation that, if unproductive of good, it is harmless. To weaken still further the remaining connexions of a broken spine; to convert a simple into a compound fracture; to expose the sheath of the cord and possibly the cord itself; and to entail the risks attending the period of repair,—cannot be regarded as circumstances of indifference. Accidentally, here and there, an instance may occur in which benefit does, or seems to, result from surgical interference; and the time may arrive when, perchance, the means of diagnosis at our command may enable us to judge with more precision of the nature and extent of the injury inflicted: but at present, with every disposition to regard this subject impartially, and to give their due weight to the arguments and facts which have been advanced in favour of this operation, I cannot regard trephining the spine as brought within the pale of the justifiable operations in surgery.

CASE OF SPINA BIFIDA OF UNUSUAL CHARACTER.

By RANDLE BUCK, L.R.C.P., M.R.C.S., Inkberrow.

MRS. F. D. was delivered of a female child on July 4th, 1868; the labour was in all respects a natural one. After securing the umbilical cord, my attention was attracted to a peculiar appearance in the back, which, on closer inspection, proved to be spina bifida, but presenting these curious features. The child lying on its face, there was before me in the lower dorsal region, what, at first glance, looked like a blister produced by cantharides, perfectly circular, and measuring three and a half inches across it. Down the centre, the spinal cord was plainly visible; it seemed raised out of its canal and adherent to the sac, which was distended with fluid. I applied a light bandage and placed the child on a soft pillow, on which it might be carried. The spinal cord being so little protected, I thought death would soon take place. There was a small escape of fluid from the sac, so that the bandage in a few hours became saturated.

The child continued in this state till July 30th, when the escape of fluid above mentioned ceased, and in a few days the head (which had hitherto been of natural proportions) began to increase in size, the sutures became widely separated, the frontal bone very prominent, the eyes depressed and squinting. From this time up to death, on November 8th, both head and sac gradually increased in size, the sac discharging some fluid at intervals. When this occurred, the head diminished in proportion. The circumference of the tumour was 11½ inches; of the head, 19 inches. Examination, twenty-six hours after death. The sac consisted of epidermis and membranes of the cord. It contained a very large quantity of cerebro-spinal fluid, and three inches of the spinal cord with nerves adherent to the sac. The spinous processes of the eleventh and twelfth dorsal and first lumbar vertebræ were missing.

I should mention that, for some time before death, the child was completely paralysed, but there were no convulsions.

ON A CASE OF OVARIOTOMY:

ACUTE PERITONITIS AT THE TIME OF OPERATION: REMOVAL OF A VERY LARGE MULTILOCULAR BLOOD-CYST: LIGATURE OF RIGHT CORNUA OF UTERUS: RAPID RECOVERY.*

By ALFRED WILTSHIRE, M.D., M.R.C.P. London, Medical Inspector H.M. Privy Council; late Senior Physician to the Islington Dispensary; and WILLIAM TYNDALE WATSON, M.A., M.D. Dublin, M.D. Oxon.

THE case which we are desirous of bringing before the Association, is one of so exceptional a character and presents such remarkable features, that we earnestly call the attention of members to it, feeling assured that they will find it to be of unusual interest.

Mrs. S., aged 49, an industrious active woman, married at 18, had nine children and four miscarriages. Her first husband died when she was 34. She remained a widow for nine years. After the birth of her second child, the veins of her lower limbs became varicose; with that exception she had been always healthy in every respect, the catamenia being quite regular. About March 1867, she first noticed that the catamenia were irregular, being too frequent, profuse, and offensive. About the same time some abdominal enlargement was noticed; and it is worthy of remark that, as the abdomen increased in size, the varicose condition of the veins of the legs disappeared. For a year, during which time the abdomen steadily increased in size, she suffered from general ill health; the menstrual function continuing deranged as at the onset. She, however, consulted no medical man, believing that her symptoms were mainly due to "the change of life." From time to time she had attacks of pain and tenderness of the abdomen. Her appetite continued good, and she did not lose flesh, though the tint of her skin was observed to be peculiar; and, at the time of her consulting Dr. Watson, was suggestive of malignant disease. She was, at last, obliged to lie by in consequence of general weakness; and, when she consulted Dr. Watson, March 30th, 1868, she complained of debility, pain, and numbness in the right arm and hand, dyspnoea, nausea, irregular menstruation and pain, tenderness and enlargement of the abdomen.

Dr. Watson examined her, and found the lungs, heart, and chief viscera, to be healthy. *Per vaginam*, nothing abnormal was detected, and the nature of the abdominal enlargement was not determined upon, as there was considerable tenderness and distension. The urine was scanty, but not otherwise abnormal. Diuretics were given, and under this treatment the enlargement of the abdomen subsided to some extent, and although she had attacks of pain in and tenderness of the abdomen from time to time, yet she got about pretty well until Thursday, April 30th, 1868, when, after a long walk, she was seized with vomiting, severe darting pains and tenderness in the right iliac region, and the abdomen rapidly increased in size. Dr. Watson saw her on May 2nd, when he found, in addition to the above symptoms, quick and hard pulse, hurried respiration, and hot skin. The bowels were confined. The urine was thick and high coloured. She was ordered an effervescing mixture with hydrocyanic acid, and a pill containing half a grain of calomel and one of opium every two hours. The bowels were opened by an enema of warm water.

May 3rd. When seen by Dr. Watson, at 10 A.M., she was much worse; vomiting was incessant; the abdomen was now very large and extremely tender. Breathing was difficult. The tongue was small, hard, and dry; the pulse quick and feeble; the skin cold. There was marked collapse. Her condition became more and more alarming in spite of attention, and, as death appeared imminent, Dr. Wiltshire was called in late at night.

Dr. Wiltshire's notes are as follows. May 3rd, 1868. I was called down to Tottenham to see Mrs. S., aged 49, in consultation with Dr. Watson. I found the patient lying in bed with her knees drawn up; countenance anxious and haggard; skin cold; pulse 105 and very feeble; indeed, scarcely to be counted. The tongue was moist and only slightly furred. The extremities were quite cold; and the pressure of the finger left a white spot in the midst of purple skin, the capillaries of which did not soon refill. The abdomen was very large and tender. There was a large hard tumour centrally placed, and it was round. There was fluid in the peritoneal cavity. Vaginal examination gave evidence of the existence of a tumour, which filled the pelvis and pressed much upon the rectum. It feels solid, but it was thought that the feeling of solidity was due to extreme tension. The uterus was normal in size, but somewhat drawn up; and the vagina was thus elongated. Ex-

* Read in the Surgical Section before the Annual Meeting of the British Medical Association in Oxford, August 1868.

amined *per anum* the tumour was felt to press much upon the rectum. The urine was said to be small in quantity, but, probably, it was so frequently passed that the friends were deceived as to the quantity. It was free from albumen. There had been constant vomiting since May 1st; and she had retained no nourishment during that time. The diagnosis was ovarian cyst (most likely without adhesions), which had suddenly become enlarged, owing, probably, to the long walk on April 30th. Peritonitis due to sudden change in tumour. As to the possible malignancy of the tumour a doubt was expressed, seeing that the aspect was peculiar, but it was thought that the loss of blood would account for the tint of skin. My (Dr. Wiltshire's) advice was, that the patient should have a nutritive enema containing opium and brandy, that ice and champagne should be frequently given, and that on the following day, should her condition have improved, the operation of ovariectomy should be performed, and, should that not be possible, that the cyst should be tapped for the purpose of giving her relief from the extreme distension of which she complained very much. Mr. friend, Dr. Watson, reluctantly concurred in this.

On the following day, I went down to Tottenham, intending to perform ovariectomy, should the condition of the patient permit it. Dr. Murray kindly accompanied me, and gave Dr. Watson and myself the advantage of his opinion on the case, which was to the effect that most likely there were adhesions, and that probably the tumour was a rapidly growing cancer. Both Dr. Watson and Dr. Murray urged that, as the woman certainly had peritonitis, and as her condition was one of such extreme depression and collapse, it would be very undesirable to operate. However, as the patient was desirous of having something done, asserting that she knew she could not live long, and that she would be glad of some relief from the distress she suffered from distension, and as I felt strongly that the right thing to do was to operate, I pressed the point; for, although it was difficult to give one's reasons, chapter and verse, yet, looking at the case from the fairest point of view, I felt persuaded it was the right course to pursue. To leave her alone would be to stand idly by and see her die unrelieved, while I thought that, though the case was desperate, yet an operation might possibly give her a chance of recovery by removing that which I regarded as the cause of her acute trouble; viz., the rapidity enlarging mass. My friends reluctantly yielded; and, as the patient gave her consent, having been promised that if her case proved very unfavourable for extirpation I would only do something to relieve her, viz., tap the cyst, I proceeded, with the kind assistance of my friends, to operate. Dr. Watson very skillfully gave chloroform, and, as well as Dr. Murray, otherwise aided me materially. Having placed the patient on the side of the bed, I proceeded to incise the abdominal wall. On reaching the peritoneum, about two pints of glairy yellowish red fluid escaped. Immediately on this a large black mass shot up into the incision. The appearance of this mass was like that of a huge hæmorrhoid or the amniotic surface of the placenta. I ascertained that there were no adhesions, but that the size of the mass was very large. I tapped it with Dr. Murray's trocar, and first of all about half a pint of reddish serum escaped, followed by dark venous blood which flowed out to the amount of a gallon. It seemed, in fact, as though I had tapped a venous aneurism. As no more would flow, the trocar was withdrawn, but still the tumour remained of considerable size and was semisolid. I found it necessary to enlarge the abdominal incision to more than an inch above the umbilicus, and I then proceeded to lift up the mass which, in the act of lifting, rent on the side opposite to that on which it had been tapped. A pint or two of blood and clots escaped over the intestines, which, as Dr. Watson remarked, were of a bright red, and, from the brilliant injection, were evidently in a state of acute inflammation. Dr. Murray urged me to get the mass out as speedily as possible, fearing the patient would sink; and having lifted it out of the abdominal cavity, he (Dr. Murray) put a stout ligature of silk around the pedicle which was very short and small. Having severed the pedicle, I turned to put the tumour into a large basin. As I was in the act of turning, Dr. Murray exclaimed: "The ligature's off; she will bleed to death." When I turned to the patient, I found that a stream of arterial blood was issuing from the pedicle, filling the pelvis, obscuring everything. I seized the whole uterus, and having forcibly lifted it up, thus straining the vagina very much, I held the pedicle between my finger and thumb while Dr. Murray put on a small clamp. This, however, would not hold, as the pedicle was so rotten. Afterwards, double silk and silver ligatures were applied, but nothing would hold; and, in sheer desperation, and with a view to arresting the hæmorrhage, as a *dernier ressort*, I transixed and tied the right half of the body of the uterus. The bleeding being thus arrested, I cleansed out the peritoneal cavity and stitched up the wound with deep and superficial silver sutures, and put on some dry lint and a bandage. The operation occupied just one hour. Dr. Watson observed, and Dr. Murray and myself verified, the fact that the pulse improved

under chloroform. There was very little sickness. The patient was placed in bed and hot bottles put to her feet; and, when visited again in an hour, was found to be very comfortable, and expressed herself as feeling much relieved. The pulse was fuller and the skin warmer. An enema, containing a drachm of tincture of opium, four ounces of beef-tea, and one of brandy, was given. Pulse 104, firm.

7 P.M. Pulse 124. Retching was relieved by ice and champagne. She had dosed a little, and was cheerful. A grain of powdered opium was ordered. At midnight, the pulse was 120. The enema was repeated. She had vomited several times. The tongue was moist. The ice and champagne were continued; and the pill was repeated.

May 5th, 11 A.M. Pulse 105. She had dozed through the night. She had no pain, and was cheerful. She had taken some beef-tea and wine. She had nausea. 3 P.M. On visiting her with Dr. Wiltshire, the pulse was 105. She took wine and beef-tea. The tongue was clean. She was brighter, and her condition was very promising. Ice was taken frequently. The wound was clean and uniting. There was no abdominal distension. The pill was repeated.

May 6th, 1 A.M. She was cheerful. The tongue was moist. Pulse 90.—11 A.M. She had slept during the night. Pulse 85. She was not in pain or sick. She took wine and beef-tea, ice, and champagne. The enema was ordered to be repeated, and the pill to be taken at bedtime.

May 7th. Pulse 150. She had frequent nausea. The tongue was moist; the abdomen flaccid. She had no pain, slept much during the night, and was cheerful. The enema was ordered to be repeated.

May 8th, 11 A.M. She had had no sickness, had eaten some bread and butter, and had slept well. Pulse 87. There was no pain.

May 9th. She was much better in every way. The bowels had acted. Pulse 108.

May 11th. Pulse 100. There was no sickness. She had taken port wine.

May 12. She was going on well.

May 13th. She ate a chop to-day.

The patient went on admirably, and perfectly recovered without a single bad symptom. There were never any rigors, nor was there a single drop of pus formed. The sutures were removed on the 16th; the wound was firm and sound. The patient went out at the end of three weeks; and, when last seen by Dr. Watson, in the middle of July, was walking about enjoying good health.

When we examined the cyst, we found it to be multilocular and to contain blood, some clotted and some semifluid. Where the rent had taken place, in the act of removal, the cyst-wall was remarkably thin and friable; and it was evident that, had it not been removed, it must inevitably have burst in the course of a few hours, since blood was continually poured into its cavity; and, as the mass had become twisted upon its pedicle, the veins were strangulated, and thus the escape of blood was prevented.

The tumour was exhibited on May 5th, at a meeting of the Pathological Society, and was subsequently presented to the Museum of the Obstetrical Society.

Dr. Murray informed me that microscopical examination gave no evidence of malignity.

REMARKS BY DR. WILTSHIRE.—The case above related will be recognised by everyone as extraordinary; indeed, it is unique.

Both Mr. Spencer Wells and Dr. Keith of Edinburgh, who saw the tumour at the meeting of the Pathological Society, agreed in regarding the case as one of extreme interest. Mr. Wells, in expressing his opinion upon it, said that he regarded it as "a leading case in science"; for, to operate deliberately upon a patient labouring under peritonitis was an entirely new principle.

Mr. Wells was kind enough to say that the authors of the paper deserved the thanks of ovariectomists, since the case related showed how much might be done in cases which appeared so desperate as to be beyond hope.

Dr. Arthur Farre kindly gave me the particulars of a case which in some measure resembled mine. A young lady, a patient of Dr. Farre's, had an ovarian tumour, upon which it was determined that Mr. Spencer Wells should operate. When the peritoneal cavity was opened, Mr. Wells found a patch of peritonitis, the existence of which, up to that moment, had not been suspected. The presence of this patch of peritonitis naturally caused much concern, but the operation was proceeded with, and the tumour removed. This young lady made a perfect recovery; and I think I understood Mr. Wells to say that she had since borne several children.

I submit that these two cases go to prove that we are too much afraid of acting vigorously when we have to deal with the peritonæum. I believe that it is only in the cachectic that we need fear evil results, and that only in those unhealthy patients in whom, when the subjects of

peritonitis, creamy lymph is poured out, do bad consequences follow operations, which, though bold, are yet well considered. I saw Mrs. S. in November last. She was then stout and well; and, on examination, the abdomen and uterus were found to be quite free from anything indicative of disease. I have again seen Mrs. S. during the present month, and, except that she is troubled with dyspepsia, she is very well.

NOTES ON DISPLACEMENTS OF THE HEART.

By R. DOUGLAS POWELL, M.D., M.R.C.P.,

Assistant-Physician to the Hospital for Consumption and Diseases of the Chest, Brompton; Physician to the Evelina Hospital for Sick Children.

THE position of the heart* affords us very important information in studying diseases of the chest; for it is particularly constant in health; hence the heart may be said in a manner to serve as an index, warning us of disturbances within the thoracic cavity, and this index should be early consulted in the rapid general survey of the chest which precedes more careful examination.

The great readiness with which the mediastinum becomes displaced has been much insisted upon by Dr. Stokes as of great diagnostic value in pleural effusions; and we see at once the cause of this susceptibility when we remember that the mediastinum is, as it were, *poised* by the contending elasticities of the two lungs; and it is very necessary to bear in mind, that the lungs exercise the same traction power upon the mediastinum that they do upon the thoracic wall, in order rightly to understand the mechanism of cardiac displacements; the physiological bearings, too, of this fact in its relation to the circulation of the blood in the great vessels of the heart are of extreme importance.† This view, however, of the relation between the mediastinum and lungs is entirely opposed to that stated by Dr. Townsend in the *Cyclopædia of Practical Medicine* (art. "Displacements of Heart"; and which has passed unquestioned up to the present time, though it is demonstrably incorrect.‡ Dr. Townsend, after enumerating the attachments by which the heart is kept *in situ*, states that it is also maintained in position "by the walls of the mediastinum, and by the equal pressure of the lungs which oppose its displacement to either side."

Malpositions of the heart may be conveniently divided into those which are congenital and those which are the result of disease, to the latter alone can the term displacement be properly applied. It is only intended in the present communication to dwell upon a few special points of interest connected with the more uniform and common causes of cardiac malposition.

Displacement of the heart is always a mechanical result either of traction or pressure; displacements by mechanical violence, an interesting case of which is related by Dr. Stokes, are extremely rare, and rather curious than clinically important.

Traction.—This is a more common means by which cardiac displacement is produced than is generally admitted: it is the first displacing force that comes into play both in pneumothorax and in pleuritic effusions: in the former case, when air enters one pleura, causing the lung to collapse, the opposite lung, hitherto also in a state of forced partial expansion, instantly collapses to a certain extent, and carries with it the mediastinum (*Med. Times, loc. cit.*). In early pleuritic effusions, too, the lung collapses exactly in proportion to the amount of fluid effused, and its active elasticity is thus gradually neutralised; in the same gradual manner the elastic power of the opposite lung becomes predominant, and draws the mediastinum to its own side. From the pressure point of view alone, it is not easy to understand how a small quantity of fluid should so readily displace the heart, acting as it must do through the medium of so spongy and compressible a substance as the lung. In those cases where fluid effused into the pleura becomes reabsorbed, but the lung does not return to its former degree of expansion, also in cases of contracted lung from old disease (cirrhosis, the fibroid phthisis of some authors, etc.), the pleural space is filled up by the flattening of the chest wall and the encroachment of neighbouring organs, including the heart, which, with the mediastinum, is displaced towards the diseased side. The mediastinum is regarded by Dr. Stokes and Dr. Walshe as being *drawn* over in these cases; but several other observers, Dr. C. B. Williams, Sir W. Jenner, and others, regard the mediastinum, in common with the chest wall, diaphragm, etc., as being *pushed* towards the con-

tracting cavity by atmospheric pressure. There seem to be two classes of cases to which these two modes of displacement severally apply. 1. In cases of contracting lung without any effusion (cases of cirrhosis, etc.), it is clear that the atmospheric pressure is equal in the interior of each lung; it is also equal within and without each thoracic cavity; it might, therefore, be imagined as removed altogether, and the contracting force of the diminishing lung would alone remain as a displacing cause. The atmospheric pressure in these cases *permits* the healthy lung to enlarge, and to follow the mediastinum. 2. In cases where the pleura (visceral and parietal) are separated by fluid which is gradually being removed, the conditions are much changed; atmospheric pressure acts equally on every side of this fluid, and tends equally to expand the lung and to depress the chest-wall, to raise the diaphragm and to curve the mediastinum; and the variable success it meets with in these several directions is determined by the varied resistance to its action; viz., by bony resilience, muscular action, membranous resistance, and lung elasticity. Each of these gives way, to a certain extent; in adults, the mediastinum becomes more displaced; in children (especially rickety children), the chest-wall becomes more distorted. Here atmospheric pressure being the displacing force, these cases really belong to the next category, but are conveniently referred to in this place.

In emphysema of the lungs, the heart is displaced downwards by the descent of the diaphragm, which remains, in common with the thoracic parietes, more or less in the position of inspiration, and does not return to the normal arched condition of health owing to the impaired elasticity of the lungs, which prevents their resuming, in expiration, their natural size. The heart is often so completely covered over by the large lungs that no dulness is to be obtained, nor impulse to be felt, except that of the dilated right ventricle at the ensiform cartilage.

Pressure, as a displacing cause, is induced (1) by accumulation of fluid in one pleura; (2) by accumulation of air (or of air and fluid) in one pleura; (3) by accumulation of air or fluid in the pericardium; (4) by the growth of a tumour, thoracic or abdominal.

It has already been observed that the first stage, so to speak, in the displacement of the heart, both by air and fluid, is one of traction, the effusion by annulling the elastic tension of one lung rendering that of the opposite lung free to act. This amount of displacement (an amount by no means inconsiderable) takes place before there is any pressure within the chest. It is instantaneous in cases of pneumothorax, because the elastic air permits the affected lung to collapse at once, and the opposite lung is at once free to act to its fullest extent. In fluid effusion, however, this process takes place gradually step by step, the inelastic liquid only permitting the lung to collapse according to the amount effused. In many cases of pneumothorax (those in which the opening is valvular), and in probably all of pleuritic effusion, further accumulation rapidly takes place, and further displacement of the mediastinum is produced by direct pressure. In cases of reabsorption of fluid effused into the pleura, when the lung is bound down by adhesions, the displacement of the heart is, in common with other organs as above shown, by atmospheric pressure. Before referring to other displacements of the heart, it is necessary briefly to consider to what extent the axis of the heart is altered in these lateral displacements. Thus far the heart and mediastinum, including the pericardium, have been mentioned indifferently, as if the terms were synonymous, because the heart is only affected with and through the medium of the mediastinum and pericardium.

In all the cases of lateral displacement above mentioned, whether to the right or left side, the direction of the heart's axis is slightly altered; in cases of displacement by accumulation of air or fluid, it becomes more vertical, but the axis never diverges beyond the vertical line; the apex never points to the right. In cases of contraction, the axis of the heart is either but little altered or rendered more transverse according to the degree of contraction, since the diaphragm is raised at the same time that the heart is drawn over.

It is difficult to understand how, by any general displacing cause as either fluid effusion into one pleura or contraction of one lung, the apex of the heart could be displaced so out of proportion to the base as to greatly alter the direction of the axis, when the fixed attachment to the diaphragm, the attachment of the right auricle below to the liver, above to the vena cava superior, the other attachments of the heart and its position with reference to the diaphragm and liver, are considered; moreover, on reflecting that the displacing forces under consideration act, as above said, upon the mediastinum and pericardium, and only through the latter upon the heart, it appears, I think, impossible, on anatomical grounds, that any pendulum-like movement of the apex of the heart upon its base can ever take place, save within very narrow limits; can at all events ever proceed beyond the vertical line. This is a point of great practical importance; and since it has been stated by observers of the highest authority (Dr. Williams, *Diseases of the Chest*,

* For precise details concerning the normal position of the heart, see Dr. Sibson's *Medical Anatomy*.

† The return of the blood to the heart is greatly aided by the constant action of this force; and in the same cause the tendency to the entrance of air into the veins of the neck during the performance of operations in that region, no doubt, finds its true explanation.

‡ See *Medical Times and Gazette*, January 30th, 1869, art. "Pneumothorax"; also Lecture at College of Physicians, Dr. Salter. *Lancet*, 1865.

4th edit., p. 119; Dr. Sibson, *Medical Anatomy*), that in cases of effusion into the left pleura, or of contraction of the right lung, the apex of the heart passes over until the axis points to the right, the following simple experiment was undertaken with the object of testing the accuracy of the above view.

Six pints of water were injected into the pleura of a female subject, causing displacement of the cardiac dulness to the right of the sternum; a stilette was then introduced at the third right interspace, close to the sternum, and passed horizontally through the chest; a second stilette was then passed in the same manner through the fifth space in a line with the first; the sternum and cartilages were then removed without disturbing the instruments, and the exact position of the heart noted. The upper stilette had passed close to the *left* side of the pulmonary artery at its insertion into the ventricle; the lower stilette had passed through the right ventricle nearer its left than its right border; a line drawn vertically from the middle of the right clavicle touched the border of the right auricle (the extreme right of the heart); a similar line, drawn from the left sterno-clavicular articulation, touched the apex of the heart (the extreme left); the axis of the heart was slightly more vertical than natural.

Mr. Henry Arnott was present at this and at a previous experiment, in which the result was exactly similar, and was kind enough to take diagrams of the exact position of the heart in each case.

In June 1868, a patient died at the Brompton Hospital while under the care of Dr. Pollock. The case was one of extensive excavation from apex to base of the right lung, with thickened pleura and contracted side; the left lung was greatly enlarged, and encroached on the middle line; the cardiac impulse was distinct, both visibly and to the touch, at the fourth right interspace, and no impulse could be felt anywhere else. *Post mortem*, the heart was found to be displaced generally somewhat to the right, but the relative position of the apex and base unchanged, the apex being opposite the fifth cartilage, an inch and a half within the left nipple; the pericardium was completely uncovered on the right side by the retraction of the lung, and the portion of the heart opposite the fourth space was the upper part of the right ventricle. The character of the impulse in this case was indistinguishable from that of the apex beat.

A similar case, one of cirrhosis of the right lung, has been this session brought before the Pathological Society by Dr. Fagge. I have notes of three such cases which have come recently under my observation, and are still living. Dr. Stokes relates an analogous case of displacement of heart, secondary to reabsorption of pleuritic effusion, in which it clearly appears that the impulse on the right side of the sternum was produced by the base of the heart. It thus appears that in cases of displacement of heart, following upon contraction of one pleural cavity, the axis of the heart is but slightly changed (usually, as above explained, slightly more transverse); and that, particularly when the right lung is affected, the displacement often appears to be much greater than it really is, owing to the covering up of the apex by the large left lung, also to its getting more under shelter of the sternum, and the uncovering of the base by the retraction of the right lung.

When the left lung is contracted, the heart is also uncovered as well as displaced; and the pulsation which is felt at the second interspace is produced by the right ventricle at the base of the pulmonary artery; the apex can be felt at the same time below the nipple, or, if the contraction is great, the apex is raised by the ascent of the diaphragm; the axis of the heart is thus rendered more transverse, and the impulse is felt in the axillary region.

Air or fluid within the pericardium causes displacement of the heart backwards, since the attachments of the heart are at its posterior part; in the case of fluid in the pericardium, the apex is slightly raised.

But little can be said, in a general way, concerning the displacements of the heart caused by the growth of tumours, since every case has some peculiarity of its own. Tumour growths, when they approach the mediastinum, usually bear the heart before them in the direction in which they are growing; and this obvious fact is often of great importance in deciding between a lung consolidation and a tumour. There are, however, exceptions to this rule; a noteworthy example of which occurred in a patient of Dr. Cotton's at the Brompton Hospital, in whom there was a cancerous tumour between the right lung and the pericardium, involving the lung and leading to secondary pleurisy, with moderate effusion; the heart in this case was scarcely at all displaced, and this was explained by the fact, ascertained *post mortem*, that the morbid growth which had originated in the bronchial glands on the right side had also affected those on the left, and had invaded the pericardium and also the left auricle, by which means the heart was fixed in position.

Abdominal tumours affecting the position of the heart being mostly of liver origin, give rise to displacement upwards, and to the left. As

before remarked, however, no general rule can be laid down. The aim in practice should be to ascertain, in all cases, the exact position of the heart; and by knowing the results of the more regular displacing causes, which are also by very far the more common, any special peculiarity of position will suggest further inquiry as to some special cause producing it. A continuance of this subject into further minutiae of detail might be considered as an endeavour to elevate what is, after all, but a very important clinical feature of many diseases, into a disease by itself—a mistake most carefully to be guarded against.

CASE OF TRAUMATIC STRICTURE.*

By CHRISTOPHER HEATH, F.R.C.S.,

Assistant-Surgeon to University College Hospital.

THE method of treating stricture of the urethra by rapid dilatation or splitting, introduced by Mr. Holt, has been received with considerable favour in professional circles as regards the ordinary forms of stricture, but I have been surprised to find that many surgeons entertain a doubt whether strictures of a traumatic origin are equally amenable to this form of treatment. Having treated several cases of bad traumatic stricture, complicated with fistula, by this method with the greatest success, I venture to bring before the meeting the last of the series as a fair specimen.

All surgeons are aware of the serious nature of strictures resulting from rupture of the urethra, from falls on the perinæum, even if the primary dangers connected with retention and extravasation of urine be safely surmounted. These strictures are extremely dense; in cases of long standing, even cartilaginous in structure, and they, therefore, owing to the non-vascular condition of the parts, are the most satisfactory cases to submit to urethrotomy, whether external or internal. Both these operations, however, possess dangers of their own into which I need not enter now; but I must for a moment institute a comparison between internal division and Mr. Holt's method, in order to mention a fact which has been but recently ascertained. In a patient who was the subject of stricture, and who died of fever before being submitted to operation, I assisted Mr. Holt to split the stricture in the *post mortem* room, and to examine the preparation, which showed a longitudinal rent in the stricture, as may be seen in the illustration to Mr. Holt's work. It was naturally concluded that a similar split occurred in the living subject, though neither Dr. Cruise of Dublin nor myself had been able to discover anything of the kind with the endoscope in patients examined a day or two after the operation. Recently, however, two different surgeons have had the opportunity of examining the urethras of patients upon whom they had operated shortly before, and they found that the mucous membrane was entire, and that merely the indurated submucous tissue or stricture proper was torn. This may not, of course, be the case in every instance; but it is certain that in many Holt's dilator does not tear the mucous membrane, and hence the very slight symptoms produced. In internal division, on the contrary, the mucous membrane must necessarily be incised; and the depth to which the submucous tissue is divided will depend upon the extent of knife protruded, and not upon the full size of the urethra being attained.

In cases of traumatic stricture, complicated with fistula, my experience is that, if the urethra is restored to its natural calibre, the fistulae close spontaneously; but it is possible that severe cases might require a touch with a hot wire to make them heal up.

CASE.—Mr. W. H., aged 18, a midshipman, in June 1867, fell off the wharf at Trincomalee, astride the gunwale of his boat, and ruptured his urethra. He was landed and put under the care of a naval surgeon, who unfortunately died of an apoplectic fit the same day. Being consequently neglected, he got extravasation of urine, and his life was only saved by the arrival, on the following day, of a military surgeon, who made free incisions into the distended scrotum. He eventually recovered, with a fistula of considerable size behind the scrotum. He was taught to pass a No. 8 silver catheter for himself, and continued to do so for a couple of months; but then, being on active duty, unfortunately discontinued the practice.

The patient came to me on May 14th, 1868, in good general health. There was a minute fistulous opening behind the scrotum; from which pus exuded, and considerable thickening about the urethra in the neighbourhood. He passed water in a very small and twisted stream, which was occasionally forked. The urethra was so sensitive that he could not bear me to pass an instrument, and could not pass a No. 3 silver catheter for himself.

On the following day, under the influence of chloroform, I suc-

* Read before the South Midland Branch.

ceeded in getting No. 4 silver catheter through a tight stricture, and then introduced the dilator and split up the stricture to the full size, passing No. 11. The patient passed a little bloody water three hours after the operation, and nearly clear water in the evening. He had a good night without any sleeping draught.

The day after the operation, he was a little feverish, and had a slight rigor; and finding that he had had jungle fever in India, I put him on quinine, in two-grain doses, and he had no further trouble. He passed water quite comfortably.

On the third day after the operation, I passed a No. 10 silver catheter easily, and he went out for a walk. The day following, Nos. 11 and 12 were passed; and on the fifth day he passed No. 12 bougie olivaire with ease. The advantage of the olivary bougie over the ordinary one is that it is slightly conical, and also that the bulb at its extremity enables it to pass readily along the urethra without catching in the wall. I have found them most convenient after Holt's operation.

My patient continued to pass No. 12 for himself to the end of the week, and then returned to the country. A fortnight afterwards I heard from him that he was quite well and able to pass his instrument satisfactorily, and that the fistula had closed.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, MAY 18TH, 1869.

RICHARD QUAIN, M.D., President, in the Chair.

REPORTS were read from the Committee on Dr. Payne's case of Ulceration of the Trachea, Dr. Hyde Salter's case of Diseased Liver, and Mr. Adams's case of Mammary Tumour.

Mr. PICK exhibited, for Dr. Fuller, an enormous Fatty Tumour of the Abdomen, twenty-eight pounds in weight, taken from a man who died in St. George's Hospital ten months after the patient's attention was first drawn to it. It lay behind the peritoneum. Microscopically, it consisted of fat, with groups of stellate crystals.—Mr. HULKE said that it might have been a tumour of a different kind, which had undergone fatty degeneration; because, if a lipoma, which was of slow growth, the case was unparalleled.—Mr. PICK said there were no appearances of any other tumour.

Mr. MYERS showed, for Mr. Potter, a Horny Growth removed from over the deltoid muscle. An epithelial growth followed in the cicatrix.

Mr. CURLING showed a Calculus with a Nucleus of Human Hair. The man had suffered for twelve months with symptoms of stone, and had been operated upon. In 1861, he suffered from retention of urine. A dermoid cyst of the rectum had been opened; and between this cyst and the bladder, it was believed, an opening had existed. Mr. Curling stated, in answer to Mr. De Morgan, that the hair was found by examination to be human.

Mr. CURLING showed a Testicle with Fibroid Deposit from a man aged 24. Plastic matter grew from the surface, and produced a projection.

Mr. CURLING also exhibited a specimen of Chronic Rheumatic Arthritis of the Knee, which had occurred after acute rheumatism, and more recently an injury, in a man aged 23. The disease was extensive, and required resection of the joint. At so early an age, this disease was unusual. In answer to Mr. Adams, he stated that there was caries, but no new deposit of bone.

Mr. BIRKETT showed a specimen of Chronic Disease of the Knee-joint, of twelve years' standing, from a female aged 20, in which the entire articular cartilage, except at three points, was destroyed.—Mr. HULKE would have wished to know whether there was true articular cartilage, or merely the semblance of it, over these joints.

Dr. DICKINSON exhibited portions of a Malignant Tumour passed by the Urethra, from a man who, when first seen, was apparently well; but he passed, once in a month or six weeks, fragments of encephaloid growth, some as large as a bean. The man died after a month's illness; but no autopsy was allowed.

Mr. GEORGE MOSELEY showed cases of Myeloid Tumour connected with the lower extremities. In one, there were considerable deposits of bone.

Dr. JOHN MURRAY showed Parotid Glands from a woman who died of acute suppurative cynanche parotidea. She had suffered also from amyloid change of the intestines and abdominal viscera. The morbid appearances of cynanche parotidea were rarely seen.

Dr. MURRAY also exhibited a Dissecting Aneurism of the Breast from a man who died suddenly, an hour after admission into the Middlesex Hospital, whither he had been brought in a state of partial col-

lapse, but sensible. He had experienced no inconvenience during life which pointed to cardiac disease. The pericardium was found generally adherent, and binding down an aneurismal sac of the size of a small orange, which was found at the commencement of the aorta anteriorly. A large cavity was also observed beneath the *visceral* pericardium, apparently of some standing, greatly distended with laminated fibrine and recent black clot, and pressing upon and almost obliterating the right cavities of the heart. The aortic aneurism had been slightly ruptured, and the escaped blood had formed this cavity. In consequence of a fresh rupture, the sac had become filled with blood, and the circulation through the right side of the heart fatally impeded.

Dr. CRISP showed an Incipient Aneurism of the Aorta and Innominate Arteries. He believed that the atheromatous plates in aneurisms were deposited after the dilatation; to which statement Mr. MYERS agreed.—Dr. CHURCH believed it exceedingly difficult to decide the question.—Dr. BASTIAN believed the change which led to aneurism was not atheroma, but a fibroid change; and, after the walls dilated, a fatty or calcareous degeneration might then take place.—Dr. GREEN had always understood that atheroma, in its earliest stage, was of a fibroid character.

Dr. BASTIAN showed specimens of Bacteria in the Blood. He had examined numerous specimens of blood, and had never found anything like a spore, but he had seen moving particles in certain diseases, as typhus and chlorosis. In the former they were probably formed from the blood-plasma; in the latter they were apparently produced by protrusions from the red blood-corpuscles. In the cells of decaying vegetable tissue, bacteria will probably be found, and where they have being formed, round protein masses are also often seen.

Dr. DYCE DUCKWORTH brought forward a Single Kidney with Compensating Enlargement; it was from the left side. There were two renal arteries and one renal vein.

Mr. GAY showed a Recurrent Cystic Tumour from the Mammary Region of a female aged 27. It illustrated, he said, the growth of these tumours from fibrous tissue.

Mr. GAY also exhibited half of the Lower Jaw of a female, which he had removed because of a fibrous growth originating in the centre of the bone.

Mr. DE MORGAN exhibited a Tumour which grew from the Femur of a female after an injury. He thought it malignant, but doubted its cancerous nature. Referred to Committee.

Mr. DE MORGAN then brought forward a Recurrent Tumour of the Testicle, of twelve years' growth. The patient was then dying.—Referred to Committee.

Mr. DE MORGAN also showed a specimen of Colloid Disease of the Breast.

Mr. HENRY ARNOTT exhibited an Enchondroma of the Parotid Gland from a young man, of six years' growth. It consisted of loose cartilage-cells and exomatosous tissue.

Dr. GREEN showed a Glioma of the Cerebellum from a patient who was under the care of Dr. Hyde Salter. His chief symptom was frontal headache.

Dr. TUCKWELL showed six Teeth, forced out by severe spasmodic movements in a case of chorea.

Dr. TUCKWELL also showed a case of Ulcerative Endocarditis, with Embolism of the Kidney and Pyæmia.

Dr. SEMPLE showed an Aneurism of the Basilar Artery, which had ruptured. The patient lived three weeks after the effusion.

Sir DUNCAN GIBB exhibited a Tumour growing from the posterior part of the Tongue, which caused death by asphyxia. Removal had a short time previously been advised.—Referred to Committee.

Mr. WILLIAM ADAMS showed an Ankle-joint from a child who died on the fourth day from an attack of Acute Rheumatism. She was supposed to have hurt her ankle. There was no great increase of synovial fluid in the joint; and there was little lymph, and no pus.

DEATHS BY POISON.—In the five years 1863-67, the number of persons who met with violent deaths by poison in England and Wales was 2,097. In 1,620 cases the description of poison is recorded thus:—By arsenic, 83; mercury, 58; opium, 114; morphia, 32; laudanum and syrup of poppies, 426; strychnia, 41; prussic acid and cyanide of potassium, 151; essential oil of almonds, 31; oxalic acid, 66; sulphuric acid, 53; nitric acid, 16; muriatic acid, 5; carbolic acid, 5; salts of lead, 242; improper medicine, 17; overdose of medicine, 52; Godfrey's cordial, 56; improper food, 33; aconite, 6; belladonna, 6; alcohol, 35; ammonia, 8; hartshorn, 3; chlorodyne, 4; vermin killer, 20; turpentine, 3; phosphorus, 15; sulphate of copper, 3; colchicum, 3; disinfecting fluid, 3; nitrate of potash, 3; chloride of zinc, 8; spirits of salt, 3; cantharides, 2; fungi, 6; mussels, 8.

THE GENERAL MEDICAL COUNCIL ON EDUCATION AND REGISTRATION.

SESSION 1869.

WEDNESDAY, JULY 7TH, 1869.*

State Medicine.—Dr. ACLAND read the following Report.

The State Medicine Committee, appointed June 27th, 1868, beg leave to report that, in pursuance of the instructions they received, dated July 8th, 1868, they have forwarded to various persons at home and abroad the following letter and questions:

Office of the General Council of Medical Education,
32, Soho Square, London, W., 1868.

SIR,—A Committee of the Medical Council has been appointed to inquire into and “to report on the steps proper to be taken, if any, for granting diplomas or certificates of proficiency in State Medicine, and for recording the same in the *Medical Register*, due regard being had to the interests of existing health officers in the several parts of the kingdom.”

The Committee have decided that such diplomas or certificates ought to be granted, after due examination, to persons who are already, or shall hereafter be, entered upon the *Medical Register*, and to no others.

The Committee are about to draw up a report on the education which in their judgment is proper for such persons; the time it should occupy; and the mode of examination.

The Committee would feel much obliged to you if you would give to them your opinion on these points, and on any others which may appear to you proper to be discussed by them.

In order to assist you in arranging your answer, I venture to append a list of questions, by no means intending to limit the form or extent of your communication, but to indicate in certain detail the information the Committee desire to obtain.

A memorandum drawn up for another purpose is also enclosed.

Of course the Committee do not presume to trouble you to answer those inquiries with which you may not be familiar.

The Committee desire me to express to you their hope that the national importance of this question may prove a sufficient excuse for the trouble they are giving to you, and that you will be kind enough to return an answer before November, to me, at the above address.

I am, sir, your obedient servant,

(Signed) HENRY W. ACLAND, *Chairman of the Committee.*

Questions.—1. Various subjects, such as Forensic Medicine, Toxicology, Morbid Anatomy (Human and Comparative), Psychological Medicine, Laws of Evidence, Preventive Medicine, Vital and Sanitary Statistics, Medical Topography, and portions of Engineering Science and Practice, have been suggested as those in which examinations should be passed by candidates for a diploma or certificate in State Medicine. Would you state what are the subjects which, in your opinion, should enter into a programme for this purpose? 2. What is the time which should be exclusively given to these subjects, supposing it to be commenced, after the completion of the ordinary period of medical study? 3. What might be the order of such studies? What should be the method of study adopted? 4. In which of these subjects of study would practical instruction appear necessary? 5. To what extent should the study of these subjects respectively be carried? Can you suggest any books which furnish an approximate standard of the knowledge you would recommend? 6. What are the deficiencies which you have observed in medical witnesses? 7. How would you propose to remedy them; by what education—legal or scientific? 8. How should a Court of Examiners in this subject be constituted?

The Committee desire to record their best acknowledgments for the great attention that has been paid to their request by the eminent persons who have replied to the questions.

Immediately following this report is an analysis of the answers from English correspondents. It has been thought desirable to keep this analysis distinct from the observations of the foreign authorities, whose letters cannot advantageously be dealt with in the same manner.

The answers from home and abroad are all printed *in extenso* in an appendix.

Dr. Rumsey has favoured the Committee with detailed personal ob-

servations on the evidence; and, although the Committee have not thought it desirable to embody those remarks in their report, they have thought it right to place them before the Council.

The Committee are unanimously of opinion that the evidence submitted in these documents warrants, and indeed demands, that the Council should insert the requisite clauses for providing a qualification in State Medicine in any amended Bill which may hereafter be prepared for Parliament.

Should the Council see fit to agree to this recommendation of the Committee, the individual members of the Council will be able to give before the next session of the Council their serious attention to the details they would wish to see embodied in any scheme or bye-laws for carrying such clauses into effect.

This seems the more necessary, because, although there is an uniform testimony among all the correspondents of the Committee that grave attention is due to the condition of public medicine in the present state of this kingdom, there is great discrepancy as to the duties to be assigned to officers for forensic and sanitary purposes, and as to the conditions under which these officers are to be appointed. The Committee are agreed that the thorough discussion of the question of appointments and duties in the Public Medical Civil Service has become essential for the progress of social administration and organisation; and they think it reasonable that medical students or practitioners (however few they may be who wish to devote themselves wholly to this branch of the public service) shall obtain a diploma, certifying the possession of knowledge adequate to the end in view; viz., the prudent and skilled care of the public health and the solution of forensic questions.

As the Council will have the opportunity, at some future period, of discussing the documents now submitted to them, the Committee do not consider it desirable at present to offer any detailed observations of their own; they recommend that the report and appendix be forwarded to the licensing bodies and other persons interested in the question of State Medicine.—Henry W. Acland, *Chairman*; Robert Christison, George E. Paget, Edmund A. Parkes, H. W. Rumsey, Aquilla Smith, William Stokes, Allen Thomson.

To the Report was added an Appendix of replies received from Dr. Arlidge; R. Baker, Esq.; Dr. L. Beale, F.R.S.; Dr. F. T. Bond; Lord Chief Justice Sir W. Bovill; Dr. Farr, F.R.S., D.C.L.; Dr. Guy, F.R.S.; Dr. G. Harley, F.R.S.; Rev. S. Haughton, M.D., F.R.S.; P. H. Holland, Esq.; G. Hewlett, Esq.; Sir W. Jenner, Bart., M.D., F.R.S.; Dr. Lankester, F.R.S.; Dr. Letheby; the Right Rev. Lord Bishop of Limerick; Dr. Douglas MacLagan; Dr. Mapother; Dr. H. Maudsley; W. H. Michael, Esq.; Dr. Rainy; Dr. A. Ransome; Dr. C. Lockhart Robertson; John Simon, Esq., F.R.S.; Dr. Angus Smith; Dr. J. A. Symonds; Dr. A. S. Taylor, F.R.S.; R. Travers, Esq.; Dr. Buchanan Washbourn; the Rt. Hon. Lord Hatherley; Dr. G. Varrentrapp (Frankfort); Dr. Pappenheim (Westphalia); Dr. Rokitsansky (Vienna); Dr. Geissé (Bad-Ems); and Dr. Max von Pettenkofer (Munich). There was also added an Abstract of the Prussian Sanitary Code; an Abstract of a Report by Dr. Geissé on State Medicine in North Germany (prepared by Dr. Rumsey); and Remarks on the Evidence, by Dr. Rumsey.

Dr. ACLAND said that it would have been scarcely requisite to make any observations, had it not come to his knowledge that some influential persons were opposed to granting qualifications in State Medicine. The reason why the Committee had given in so brief a statement was, that the recommendation which they had to make was brief and intelligible; viz., that the requisite clauses for providing a qualification in State Medicine should be inserted in any amended Bill which may hereafter be prepared for Parliament. This was proposed as a piece of permissive legislation only, not to be compulsory on any one. Within the last twenty or twenty-five years, State Medicine had been very much discussed both within and outside the profession. In every form and shape, the question of the relation of the medical profession to public health was under discussion. The Council had not the power of instituting a new examination or a new qualification; but he thought that the time had arrived when the Council should propose to the licensing bodies that, if they were ready to certify the possession of knowledge of particular branches, the Council would be ready to register the qualifications. It might be said that some of the licensing bodies would desire to institute qualifications in State Medicine. This was quite possible. Opinions were freely expressed by members of the profession on questions requiring engineering knowledge and skill; and were often given in an improper manner by persons incompetent to answer them. The questions in the Report, and the answers given in the Appendix, were worthy of serious attention. An analysis of them had been drawn up, under the superintendence of Dr. Stokes, for ease of reference, and was appended to the Report. There was a great difference in the opinions expressed; and it was for the Council to form an opinion from a consideration of the various replies. The Com-

* Continued from page 46 of last number.

mittee could not see what objection there could be to a permissive clause. It was not desirable to bind the Council further than to the question, whether it was or was not desirable to institute a diploma in State Medicine. He moved—"That in any amended medical Bill which may be prepared for Parliament by the Council, it is desirable that the requisite permissive clauses for providing a qualification in State Medicine be inserted."

Dr. CHRISTISON seconded the motion. Sooner or later, a class of medical officers having special relation to public medicine must become an absolute necessity; and the question was, whether the Council should anticipate the demand by giving encouragement to the taking of special qualifications. If this Council did not make provision for this matter, and encourage the Universities and Corporations to be formed, it would be taken out of their hands. There were already great facilities; such as the Degrees in Science in the University of Edinburgh, granted for Physical and Natural Science, and Mental Science; to which there would be no difficulty in adding State Medicine. He understood also that there would be no difficulty in adding it to the subjects for Science Degrees in the University of London. As to the Colleges and Corporations, there was no reason why they should not be allowed, if they pleased, to grant diplomas in State Medicine. The number of persons applying would be very few; and, from the difficulty in forming a complete board of examiners, the matter would probably be at last left to the Universities.

Dr. ANDREW WOOD had been somewhat taken aback by the proposal. He thought that the licensing bodies ought to be consulted before action was taken; and that the Council would be proceeding too fast if it followed the course indicated by Dr. Acland. Dr. MacLagan of Edinburgh had brought forward, in his reply to the Committee, statements which should at least make the Council pause before instituting a new qualification. No one would deny the want of that scientific knowledge which was necessary for the prevention of disease. He would ask whether the Council, if they established the qualification asked for by Dr. Acland, would not be throwing cold water on the attempts made to improve the general knowledge on the part of the medical profession of the prevention of diseases. He quoted from Dr. MacLagan's reply in the Appendix: "I cannot concur in the movement which has led to the appointment of the Committee on the subject of granting diplomas or certificates in State Medicine. It is quite right to pay due regard to the interests of existing health-officers, but a far more important point is, to pay due regard to the interests of the profession generally, and I think that by the creation of a separate class of graduates in State Medicine these will be seriously compromised. . . . If a diploma of this kind is to be given, and its holders are to appear in the *Register*, it must be with the expectation and intention that they will be preferred for the discharge of the professional duties comprehended under the heads of Medical Jurisprudence and Medical Police; there will consequently be no inducement to the ordinary medical practitioners to pay due attention to these subjects, or to the ordinary examining boards to ascertain that their licentiates have duly studied them, and consequently in this important respect the general character of the profession will be deteriorated." He trusted that the Council would see that their duty was not to take action immediately, but to obtain the opinions of the licensing boards. He moved as an amendment—"That the Council come to no decision in the present session as to the desirability of inserting in any amended medical Bill permissive clauses for providing a qualification in State Medicine, but that the matter be delayed till next session; and that during the recess the Report of the Committee on State Medicine, with the evidence appended, be sent down to the licensing bodies for their consideration."

Mr. HARGRAVE seconded the amendment.

Dr. ALEXANDER WOOD said that the Council had been told that they were going too fast; but the College of Surgeons of Edinburgh had gone faster still, and had expressed an opinion on the measure proposed before it had been adopted by the Council. He had understood that the Council was formed to improvise and make recommendations to the examining boards. It was the function of the Council to institute improvements, and not merely to receive those instituted by other bodies. The Council must receive communications; but it had a superior duty, that of endeavouring to improve education. He would support Dr. Acland's motion, as he believed that the institution of qualifications in State Medicine would improve medical education. No one could read the daily papers, without seeing that medical men often appeared in courts of law to little advantage. The public were apt to believe that medical men were acquainted with subjects which they had not been taught. With regard to Dr. MacLagan's objection, he granted that medico-legal inquiries would require to be made by medical men who had received the ordinary education; but then the Council must not omit to improve the education of the whole body of the profession.

When examined on the working of the Poor-law in Scotland, he had said that the Poor-law medical officers ought not to be appointed officers of health, because they were not specially educated for the purpose. There was not a sufficient number of men specially educated in State Medicine. The Council did not go beyond its bounds, when it proposed to the licensing boards to register qualifications in State Medicine if they should be instituted.

Dr. STOKES called attention to the resolution by which the Committee had been appointed in 1868, and defended it against the observations made by Dr. Andrew Wood.

Dr. AQUILLA SMITH defended the action of the Committee; who, he said, were justified in the conclusion at which they had arrived.

After some further remarks from Mr. HAWKINS, Dr. STOKES, and Dr. STORRAR, the debate was adjourned, on the motion of Dr. RUMSEY.

THURSDAY, JULY 8TH, 1869.

The PRESIDENT took the Chair at 2 P.M.

Dr. ANDREW WOOD moved, Dr. PARKES seconded, and it was resolved—"That the communications from Dr. J. Harley, Mr. Courtauld, Dr. MacLoughlin, and Dr. Edwards Crisp, be referred to a Committee, which shall report as to their nature and the answers which seem proper to be returned to them." The Committee was appointed to consist of Dr. Thomson, *Chairman*; Dr. A. Smith, Mr. Cooper, and Dr. Rumsey.

The standing order was then suspended, and, with the view of expediting the business of various committees, the Council adjourned.

FRIDAY, JULY 9TH, 1869.

Dr. BURROWS, President, took the chair at 2 P.M.

State Medicine.—The discussion on the Report of the Committee, and on the motions proposed by Dr. Acland and the amendment proposed by Dr. Andrew Wood on the previous Wednesday, was resumed.

Dr. RUMSEY thought that some of the misconceptions as to the objects of the State Medicine Committee might have been avoided, had it been possible for the Committee to comply with a resolution passed on July 27th, 1868, that the Report should be sent in as soon as ready to the Executive Committee, who should have power to print the Report and circulate it among the members of Council prior to the session. Had the Committee been able to place the Report and Appendix in the hands of members of Council, some part of the discussion on Wednesday might have been spared. It might also have been better, if the first report of the Committee had been carefully examined by members of the Council. The resolutions in that Report were referred to in substance in Dr. Acland's letter contained in the present Report. The resolutions had also been thus summarised by Dr. Rumsey himself in the appendix. "Under the term 'State Medicine' the Committee included Legal Medicine or Medical Jurisprudence, and Preventive Medicine or Public Hygiene. They resolved unanimously that it was desirable that special certificates or diplomas should be granted for knowledge of State Medicine; that the proposed qualification should *not* be compulsory on all registered practitioners; that no one should be allowed to register a qualification in State Medicine unless he had previously obtained a qualification entitling him to be on the *Medical Register*; and that the possessor of the proposed certificate or diploma should be entitled to register it as an additional qualification." The resolutions showed that the Committee recognised the fact that a public demand existed for a new qualification in State Medicine; and that they suggested a mode of meeting that demand, by requiring from candidates for certain offices and employments a course of study and preparation which it would be in vain to attempt to include in the ordinary curriculum for general practitioners. However much the education of the medical student might be improved by better elementary teaching in hygiene, and in physical science, physiology, etiology, therapeutics, and toxicology, there lay beyond this a wide field for cultivation, for which a special education was required. This could not be imposed on students in their ordinary four years' curriculum, without dangerously interfering with other subjects of primary and paramount importance. It has been said that the Committee had decided the question beforehand. They had only admitted a principle, and had not laid down the details. The corporation which Dr. Andrew Wood represented had prejudged the question, in denying the necessity for a special qualification. The Committee had only exercised prudence and foresight in perceiving that the present necessities of State Medicine could only be met by fresh legislation; but they were not attempting to force any final measure on the Council. They asked only for a permissive enactment, which might enable the Council ultimately to register such diplomas in State Medicine as might be granted by the Universities, and perhaps by other boards. To postpone a provision for the

requisite clause or clauses until another session of the Council would be virtually to invite defeat; and it would be an admission to the Government that the Council could not undertake the matter. The University of London, in its degrees, had not embodied in one *ensemble* all subjects relating to State Medicine as he had hoped that it would. He knew that the members of Universities were anxious to promote the measure. If proof were required of the existence of a public demand for a qualification in State Medicine, he could produce it. He believed, for instance, that no one would question the necessity for appointing highly qualified medical officers of health if they knew the facts which were being brought before the Royal Sanitary Commission. When Government, or the advisers of Government, were urged to organise a staff, the reply was: "The thing ought to be done—but where are the men? We cannot insist upon a general appointment of a scientific and specially qualified staff until we know that there is a sufficient number of qualified men." Should the Council remain longer under the imputation? Should they any longer afford the legislature an excuse for inaction? Should they repudiate their public liabilities, and leave the matter from year to year till the Government took it into their own hands? If so, he would say—*Fiat justitia, ruat Concilium*. There were two documents which contained the opinions of most distinguished men. The first was an Instructional Minute on the Qualifications of Officers of Health, drawn up by Mr. Simon, and issued in 1855. In it were the following words. "The most distinguished practitioner of a neighbourhood may indeed happen to be also the person best qualified for a sanitary appointment; but the reverse must often be the case, for not all members of the medical profession can afford equal leisure to cultivate those distinctive studies; and it will imply no disparagement of men actively and skillfully engaged in the treatment of disease if the special qualification in question should sometimes be found in other members of their profession rather than in them. . . . The branches of knowledge here spoken of are not the parts which have the most direct relation to the treatment of disease." The other was a letter from Dr. Farr in the twenty-seventh Annual Report of the Registrar-General, suggesting the appointment of registration medical officers, to be primarily employed in statistical and medico-legal duties, but secondarily as sanitary consultants, to be specially qualified under such rules as the Registrar-General might lay down. The Social Science Association, at the meeting held in Birmingham last year, had also passed a resolution in favour of appointing properly educated and qualified medical officers of health and registration. Were the regulations providing for sufficient education and qualifications of public medical officers to be made by the Council or by the Government? This was a matter which very greatly affected the honour of the Council. No one demanded greater consideration as a scholar, a promoter of education, and a member of Parliament, than Lord Lytton. In his address at Birmingham in 1868, his Lordship had shown his power of grappling with questions of education as regarded the masses as well as the classes, and had especially adverted to the necessity for education in State Medicine. The Council was thus being watched by persons of influence, who would not fail to note what they considered to be derelictions of duty. Opposed to the movement were the Royal College of Surgeons of Edinburgh, and Dr. MacLagan. Considering that the appendix to the report had only just been tabled, it gave additional proof of Dr. Andrew Wood's acumen that he had at once singled out from a mass of evidence the only opinion against the institution of qualifications in State Medicine. Nothing was said by Dr. Wood of the opinions of twenty or more gentlemen equally distinguished, and all in favour of the movement—such as Dr. A. S. Taylor, Dr. Rainy, Dr. Mapother, Dr. Pappenheim, and especially Dr. Pettenkofer, who said in his reply—"Your plan of the reform of medical instruction in the interest of the public sanitary measures and police regulations is in accordance with the spirit of the age, and is as thorough as comprehensive. I am envious that England should so far outstep my German fatherland in this matter." He would remind the Council that Dr. MacLagan had answered himself, by giving advice in the event of the Council pursuing a course which he advised it not to pursue. Dr. Rumsey concluded by observing that prompt action would redound greatly to the credit of the Council, to its influence with Government, and to its reputation through the world.

Mr. HARGRAVE objected to the motion, chiefly because the Committee had not sent the Report to the licensing bodies, the members of the Council, and others interested. They had not therefore had time or opportunity for giving the matter that consideration to which it was entitled. Since the Report had been placed in his hands, he could detect little but vague recommendations, and ideas so confused and conflicting, that he could not possibly give his adhesion to it. Some advised that the time requisite for proficiency in those branches relating to State Medicine should be six months, others two years. If, instead of passing such imperfect recommendations, each College appointed a

Professor of Hygiene, as did the Royal College of Surgeons in Ireland—which body was far ahead of other Educational Corporations in this respect—it would obtain the object now sought by this permissive clause, with this advantage, that it gave the necessary instruction without any special licence or degree. These lectures, delivered by Professor Cameron at the Royal College of Surgeons in Dublin, had been patronised most extensively by all classes, and with the greatest success. He was glad to hear of the recent appointment of a Professor of Hygiene in University College.

Dr. RISDON BENNETT thought that it was desirable to keep to the terms of the motion before them. It was quite in vain to attempt to give the Report the attention which was due to a measure of such magnitude, during the present Session. Much valuable time and attention had been bestowed upon the question of State Medicine, by the Committee who drew up the Report; but the rest of the Council and the Licensing Boards had not had the opportunity of considering the matter. Although himself of the opinion that some kind of diploma should be given to those who by careful study attained to a satisfactory proficiency in State Medicine, as a qualification for the office of a State medical officer, the question, nevertheless, resolved itself into this: supposing a door were opened for the introduction of special qualifications as grounds for admission to the Register, whether many other demands would not necessarily follow. There was a disposition abroad already, to force the Council to admit a knowledge of midwifery as a qualification for this admission, and on these grounds he deemed it more prudent to postpone legislation upon the question during the present Session. He did not want to throw cold water upon any one desirous of studying State Medicine; but he strongly objected that any new qualification should be placed upon the *Medical Register*.

Dr. FLEMING thought the Council was going too fast in dealing with the question as they had done. It was not a measure that could or should be lightly passed over; and if there was any truth in the adage "That in the multitude of councillors there is wisdom", assuredly it could be said on the present occasion, "that in the multitude of opinions there was confusion." He was quite as much impressed as some previous speakers, as to the necessity for action; but the Council was not in a position to deal with it, not having had the opportunity of studying the Report until the day previous. He thought that if the Council were to leave the matter to the discretion of the Universities, and let them give such certificates as seemed to them desirable, the object now sought by separate legislation would be obtained in a far more satisfactory manner.

Dr. QUAIN wished to direct the attention of the Council to the wording of the resolution, which in his mind was very obscure. The Council was asked to pledge itself—for the motion undoubtedly implied a pledge of some kind—to nothing less than that they were to agree to establish a doctorate in State Medicine. He could scarcely conceive that the Council would consent to such a course, as it would open the door to the introduction of specialists and specialism in its various phases, as qualifications for admission to the *Register*. Assuredly if they commenced with this one false step, they would find it difficult to stop. He objected to any new qualification being added to the already long list of the *Register*. Besides, the whole Report of the Committee upon which the Council was asked to pass the motion, was so contradictory that scarcely two lines agreed. He quite agreed with Dr. Fleming, that they were going too fast in this direction, and should therefore oppose the motion.

Dr. EMBLETON said the question was, whether it would be desirable to press the motion at all now, as the licensing bodies had had no opportunity of studying the recommendations contained in the Report. He was rather of the opinion that the question should stand over until next session, in order that the Council and the educational bodies might become more thoroughly acquainted with its provisions.

Dr. MACROBIN considered the question to be a very simple one. The Council was not asked to express any opinion upon the proposition, but only to allow a permissive clause to be inserted in the Medical Acts Amendment Bill. He was opposed to a further postponement.

Dr. AQUILLA SMITH expressed himself in favour of the motion.

Dr. SHARPEY said that, although he was opposed to any special certificate or licence being given for proficiency in this branch of study, he nevertheless hoped that some provision would be made, so that gentlemen who distinguished themselves in dealing with the questions relating to State Medicine, should meet with some encouragement. Some misconception evidently existed as to the objects of this motion. It was not intended as a special qualification for admission to the *Register*, but only an additional inducement for those who were already registered to become better acquainted with the requirements of officers of health.

Mr. HAWKINS hardly knew upon which side to vote as the matter

now stood; but of this he was quite certain, that something should be done in the direction indicated by the motion; and if the Committee would agree to the addition of the following words to the original motion, "In addition to any of the qualifications sanctioned by the Medical Act," he would be prepared to vote for it, as the objections to the granting of any special certificate would then be removed.

Dr. ALLEN THOMSON remarked that there was a remarkable unanimity of opinion that something should be done, although some were of opinion that immediate action should be suspended. He would, therefore, suggest that the various licensing bodies be consulted as to how the objects proposed could be best carried out; and with this view he would move an amendment to that effect.

Dr. ACLAND said the Committee appointed last year had cause to be grateful for the attention to, and various opinions expressed upon, a subject, which in his mind was most important. That Committee could not but be thankful that the measure entrusted to them had received so much consideration from the Council. But, as chairman of that Committee, he would endeavour to meet some of the objections that had been advanced. He was aware that the opinions of the Council were much divided; and he regretted much the remarks that had been made by one speaker, that the conclusions at which the Committee had arrived were unsound, that the Report was contradictory, and that the Council asked to pass a measure, of which it had no previous knowledge. It had been objected that the Committee had not proceeded in the right manner, or at the right time. With reference to the first objection, the Committee had fulfilled the duties intrusted to them as they deemed most conducive to the success of the measure; and as to the time, the present was the right time, unless the Council abrogated its functions entirely, and allowed others to take up the matter, and do for the profession what that Council refused to do. He was also convinced that, although the step had not been taken by the Universities, they nevertheless only required an expression of opinion from the Council. He regretted much that, owing to the extensive nature of the inquiry, the Committee had been unable to issue the Report sooner; but he did not think that the Council had suffered by delay in this respect, as the subject had been before them in previous years, and they must have had time to form an idea of its utility. It was quite clear that the time had now come when something must be done, and he strongly objected to deferring the measure for another year.

Dr. ANDREW WOOD denied that any special qualification was necessary for the purpose, but presumed that no one would be allowed to take the licence unless he were already a registered practitioner.

Dr. STOKES objected to again postponing the measure. The Council had already spent several hours in the expression of opinion; and, as the Council met at great expense, and much was said in consequence out of doors, he hoped the motion for this permissive clause would be carried.

Dr. ACLAND, in explanation, said that the Committee was unanimous that the proposal should take the form of an additional qualification to those already on the *Register*. If the addition suggested by Mr. Hawkins would make the matter clearer upon this point, he would not object to its incorporation with the original motion.

Dr. ANDREW WOOD's amendment was then put to the vote and negatived.

The original motion being then put to the vote, Dr. QUAIN moved, and Dr. ANDREW WOOD seconded, the following as a second amendment:—"That the Council, whilst expressing their entire approval of an improved education in State Medicine, and of a definite recognition of the attainment of individuals in the subject by certificates of special proficiency or otherwise, recommend that the Report and Appendix be forwarded to the Licensing Bodies, with a request that they would favour the Council with their opinions on the following points: 1. The facilities that might be afforded for extending and improving the Education of persons wishing to study the subjects comprised in this Report; 2. As to the desirability of granting Certificates of Special Proficiency in any or all of these subjects; 3. As to the desirability of granting a special Degree or Diploma in this subject."

This amendment also was negatived.

Dr. THOMSON then moved as an amendment, and Dr. ANDREW WOOD seconded:—"That the Council recognises the importance of improving the knowledge of Licensed Medical Practitioners in State Medicine, and is favourable to the recognition of superior attainments in that department in the *Medical Register*. And with a view to obtaining the opinion of the various Licensing Bodies as to the mode in which these objects may be best accomplished, they resolve to send the Report of the State Medicine Committee and the evidence contained in it to the several Licensing Bodies, with a request that the Council may be favoured with their opinions on the subject."

This amendment was also negatived.

Mr. CÆSAR HAWKINS then proposed as an amendment, and Dr. STOKES seconded, "That the following words be added to the original motion—"in addition to any of the qualifications sanctioned by the Medical Act."

This amendment was carried, and the original motion, with the addition, being put to the vote, was agreed to in the following form:—"That in any amended Medical Bill which may be prepared for Parliament by the Council, it is desirable that the requisite Permissive Clauses for registering a qualification in State Medicine be inserted, in addition to any of the qualifications sanctioned by the Medical Act."

Resignation of Dr. Burrows, and Election of a new President.—The President, Dr. Burrows, said that, before quitting the chair which he had, by the favour of the Council, occupied so long, he would wish to say a few words. When, last year, the Council did him the honour to re-elect him, he expressed an objection to occupy the seat for the usual term of five years, for both private and public reasons. His private reasons were known to most; and his public ones were soon told. He had occupied the distinguished post of President for six years; and when any man had received such an honour, he did not think he was justified in continuing in the office to the detriment of others, who were quite as well entitled to the honour as himself. He esteemed the position highly, but would be sorry that any should imagine he held it for his own personal gratification or profit; he declined, therefore, on public grounds, to stand in the way of those other gentlemen who were so well qualified for the exalted position. Last year, before retiring, he expressed his thanks to the officials and to the members of the Council for the aid which they had given him. He now renewed those thanks for the past year. But there was one omission he would desire to supply; and that was, in reference to the public press. He thanked the representatives of the press for the strict impartiality and fidelity of their reports; and the conductors of the medical journals, for their judicious remarks upon the proceedings of the Council. He hoped that the Council would make allowance for any shortcomings which might have been observed in the discharge of his arduous duties; and he hoped that they would, after conferring among themselves, arrive at an unanimous choice of his successor.

The President then retired.

Dr. STOKES having taken the chair by desire of the Council,

Mr. CÆSAR HAWKINS, in a brief speech, alluded to the high qualities and the abilities of the late President, and moved, "That the warmest thanks of this Council be given to the late President for the able and admirable manner in which he has so long conducted the business of the Council; for the kindness and impartiality which he has uniformly displayed towards the members of the Council, and the determination he has shown on all occasions to conduct their discussions with the view to the improvement of the education of the medical profession and the welfare of the public; and that this motion be communicated to the late President."

Dr. CHRISTISON seconded the motion; adding that no words from him were necessary to recommend it to every member of the Council.

The motion was carried with acclamation.

The Reporters were requested to withdraw, that the Council might deliberate in private as to the appointment of a successor to the vacant chair.

On the readmission of the reporters, Mr. Cæsar Hawkins and Dr. Paget were nominated for the office of President. The votes being taken, there appeared: for Dr. Paget, 13; for Mr. Cæsar Hawkins, 7. Dr. Paget was accordingly declared to be elected President for the term of five years.

Dr. PAGET then took the Chair as President, and addressed the Council as follows.

Gentlemen,—I hardly know what to say, or how to thank you for the honour you have conferred on me. I do thank you from my heart. It is an honour to which I could never have aspired, or even thought of aspiring. When I look round this table, and see those whom I have held in honour—I should more truly say, reverence—ever since I had any acquaintance with medical science; and those too whom I have known since I became a member of the Council, and whose capacity for business and debating powers have been a constant surprise to me; I confess I am astonished at finding myself in this Chair. But I have other feelings not less strong than my sense of your kindness. Dignities ever bring with them responsibilities and cares, and this one is no exception. I am very conscious of the difficulty of the position in which your favour has placed me—difficulties peculiarly great under existing circumstances—and I could not, and I would not, accept the distinction, were I not quite sure of your kind and constant support and aid. But I have confidence in the future of the Council. I do not believe, and I cannot believe, that picked men from England,

Scotland, and Ireland, can assemble here, and work as I know they work, without good results—results which will one day be universally acknowledged. There must be some interval between seed-time and harvest. Nature tells us so. But I know that the good effects of our labours are already manifest to those that are willing to see them. I know that the ground has been well tilled, the ground has been cleared of weeds, the seed has been sown, and has sprung up. I know that the crop is growing, and those who do not shut their eyes may see it; and, I am very sure that before long there will be a rich and abundant harvest.

Mr. CÆSAR HAWKINS also thanked the members who had supported him; and the Council adjourned.

SATURDAY, JULY 10TH, 1869.

Dr. PAGET, President, took the Chair at two P.M.

Executive Committee.—A ballot having been taken, the following members of Council were declared elected to form the Executive Committee for the next year: Dr. Risdon Bennett, Mr. Cæsar Hawkins, Dr. Acland, Dr. Andrew Wood, Dr. Aquilla Smith, and Dr. Sharpey.

Report of the Finance Committee.—The following report was read:

Report.—The Finance Committee beg leave to present, in the subjoined table, a statement of the estimated and actual income from ordinary sources, and of the estimated and actual expenditure, for the year 1868, also an estimate of the income and of the expenditure, so far as the Committee are able to judge, for the year 1869.

In estimating the expenditure for 1869, as compared with that of 1868, the Committee have made a deduction of the expense of visiting examinations, which has not been incurred this year, and have also had in view the saving that may probably be effected on the ordinary account for printing, in consequence of the adoption by the Council of the measures of economy recommended by the Executive Committee; but, on the other hand, they have had to allow for a considerable extra charge for printing and other expenses incurred by the two special Committees on Education and State Medicine appointed last year. The result is an estimated excess of expenditure over income of £575.

In last year's report it was stated that the sum remaining due to the Council on the 5th January 1868, for advances on account of the *Pharmacopæia*, was £712. Since then, the receipts from the sale of the work, after deduction of all expenses, have produced £735:16. Of this sum, about £500 will be required to defray the charges for a re-issue of 5,000 copies of the *Pharmacopæia*, ordered by the Executive Committee, in consequence of the original impression of 20,000 copies being well nigh exhausted. The money balance in hand, together with what may be expected from the state of the remaining stock and the whole of the new issue, after deducting various expenses, may be reckoned at upwards of £1,500, which, after covering the outstanding debt due to the Council, will eventually yield a balance of £800.—W. SHARPEY, *Chairman*.

The income and expenditure for 1868 was as follows:

<i>Income.</i>							
Fees received by—		£	s.	d.	£	s.	d.
Branch Council for England		2492	15	0			
Branch Council for Scotland		757	0	0			
Branch Council for Ireland.....		837	15	0	4087	10	0
Dividends received by—							
Branch Council for England		617	10	10			
Branch Council for Scotland		67	6	10			
Branch Council for Ireland.....		62	7	4	747	5	0
Sale of Registers					284	9	6
Penalty					10	0	0
					<hr/>	<hr/>	<hr/>
					5129	4	6
<i>Expenditure.</i>							
Expenses of—		£	s.	d.	£	s.	d.
General Council.....					4044	1	3
Branch Council for England		622	9	7½			
Branch Council for Scotland		264	1	6			
Branch Council for Ireland.....		259	12	1	1146	3	2½
					<hr/>	<hr/>	<hr/>
Total Expenditure.....					5190	4	5½
Total Income					5129	4	6
					<hr/>	<hr/>	<hr/>
Excess of Expenditure over Income.....					60	19	11½

An estimate for 1869 was also given, in which the income was given as £5,025, and the expenditure at £5,600; leaving an estimated excess of expenditure amounting to £575.

Dr. ANDREW WOOD moved—"That the members of Council be allowed five guineas a day for six days, or whatever number of days under six the Council may sit. That whatever the duration of the session of the Council, the sum paid to each member shall not exceed

thirty guineas. That when a member is absent without the permission of the President from any meeting after the sixth day, he shall forfeit the sum of three guineas for each day that he may be so absent. That the travelling expenses and hotel expenses remain as at present." He said that the time had come when the Council must take action, and not go on exceeding its income by its expenditure. If any of the members of Council found their household expenditure exceeding their income by £575, they would look about them and endeavour to put the matter right. Another reason for a change was, that the Council looked forward to a considerable increase of outlay for the visitation of examinations; and there was no better way in which the money of the Council could be spent. The Council had begun a good system, in transferring work to the Committee sitting during the recess; and he must do Dr. Acland, who had proposed this some years ago, the justice to say that he was now converted to his views on this matter. He believed that the Council would do more work in this way than hitherto; but there was expense attending it. Was there any way of lessening the expense? The fees paid to members of the Council for attending the annual session in 1868 amounted, without including travelling and hotel expenses, to £1,412:5. Much had been said outside the Council about the expenses of the meetings. He did not regard any of the ungracious insinuations that had been made. No one in the Council was ruled by mercenary motives; and to many of the members the attendance at the annual session involved a large pecuniary sacrifice. At the same time, the Council had many important objects in view, and without the sinews of war their efforts would be unavailing. He calculated that, by the plan which he proposed, there would be a saving of £800; and, if this was not sufficient, he believed that there was not a member of Council who would not be willing to make further sacrifices.

Dr. QUAIN seconded the motion.

Sir D. CORRIGAN would meet the proposal with a direct negative, as inopportune and unwise. His practice through life had been to give his advice for nothing rather than for an insufficient fee: he recognised no grade between a proper fee and none. If it were the feeling of the Council that the funds were insufficient for the proper payment of the members, he would give his time for nothing; but he would not consent to a reduced fee. A plan of payment which might be suggested was, that the Crown nominees should be paid from the public funds, and each of the representatives by the University or Corporation sending him. If the Council wished this, he would ask payment from the Queen's University, which sent him to the Council.

Dr. FLEMING said that the question was a very delicate one. The excess of expenditure must be met in some way; and he saw no other method than that of lowering the fees. He did not think that men would be prepared to enter the Council without any payment. Dr. Wood's plan gave the payment more of the character of an honorarium; and it might have a tendency to diminish the duration of the meetings. The object of the forfeit of three guineas was to ensure the attendance of members who might be disposed to absent themselves when they had earned their six days' fees.

Dr. ALEXANDER WOOD had suggested a composition. He could not consent to Dr. Andrew Wood's proposal, and would rather attend the Council meetings without fee or reward.

Dr. RISDON BENNETT had never listened to a discussion more calculated to do injury to the profession, after all that had been said against gratuitous services. The members of the Council ought not to care for the fee, but they did care for the principle; and he would vote for no smaller sum than that which was allowed. The most simple plan of reducing the expenditure was to shorten the speeches, so that the business might be transacted in about a third of the time which it now occupied. There could be no excuse for the speeches, having a duration of half or three quarters of an hour, which were often made. The Council should reform itself in a way that would meet with the approval of the profession. He would vote against the motion.

Dr. QUAIN said that either the usefulness or the fees of the Council must be reduced. He believed that all the business could be done in six days if the Council would agree to limit the duration of the speeches.

Dr. STORRAR said that, while there was an objection to "tympanic" speeches, he could hardly wish to put a fixed limit on the time during which a member should be allowed to address the Council. With regard to the fees for visitation, he would remark that in some of the ordinary visitations there was really very little work—scarcely more than seeing a number of young men writing at a table. But when a member was required—as in his case—to examine a large mass of questions and answers, and got nothing for it, he must be satisfied with doing it for the public good. It would not be conducive to the dignity of the Council to reduce the fees; but they might dispense with inflated eloquence.

Dr. RUMSEY spoke in favour of imposing a limit of time on the speeches. This was done in other associations.

Mr. COOPER considered that money was well expended on the visitation of examination.

Dr. CHRISTISON concurred with Dr. Bennett's remarks. Much important time was spent in an excess of oratory, intended not for the Council so much as for the world outside. He would not be put down by members who cried "Oh! oh!" but would express what he believed to be a very strong feeling. His own speeches were formerly perhaps longer than was necessary. He had been once charged with making the longest speech ever delivered in the Council: he did not admit the charge, but he took the hint, and his speeches had since been occupied but very little of the time of the Council, though he said all that he wished to say. Chairmen of committees must, of course, be allowed more time. He moved as an amendment—"That the annual session be limited to six days; and that the powers of the Executive Committee be extended in the Medical Acts Amendment Bill, so as to allow any remaining business of the Council to be transacted afterwards by the Executive Committee."

Dr. ALLEN THOMSON seconded the amendment. He had always been of opinion that the duration of the session of the Council was much longer than was necessary. The Council was always accused of being very slow, and of not showing work for the pay. It was not only the length of the speeches, but their number, that required to be reduced.

Dr. ALEXANDER WOOD referred to the communications from the Treasury respecting the fees for attendance.

Mr. HARGRAVE thought that the time to be allowed to each speech should be specified.

Dr. STOKES said that a fee, though trifling, had an effect in ensuring attendance, as was proved in the case of directors of insurance companies. He was quite in favour of limiting the speeches. At a meeting which he had lately attended, each speaker was limited to five minutes; and he had never heard so practical a debate.

Dr. AQUILLA SMITH said that Dr. Andrew Wood had forgotten that in 1868 the excess of expenditure over income was only £60 : 18. He had great objection to the motion, which involved important matters, and ought not to have been brought forward at this late period of the session; but he did not object to the appointment of a committee. He regarded the motion as an act of pandering to the clamour made out of doors. He would rather act gratuitously than for a reduced fee; but this would be a bad precedent for the public in their dealings with the profession.

Dr. ANDREW WOOD, in reply, denied that his proposal was an act of pandering to clamour from without. It was an act of wise submission to pressure from within. He could not see what there was mean or mercenary in endeavouring to reduce the expenditure within the income. The members of Council should, he allowed, endeavour to make their speeches as short as possible; but it was not always possible to compress the arguments, and no rational association limited the duration of speeches. To the suggestion that the members should attend for nothing, there was the objection that the Medical Act provided that fees should be paid to the Council. But why should members receive five guineas a day for attendance, while members of the Executive Committee coming from Scotland and Ireland—it might be in the depth of winter—received only two guineas? As to the fine of three guineas, it would not be fair that members of Council should leave after the end of six days, if the session lasted beyond that time. He denied that the members were in the habit of addressing long speeches to the outer world rather than to the Council. Another reason for saving money was, that the Council might have a hall of its own.

The amendment was then put to the vote, when 9 voted for, and 9 against it. It was, therefore, not carried; the President declining to vote.

Dr. FLEMING then proposed as a second amendment, and Dr. ALLEN THOMSON seconded—"That it be remitted to the Executive and Finance Committees jointly to consider and to report on the best means of lessening the expenditure of the Council."

The amendment was carried, and, having been put as a substantive motion, was agreed to.

Dr. RISDON BENNETT moved, Dr. A. SMITH seconded, and it was resolved—"That the Report of the Finance Committee be received and adopted."

Report on Medical Education.—Dr. ANDREW WOOD moved, Dr. PARKES seconded, and it was resolved—"That the Report of the Committee on Medical Education be received and entered on the minutes, and that the appendices be added to the volumes of minutes of the Council."

The Report, with an appendix of replies from various teachers in

the medical schools, is a long document. The following are the concluding paragraphs of the Report.

We have now to sum up our answer to the resolution of the Council appointing this Committee. We recommend—

1. That the ten subjects deemed necessary by the Council be further sub-divided, for the purposes of teaching, as follows:—1, Physics; 2, Chemistry; 3, Medical Chemistry; 4, Anatomy; 5, General Anatomy; 6, Physiology; 7, Pharmacy; 8, Therapeutics; 9, Medicine; 10, Surgery; 11, Pathological Anatomy; 12, Midwifery; 13, Forensic Medicine; 14, Hygiene.

2. That Physics, Chemistry, Medical Chemistry, Anatomy, General Anatomy, Physiology, and Pharmacy (and Botany if included) be studied previously to passing the first professional examination.

3. That in the remaining period of the four years, the other subjects shall be studied, viz., Therapeutics, Medicine, Surgery, Pathological Anatomy, Midwifery, Forensic Medicine, and Hygiene, and that the second or pass examination shall then take place.

4. That the exact order, number of lectures, and amount and kind of practical instruction be left to the schools, a guide being furnished to them by a definition of the area in each subject over which the examination will extend.

5. That the schools institute class examinations in all these subjects, and that the certificate of study shall attest that the student has undergone these examinations.

If the Council approve the policy sketched out in this Report, and decide on carrying it into effect, we suggest that a small Committee, consisting of about five members, shall be appointed, and shall receive full powers to enter during the recess into communication with the various licensing bodies with respect to the limits of examination; and that this Committee shall present to the Council, at its meeting in 1870, a definite plan showing the extent to which the licensing bodies propose to carry their examinations. This Committee should also have power to enter into the other matters noted in the Report, especially into the possibility of forming conjoint examining boards, before which every student shall appear to entitle him to receive a licence to practise. The Council will then be in a position next year to take definite action in the matter.

Dr. ANDREW WOOD moved, Dr. PARKES seconded, and it was resolved—"That the Report of the Committee on Education be taken into consideration at the next session of Council, and that in the meantime the Report, with the appendices, be submitted to the various licensing bodies for their consideration and remarks, with a request that their remarks be sent to the Registrar on or before the 1st December, 1869." "That a Committee of five members be appointed, to whom the comments of the licensing bodies on the Report of the Committee on Education be referred, and who shall have power to discuss with the licensing bodies the various points raised in the Report, and to embody the results in a Report to be sent to the Executive Committee at least one month before the next session of Council. The Committee shall have power to fill up any vacancies that may occur in its numbers during the recess."

The Committee was appointed to consist of Dr. Parkes, *Chairman*; Mr. Hawkins, Dr. Andrew Wood, Dr. A. Smith, and Dr. Sharpey.

Preliminary Examination.—The Report of the Committee on Preliminary Examination was read, and ordered to be received and entered on the minutes.

It was moved by Dr. BENNETT—"That, inasmuch as there are now, in England, national examining boards on subjects of preliminary education which are readily available by students throughout the kingdom, and whose certificates are in all respects deserving of the confidence of the Council, the time has arrived when the special preliminary examination in general knowledge instituted by the English medical corporations should cease to be recognised." He thought that, now that the Universities held local examinations, there was no reason why the Council should not avail itself of these. He would also like to see a reduction in the number of examining bodies in general education recognised by the Council.

Dr. STORRAR seconded the motion, which was opposed by Mr. Cooper and Sir D. Corrigan.

Dr. ANDREW WOOD moved as an amendment, and Mr. HARGRAVE seconded—"That the Council consider that it would be desirable that in any new amendment of the Medical Act, a clause should be inserted enabling the General Council or the Branch Council of any part of the kingdom to establish a board or boards for the examination of medical students in general education."

The amendment was negatived; and the motion was withdrawn, with the permission of the Council.

Mr. CÆSAR HAWKINS moved, Dr. ACLAND seconded, and it was resolved—"That the attention of the several medical corporations be

drawn to the recommendation (No. 4 of the Recommendations and Opinions issued by the Medical Council), viz.: 'That the examination in general education be eventually left entirely to the examining boards of the national educational bodies recognised by the Medical Council', and that their opinion be asked whether the time has not now arrived when this recommendation should be carried into effect."

Licence of the College of Physicians.—A communication from the Royal College of Physicians of London, with a copy of their licence, was read. It was moved by Dr. BENNETT, seconded by Dr. CHRISTISON, and agreed to—"That the communication and copy of licence be received and entered on the minutes." The Registrar of the College, in his letter, said: "I am further directed to state that the 'licence to practise physic' granted by the College under the authority of its charter and Act of Parliament, is a legal qualification to practise medicine, surgery, and midwifery, and that such licentiate is also legally authorised to dispense medicines, but only to those who are his own patients."

[To be concluded.]

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 17TH, 1869.

CONFERENCE OF HEALTH OFFICERS AT LEEDS.

DR. WILLIAM FARR has made a proposal, the adoption of which will give an exceptional interest and importance to the approaching meeting of the Association, and especially to the Public Medicine Section over which he presides. In accordance with his suggestion, it is intended to invite as many Health Officers from all parts of the kingdom as can make it convenient to attend, and to devote one day in the above mentioned section to the discussion of subjects relating to their position, their duties, and the results of their labours. We need not waste words in pointing out the benefits likely to accrue from the free interchange of information and opinion among those who are actively engaged in the arduous endeavour to promote the health and well-being of the inhabitants of our large towns. Further particulars will be announced in next week's JOURNAL.

THE SESSION OF THE MEDICAL COUNCIL.

THE General Medical Council concluded a session of ten days on Monday last; and we cannot compliment it on having done work in proportion to the time. The passing of Dr. Acland's motion in favour of a special qualification in State Medicine was an act deserving of commendation. On Monday, a long report from the Committee on the Amendment of the Medical Act was brought up; and, after a hurried discussion, the following resolutions were passed.

"That, in the opinion of this Council, it is desirable that power be given to the Medical Council to refuse registration to any one who has not been sufficiently examined both in medicine and surgery."

"That, having carefully considered the objects of the Medical Act of 1858, and the constitution of the Council appointed under that Act to carry out its objects, the Council are of opinion that, for the purposes of the existing Act, the present Council is essentially well constituted."

"That the Council are of opinion that, if the legislature should think proper to invest the Council with extensive powers and fresh duties, by which the profession at large would be brought more under the direct influence of the Council, then in that case the profession at large should have more direct influence in the appointment of members of Council."

"That, in any future Act, provision should be made for instituting prosecutions by a public prosecutor or other authorised functionary, instead of leaving the enforcement of the law to the voluntary action of individuals of the public."

After these and sundry other resolutions, a motion was put, "That the report, as amended, be adopted." The numbers voting for and

against this were equal—eight; and it was not carried. It was then agreed—

"That the President be requested to write to the Lord President of the Council, to the effect that, on the receipt of his Lordship's communication of the 14th May, it was referred to a Committee of the General Council appointed to consider the amendments of the Medical Acts; that the enclosed was the report submitted to the Council by the said Committee, but not as a whole adopted."

"That the President and Executive Committee shall be authorised (if it shall appear necessary) to confer with the Government on the subjects referred to in the Lord President's communication, and report the results of any such conference to this Council at their next meeting."

We shall give the report and an account of the discussion next week. In the course of the proceedings, Sir Dominic Corrigan moved a resolution in favour of the appointment of a Royal Commission, which, however, was lost by a large majority.

OUR SYSTEM OF ARMY HOSPITALS.

No. IV.

HAVING in preceding articles distinguished between the professional and the military attributes of the army medical officer—the former as the *essential* and the latter as the *accidental* element in his position—and having shown the incompatibility which has existed, and ever will exist, between the two, we indicated which we should select as the basis for the systematic reconstruction of the department.

It has long been our decided opinion that, until the Army Medical Department be established on the "purely civil basis", there will be no end to the disappointment and chagrin of those who enter the service with the hope of finding in it an extensive field for professional labour, from which in due time may be reaped a harvest of commensurate reward. It is well known how great are the difficulties which the military surroundings of the young medical officer throw in his way in the maintenance of his professional studies. Those who succeed in overcoming such obstacles, do so by the expenditure of an amount of zeal and self-denial which, in any other avocation, or in the civil practice of the profession, would most probably lead to wealth and fame. For the first few years of the army medical officer's career, the excitement caused by the complete change of scene and the first tour of foreign service, particularly during military operations, takes such possession of him that he has hardly time to see the result impending over him. During the period of reaction, however—particularly if this be passed on compulsory half-pay, on the expiration of sick leave (strictly limited to six months in his case, while combatant officers, under exactly similar circumstances, can have eighteen months or two years without loss of service or pay)—he begins to see the fruit, which in the distance gleamed with a roseate hue, turn to ashes in his hand. He now compares his lot with that of former class-fellows who may have adopted civil careers; and, if he be conscious of the possession of equal or superior powers, he will select for the comparison those who have been most successful, and will find his own position to appear before him in not the most attractive colours. On the other hand, if he have weakly yielded to circumstances unfavourable to professional studies and occupations, and have become content with a lowered ideal, or have been originally of inferior capacity, he will compare his own relatively secure position and light duties with the struggles of men who have not yet attained the lower rung of the ladder leading to fame and fortune, and he will with complacency contemplate the contrast. In other words, the tendency of the service, as at present constituted, is to enervate and disappoint aspiring talent, and to create a haven of refuge for self-satisfied mediocrity and worthless idleness.

It would be our wish that our profession in the public services should be represented by men to whom the occasional selection of one of their body to the Presidency of one of the Royal Colleges of Physicians and Surgeons, or to advanced degrees, "*honoris causa*", from the Universities, would be more gratifying, as a recognition of professional services, than pseudo-military rank, or even the Knight Companionship of the Bath itself. In this matter, we think the civil profession has been to

some extent to blame, as it has hitherto been too much the custom among us to lose sight of the professional brotherhood of the medical officers of the army and navy. It will be sufficient, as an instance in demonstration of the truth of this statement, to recall the complete omission of any representatives of the services at the laying of the foundation stone of the new St. Thomas's Hospital. We would not, however, limit the acknowledgment of pre-eminent merit and of distinguished national service to such professional rewards as the various learned bodies might bestow. We should be glad to see the adoption of the suggestion of one of our correspondents, of a system of good-service pay while the medical officer is still actively employed. The possession of such reward for professional excellence would at once be gratifying to the recipient, and an active stimulus to others to emulate his good deeds. We should thus reward merit at the public cost, instead of at the expense of other not less meritorious, though less fortunate, officers, as is now done by the system of promotion for service. There can be no doubt that many military and naval surgeons have deserved this increase of pay from their country, but have been permitted to retire on exactly the same terms as a host of others, of whom the best that can be said is, that they had not very egregiously committed themselves, and of some of whom even so much could not with truth be predicated.

The privilege of early retirement at the expiration of certain fixed periods of service—say ten, fifteen, and twenty years—at a graduated scale, would tend to keep up a vigorous circulation throughout the department, it being understood that medical officers retiring in this manner should be liable to serve again if required, until they have attained a certain age. For those who would remain beyond these periods, there should be an increase of retiring allowance, until they have attained the inspectorial ranks, when a similarly progressive scale would again apply to them. In order, also, to maintain the circulation, the period of service in the two higher ranks of inspector and deputy inspector-general should have a fixed limit, after which retirement should be compulsory.

Service in unhealthy climates, as we have before hinted, should be allowed to reckon as *extra* for retirement, or be paid for at a special rate.

But the main element in our remodelling plan would be to render the medical services of the army and navy purely civil; and this can only be done by placing the heads of each medical department in an assured civil position. This, as regards the army, should be that of an Under-Secretary of State for the Medical Department, responsible immediately and solely to the Secretary of State for War; and in the navy, should be that of a Lord of the Admiralty in the Medical Department, similarly responsible to the First Lord of the Admiralty. In the present state of affairs, these officers are actually the worst paid in their respective departments. It is needless to say that the change which we propose would carry with it a considerable increase of salary.

It would of course be impossible for us in a short article to enter into the full details of the changes which would necessarily follow the introduction of such a change of system. Most of the existing anomalies would, however, be removed by it; the heads of the respective Medical Departments would be put into their proper positions as the professional advisers of Government; and the subordinate officers of every grade would be relieved from the jealousy and ill-will inseparable, unfortunately, in too many instances, from the ill defined nature of their relations towards the combatant branches of the services.

Some distinctive dress while on duty would of course be necessary; but it should be simple and strictly professional on all ordinary occasions; and at levees or official receptions it should partake more of the character of the civil or diplomatic than of any military uniform.

We believe that, in the series of articles which we have devoted to this subject, we have given expression to the opinions of a steadily increasing class of thoughtful men. We have no idea that they will be universally acceptable; they have, however, been put forward in good faith, and in publishing them we trust that we may have contributed our share towards awakening the best interests of our brethren in the public services. We should be glad to see the whole question investigated by a Royal Commission.

POOR-LAW MEDICAL OFFICERS' QUALIFICATIONS.

OUR cotemporary the *Lancet* has published a strange error on this head, which must have mystified half the Poor-law medical officers of the country, and which has greatly disturbed numerous aspirants to those offices. In answer to a correspondent, the *Lancet* of July 3rd, 1869, replies as follows:—"The medical must be a degree in medicine from a university in England....In fact, the medical qualification must be an English one. The M.B. of the University of London is available as a surgical qualification, etc." Homer must have been worse than asleep when he wrote all this. To the relief of the many minds disturbed by this announcement, we beg to assure those interested, that the Poor-law Board recognise any diploma, degree, or licence in medicine or surgery, granted or issued by competent authority in Great Britain or Ireland. As in the army, the Poor-law Board require a double qualification; viz., one in Medicine, and one in Surgery.

DR. HEYWOOD SMITH and Dr. A. W. EDIS have been unanimously appointed Physicians to the British Lying-in Hospital, Endell Street.

DR. GALLIGO, of Florence, a well known syphilographer, and editor of *L'Imparziale*, died on June 19th, at the early age of forty-seven.

THE Spanish Government has recognised medical titles and diplomas granted in Portugal as giving to the holders the right of practice in Spain.

A PRIZE of 3,000 roubles (£480) has been founded by the Council of Medicine in Russia, and will be adjudged on October 12th, 1871, to the author of the best work on vaccination.

HER Majesty has deputed the Princess Louise to lay the foundation-stone of the second pair of buildings of the National Cottage Hospital for Consumption at Ventnor.

LIEUTENANT-GENERAL SABINE, President of the Royal Society, is about to be made a civil K.C.B., in recognition of his scientific attainments.

DR. J. M. FLEMING reports, in the *Indian Medical Gazette*, that he has treated sixty patients suffering from guinea-worm by the local application of carbolic acid. Of these, fifty-seven were cured, and three ceased to attend.

MR. JOHNS, subassistant-surgeon and lecturer on anatomy in the Agra Medical School, is about to bring out a work on anatomy in the Oordoo language. It is to contain three hundred illustrations, copied from the last edition of *Quain's Anatomy*.

A MEDICAL botanist, named John Kirby, of Halifax, has been committed for trial for unlawfully using an instrument with intent to procure the miscarriage of a young woman, named Elizabeth Sutcliffe, who is dangerously ill.

AN outbreak of yellow fever at Rio de Janeiro, attributable to prolonged drought and hot weather, has been reported by the British Minister at that city. Several cases have occurred on board English vessels. As a precautionary measure, the customs officers at the various English ports have been informed of the circumstance.

AT the half-yearly meeting of the Governors of the Royal Humane Society, on Wednesday last, one of the silver medals of the Society was awarded to Mr. De Vere A. N. Irwin, a medical student, for saving the lives of his father, brother, and two sisters, whose boat was swamped on the lake of Geneva in August last.

A new association of physicians has been organised in New York, under the title of the *Society for Reporting the Progress of Medicine*. It consists of one member representing each department of medical science, each of whom in turn is to prepare a report of the advances made, abroad and at home, in his department.

TREATMENT OF ANEURISM BY IODIDE OF POTASSIUM.

DR. G. W. BALFOUR, Physician to the Edinburgh Royal Infirmary, reports, in the *Edinburgh Medical Journal* for July, eleven cases of aneurism treated by iodide of potassium. In all cases, where the treatment has been continued for a sufficient time, there has been not only relief of the symptoms, but a positive improvement; and Dr. Balfour thinks that facts tend to show that iodide of potassium also acts remedially and prophylactically in the "aneurismal diathesis".

THE HEALTH OF THE CAMP AT WIMBLEDON.

THE health of the Camp this year has hitherto been excellent. A few cases of diarrhoea, an occasional case of slight exhaustion from fatigue, exposure to the sun, or perhaps the little follies of the previous day, have been about all to engage the attention of the surgeons in camp. With the exception of the policeman, now happily convalescent, who was thrown from his horse, and who, in addition to some bruises, received a severe lacerated wound of the scalp, no one has met with any accident of moment. The cool mornings and evenings, and the refreshing breeze which has almost daily blown across the Common, have no doubt contributed much to the satisfactory bill of health; but the improved water-supply, the more effective earth-closets, the greater and more varied hygienic precautions taken by the volunteers, and the general improvement in the sanitary arrangements of the Camp, have every reason to claim a favourable hearing.

ST. GEORGE'S HOSPITAL.

A DEPARTMENT on Orthopædic Surgery is about to be established at St. George's Hospital, under the charge of Mr. Brodhurst, who now resigns his assistant-surgeoncy to the hospital. A vacancy will accordingly occur, for which Mr. Pick will be a candidate. Departments have also lately been established for out-patients suffering from diseases of the skin and ear; the former under the charge of Dr. Barclay, and the latter of Mr. Rouse.

CONVICTION UNDER THE MEDICAL ACT.

AT the Lambeth police court, on Tuesday last, Mr. William Bramley Taylor, of Camberwell, was summoned for "wilfully and falsely pretending to be a surgeon," in contravention of clause 40 of the Medical Act. It appeared from the evidence that the defendant had obtained the licence of the Apothecaries' Company, but had not yet passed the final examination of the Royal College of Surgeons; and that, although not registered, he had a plate with the word "Surgeon" on the door of his father's house, to whom he acted as an assistant. He pleaded that he did not know that he was offending against the law. The magistrate, Mr. Elliott, was of opinion that the offence was proved, and inflicted a penalty of £5, with £2 : 2 costs.

DEFORMITIES OF THE CRANIUM.

AT the last meeting of the Ethnological Society, Dr. King brought forward the subject of the Cranium and its Deformities, in relation to Intellect and Beauty. He arranged the deformities of the cranium as artificial and natural. Of the former, the flat-heads afford an example. These are an American race, and they comprise several tribes in the neighbourhood of the Columbia River. The custom of flattening the head is prevalent along the north-west coast of America, from Salmon River to Umqua River; but it has been also observed in different parts of America, and is known to have prevailed among the ancient Peruvians. The flat head was maintained by Tiedemann, Pentland, and Morton, to be a natural formation, upon examination of the flattened skulls found at Titicaca. It has since been found that it is an artificial deformity. The natural deformity was the main point of the paper. Dr. King insisted that a deformity was going on in civilised life that far outbalanced the deformity of uncivilised life; because in the artificial deformity there was uniformity of error, whereas in the natural deformity there was non-conformity. It was the mode of nursing in civilised life that gave rise to the natural deformity. The child was nursed

on one side, the mother having lost one breast; or she has twins, and she nurses one child on one side, and the other on the other side; or she is a wet-nurse, and she nurses her own child on the one side, and her foster child on the other. This mode of nursing necessarily inclines one side of the head downwards—it may be the right side, or it may be the left side. Now, as the brain necessarily forms the braincase, as the kernel forms the shell of the nut, the brain, which is very rapid in its growth in early life, especially during suckling, carries the bones of the head, now incomplete, to the depending side; and thus the head of the child is larger on the depending side, and is moulded for life, if not corrected before the bones of the head are consolidated into one mass. The cranial vault, as a consequence, is deformed.

NURSING IN THE TAVISTOCK WORKHOUSE INFIRMARY.

MR. BONE, the Deputy-Coroner for South Devon, has the merit of having stirred up the Guardians of the Tavistock Union to an inquiry into the provision for nursing in the Infirmary; Mr. Sleman, the medical officer, having reported in July 1868, and again in January and July 1869, that the nursing was very inadequately provided for. It appears that one of the nurses in the men's ward is a man aged seventy-three, and that until lately there was also a one-armed man acting as nurse. He, however, left the house rather abruptly, and his place was supplied by an imbecile. A reason alleged for this very defective arrangement is, that the master likes to have the best men in another part of the building.

TREATMENT OF THE SICK AND WOUNDED IN MARITIME WAR.

ON the 20th of October, 1868, the principles of the Convention of Geneva of the 22nd of August, 1864, were made applicable to maritime warfare. The central Committee of the Prussian Association for the relief of such wounded soldiers in times of war, now offers a prize of 100 frederics d'or (about £85) for the best essay on the following questions:—

"In what circumstances, under what form, and with what success, during the maritime wars of the past, has private charity assisted in saving the shipwrecked and taking care of the sick and wounded of the belligerent fleets? To what extent, and under what conditions, can the relief societies undertake this task with a probability of success? What arrangements ought to be made in time of peace, in order to obtain such results as may satisfy the wishes of philanthropy in this respect? Would the realisation of these wishes be hastened or secured if the Permanent Relief Committees, whose duties are to aid the hospital and ambulance service of armies in time of war, were to establish a practical understanding with the existing Life-Boat Institutions?"

The author of this essay must base his conclusions upon the experiences of former wars, and also take into consideration the ideas brought forward at the sitting of the International Conference of Berlin of the 23rd of April last. No restrictions are placed on the arrangement or extent of the essay. The essays, written in German, French, or English, must be sent to the Prussian Central Committee not later than the 1st of May, 1870. They must be without signature, but distinguished by a motto, and accompanied by a sealed note reproducing this motto, and giving the name and residence of the author. On the 30th of September, 1870, the birthday of Her Majesty the Queen of Prussia, the prize will be awarded to the essay to which it shall have been adjudged by a jury nominated by the committee. The author will have the right to publish the essay which shall gain the prize; but if, within six months after the date of the decision, the author have not availed himself of his right, the Prussian Central Committee may dispose of the essay.

MEDICAL LEGISLATION IN CANADA.

A MEDICAL ACT has been passed by the Canadian legislature; and the constitution of the Medical Council is causing much commotion among the profession. The Council is composed not only of representatives of the legitimate art of medicine, but of persons elected by the Homœopathic and Eclectic sects. Indignant protests against this forced and unnatural association have been made by the Canadian Medical Insti-

tute, and by various societies and individual members of the profession in Canada. We trust that our Canadian brethren will persevere, and obtain a repeal of the obnoxious portions of the Medical Act. Homœopaths and Eclectics must be allowed to practise according to their lights; but it cannot be admitted that they should have a share in the management of the profession of legitimate medicine, and, it may be, in the direction of medical education. Toleration of creeds is rightly demanded, and must be allowed; but what should we say of the introduction of delegates of the homœopaths and bone-setters into our Medical Council, or of representatives of Catholicism and Islamism into a convocation called for the purpose of regulating the Protestant churches?

THE PRESIDENCY OF THE MEDICAL COUNCIL.

THE report of the proceedings of the Medical Council, at page 60, contains a brief record of the retirement of Dr. Burrows from the office of President. The Council has, in this act of Dr. Burrows, sustained a great loss; and it is no disparagement to his successor, Dr. Paget, to say that it will be very difficult for any one to do more than fill the vacant place in an equally worthy manner. Dr. Burrows' six years' presidency has been distinguished by ability, impartiality, and a happy combination of courtesy with firmness towards all the members of Council. His exertions in all matters coming within the province of the Council, and most especially as regards the amendment of the Medical Acts, have been unwearied, and cannot be forgotten in any subsequent phases of development of medical reform. For his remarks on the public and the medical press, and on the manner in which the proceedings of the Council have been reported and its acts commented on, we thank him; taking it as an honour, *laudari a laudato viro*.

ENTERTAINMENT AT ST. LUKE'S HOSPITAL.

ANOTHER admirable concert of vocal and instrumental music, arranged by Dr. J. Thompson Dickson, the energetic Resident Medical Superintendent, was given for the amusement of the patients at St. Luke's Hospital on Thursday evening last week. The performers comprised amateur and professional artistes, who generously gave their services for the occasion. Among the performers were Miss Kate Roberts, whose exquisite execution, as usual, elicited the warmest applause. Among the other performers, Miss M. Hammond, Mr. Critchett, and Mr. Semple were received with deservedly great favour. Upon the tasteful bijou stage, the design and in part the production of Dr. Thompson, was represented the garden scene from the Opera of *Faust*.

OPENING OF THE MORLEY CONVALESCENT HOSPITAL.

THE Morley Convalescent Hospital, says a tablet erected in the entrance-hall, was founded by Mr. Atkinson Morley, late of Cork Street, as a convalescent hospital for poor patients of St. George's Hospital. The foundation-stone was laid on July 14th, 1867, by Earl Cadogan; and on Wednesday it was opened by service in the chapel, conducted by the Rev. Dr. Irons, of Brompton, and the Rev. Mr. Groves, Chaplain to St. George's Hospital. It is situated at Copse Hill, Wimbledon, on the Cottenham Park Estate, and commands a magnificent view towards the south, extending, in fine weather, across the Epsom Downs as far as the Devil's Dyke at Brighton. The building is in the shape of the letter T, the stem of which contains the administrative department and chapel, the arms to the right and left forming the wards. The greatest length is 340 feet, and depth 135 feet. It is two storeys high, with an additional floor in the centre. On both the first and the second floors are a male and a female ward of twenty beds each, and two children's wards of ten beds each, besides several separate wards for special cases. These wards are exceedingly chaste and cheerful, with open fireplaces and pillared flues, in addition to warm-water pipes. The windows appear perhaps a little narrow for the height of the wards; but the wards are otherwise in good proportion. Adjoining each of the large wards are a nurse's room, lavatories, bath-room, and water-closets. On the basement floor, a large male and also a female day-room are provided; a covered airing-ground, kitchens, sculleries, etc. The servants'

rooms are on the third floor. There are beautiful and wooded airing-grounds, eight acres in extent, and facing the south, from which a lovely view of the Surrey hills and intermediate country may be obtained. In the grounds, a laundry, fitted up with steam machinery, has been built; and here is an Artesian well, with a bore of 460 feet, which will give a constant supply of admirable water. Adjoining the laundry are the stables, and a coach-house for the handsome omnibus to be used for conveying patients to and from St. George's Hospital. The cost of the building is about £25,000. Great credit is due to the architects, Messrs. Kelly and Crawley, and the builders, Messrs. Simpson and Son, for the manner in which they have done their work.

THE NEWCASTLE-ON-TYNE INFIRMARY.

AT a quarterly meeting of the Governors of this Infirmary held on July 1st, Mr. Stanley Peacock was elected house-surgeon. The election of a junior house-surgeon was postponed for three months, in order that Mr. Arthur Walpole, who had been temporarily performing the duties of the office, might have an opportunity of becoming legally qualified. Mr. Luke Armstrong, Mr. A. Bell, Mr. J. Hawthorn, and Mr. G. H. Hume, were then elected honorary surgeons. There was also a vacancy in the office of physician; and regarding this there has been some considerable excitement. The only candidate, we believe, who has come forward, has been Dr. William Murray. He, however, has been objected to, on the ground that he does not practise as a pure physician, inasmuch as he performs obstetric operations; and consequently he has withdrawn for the present. At the meeting, a subcommittee of six members was appointed to confer with the Medical Board, to consider whether Dr. Murray was really disqualified; and the election was deferred to the first Saturday in August.

CENSURE OF A MEDICAL OFFICER OF HEALTH.

AT the weekly meeting of the Manchester Guardians on July 5th, attention was called to the case of a man named Michael Conlan, who was admitted to the workhouse hospital on June 21st, under a certificate of insanity from Dr. Ledward, Medical Officer of Health for St. Michael's district, but who, upon examination afterwards, was found by the house-surgeon to be covered with a profuse eruption of the maculæ of typhus fever, and died in the fever ward four days afterwards. An explanation was asked from Dr. Ledward, in reply to which he wrote a letter in which he stated that he had been misled by the following circumstances. The patient had previously been insane twice during the last two years, and was for some time an inmate of the workhouse hospital. Dr. Ledward was called upon by the patient's friends to visit him on a statement that he was "in his old way," and could not be managed. Dr. Ledward said further, that he was not permitted to make an examination of the patient, who lay in a badly lighted apartment; and that there was ample time—forty-eight hours—between his visit and the man's removal to hospital, for the development of the typhus maculæ. He also pointed out that there was great difficulty in making the diagnosis of the typhus eruption in an early stage in a patient with a dirty skin. The guardians passed a resolution reprimanding Dr. Ledward for want of due caution.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

WE beg to remind our readers that the annual meeting of this active and useful Association will be held at the Freemasons' Tavern, on Wednesday, the 28th inst., at 5 P.M., for the election of officers and Council for the ensuing year, and for the transaction of other important business. The annual dinner will take place at half-past six o'clock. The occasion promises to be of more than usual interest, as several members of Parliament, including Drs. Brady, Brewer, Lush, Lyon Playfair, C.B., Messrs. Corrance and Torrens, and other influential gentlemen, will be present. We would urge all medical officers to join the Association, which now numbers nearly eight hundred members, and is ably and successfully carrying on a good work, in which the profession generally take a deep interest. The Association year commences on the first day of August.

SCOTLAND.

It is not expected that the new Glasgow University buildings will be ready for use before the autumn of next year.

THE foundation-stone of the New Govan Poorhouse Hospital and Lunatic Asylum was laid on the 6th. The hospital will accommodate 140 patients, and the asylum about 180.

EDINBURGH UNIVERSITY: CHAIRS OF CLINICAL SURGERY AND PATHOLOGY.

WE understand that Dr. Gillespie, who has acted as surgeon to the Royal Infirmary for many years, is an additional candidate for the Chair of Clinical Surgery. We also hear that Dr. Andrew Smart, whose excellent reports on the cattle plague were favourably noticed, intends coming forward as a candidate for the Chair of Pathology. Great efforts are being made by the respective candidates and their friends to secure election. Testimonials of every description keep pouring in not only upon old Edinburgh men, but in some instances, we have heard whispered, upon medical practitioners who, in many cases at least, are not in a position to decide on the question, and have no knowledge of the candidate either personally or as a teacher. Now, although it is highly important to arrive at the feeling of those who are entitled to give an opinion on the respective merits of the candidates (and hence the usefulness of testimonials), we are strongly of opinion that some of the candidates are carrying the matter too far beyond this, and are paving the way, if they have not already paved it, to further abuses, at which it is unnecessary for us even to hint.

IRELAND.

ROYAL COLLEGE OF SURGEONS.

THIRTY-EIGHT candidates have offered themselves for the quarterly examination for the diploma.

JERVIS STREET HOSPITAL.

DR. COLLINS and Dr. Walshe are candidates for the vacancy which is soon to occur in the Jervis Street Hospital. It is rumoured that the governors are contemplating an arrangement by which the purchase system shall cease after the election of the next series of officers.

THE OBSTETRICAL SOCIETY DEBATE.

DR. KENNEDY's reply occupied over three hours in the reading, and the comments of his sixteen opponents were met with great ability. Even an analysis of so voluminous a paper would be inadmissible; and we trust that the whole discussion will be published in pamphlet form. A general desire has been expressed that Dr. Kennedy should read a summary of his paper on Lying-in Hospitals, at the ensuing meeting of the Association.

THE DUBLIN HOSPITALS.

THE Eleventh Report of the Government Board has just been issued, and it consists solely of statistical returns. The daily average of beds and the cost of each bed are mentioned after each hospital in the following list: Lock, 68, £46; Steevens's, 154, £35; Meath, 90, £33; Cork Street, 68, £45; House of Industry, 194, £36; Rotunda, 42, £54; Coombe, 20, £44; Incurables, 155, £22; St. Mark's, 28, £24. Lord Charlemont, Chief Justice Monahan, Sir D. Corrigan, Drs. Stokes, Colles, and Fleming, and Messrs. Hamilton, Brady, Pym, and Moreland, sign the report.

THE REPORT ON NAVAL HOSPITALS.—In reply to Mr. Alderman Lusk, Mr. Childers said that the report of the Civil Commission on Naval Hospitals had been under the consideration of the recently appointed Medical Director of the Navy. The report would be laid upon the table of the House in a few days. The cost of the Commission was £353:13:6.

REPRESENTATION OF THE PROFESSION IN THE MEDICAL COUNCIL.

ON Monday last, a large and influential deputation of the Committee of Council of the Association, the Committee appointed by the Association to secure the direct representation of the profession in the Medical Council, and other members of the profession interested in the matter, had an interview with the Right Honourable the Lord President of the Privy Council. The deputation was accompanied by Dr. Brewer, M.P.; Mr. Bazley, M.P.; Sir John Dalrymple Hay, M.P.; Mr. Dixon, M.P.; Mr. Wheelhouse, M.P.; Mr. Tollemache, M.P.; Mr. Davis, M.P.; Colonel Sykes, M.P.; Mr. Raikes, M.P.; Mr. Cawley, M.P.; Hon. C. P. Villiers, M.P.; Lord Sandon, M.P.; Lord R. Grosvenor, M.P.; Mr. Blake, M.P.; Mr. Wykeham Martin, M.P.; Dr. Dalrymple, M.P.; Mr. Samuelson, M.P.; Mr. W. B. Samuelson, M.P.; and Colonel Bourne, M.P. It consisted of Dr. Chadwick, President-elect of the British Medical Association; Dr. Sibson, President of Council; Dr. Edward Waters, Chairman of the Committee on Direct Representation; Dr. Falconer, Treasurer; Mr. T. Watkin Williams, General Secretary of the Association; Dr. Gibbon, Secretary of the Parliamentary Bills Committee; Dr. Bryan (Northampton), Mr. Bartleet (Birmingham), Dr. H. Barnes (Carlisle), Mr. Ceely (Aylesbury), Mr. Clayton (Birmingham), Mr. Edye (Exeter), Mr. Hodgson (Brighton), Dr. Jeaffreson (Leamington), Dr. Simpson (Manchester), Mr. Heckstall Smith (St. Mary Cray), Mr. Southam (Manchester), Mr. Steele (Clifton), and Dr. Eason Wilkinson (Manchester),—members of the Committee of Council: Dr. Holman (Reigate), President of the South Eastern Branch; Mr. Solomon (Birmingham), President of the Birmingham and Midland Counties Branch; Surgeon-Major T. Atchison, Dr. Butler (Woolwich), Dr. Bantock (London), Dr. Bright (Forest Hill), Dr. Carr (Blackheath), Dr. Davey (Northwoods), Dr. Tilbury Fox (London), Dr. Hogg (Royal Artillery), Dr. Lingen (Hereford), Mr. W. Martin (London), Mr. Napper (Cranleigh), Mr. Newnham (Wolverhampton), Mr. Nicholson (Hull), Dr. Purvis (Greenwich). Mr. Bright, M.P.; Mr. Muntz, M.P.; Mr. Clement, M.P.; Mr. C. H. Mills, M.P.; and Mr. J. G. Talbot, M.P., were prevented by engagements from being present.

The officers and members of the Council (with the exception of Mr. Heckstall Smith, the President-elect for 1870, and Dr. Gibbon) and many of the members of the Metropolitan Counties Branch, were unavoidably prevented from being present, in consequence of the annual meeting of the Branch having been fixed for the same day and hour.

The Right Hon. Earl de Grey and Ripon, Lord President of the Privy Council, was attended by Mr. Forster, M.P., the Vice-President, and by Mr. John Simon, the Medical Officer of the Council.

The Hon. C. P. Villiers, M.P., introduced the deputation, and personally introduced Dr. Sibson.

DR. SIBSON then introduced Dr. WATERS, who addressed his lordship as follows.

My Lord,—I have to thank your Lordship for the kindness as well as courtesy with which you have so readily consented to receive a deputation, in order that the views of the British Medical Association as to the importance of the direct representation of the profession in the General Medical Council may be laid before your Lordship.

The body which the deputation represents is the British Medical Association, now on the eve of holding its thirty-seventh annual meeting. This Association has, throughout the period of its existence, taken an active part in all questions of medical and sanitary reform, and numbers above four thousand members. During the arduous struggles which preceded the passing of the Medical Act, the Association played an important part. Time after time, when minister after minister failed to carry a measure of medical reform, the Association adhered to the cause. Sir James Graham, Mr. Cowper, Mr. Walpole, notwithstanding all their official experience, knowledge of the subject, and zeal, after taking the subject up with a determination to carry it through, from inability to reconcile the conflicting interests of the various Universities, Colleges, and Licensing Bodies, abandoned the attempt in despair—with the taunt that, when the profession, a profession numbering over fifteen thousand members, was unanimous, they would again take it up. With the old adage, "Quot homines, tot sententiæ," in mind, to hope for such unanimity was vain; and, under such discouraging circumstances, but for the steadfastness of the British Medical Association, the question of medical reform would probably have been shelved for years. Private members, among whom Mr. Headlam was conspicuous, then received the support of the Association;

and, when his measure passed the first reading, the battle was virtually gained; the House of Commons desired the settlement of the question, and a minister and an ex-minister combined to aid its progress. The various corporations, seeing further opposition must fail, sought then to secure the most favourable terms, and "The Medical Act" became law.

This, my Lord, is a striking illustration of the necessity of direct representatives of the profession in the Council, to counterbalance those elected by the Universities and Corporations. At the annual meeting of the Association held in Dublin in August 1867, resolutions were passed to the following effect: "1. That eight members, to be elected by the registered members of the profession, should be added to the Council. 2. That four should be elected for England, two for Ireland, and two for Scotland. 3. That the election should be by voting-papers, to be distributed and collected by the Registrars of the Medical Council in the respective countries. 4. That the tenure of office should be the same as that of the members of the Council appointed by the Crown. 5. That every candidate should be nominated by at least twelve registered members of the profession resident in the division of the kingdom for which he is to be elected; and he shall also signify to the Registrar, in writing, fourteen days before the day of distributing the voting-papers, his willingness to serve if elected." These resolutions were not hastily drawn up. On the contrary, the points involved in them had been long held of paramount importance by the great body of the Association and of the profession. To show your Lordship how carefully they were prepared, I will, in a few words, describe how the Association is managed. In it, as in all well constituted bodies and governments except that of the General Medical Council, the representative principle is brought into action. In the Association, this became imperative, as no other method proved satisfactory to the members. The Association, in the first place, annually elects by ballot a Council, in the proportion of one to every twenty members; and, in the second place, this Council in a similar manner elects a Committee of Council. These elections, as stated, take place annually. There is, however, another important officer—the President of the Council—whose term of office lasts for three years. He is elected by the Council. Dr. Sibson, a gentleman of high standing in the profession, long a teacher and trainer of medical students in St. Mary's Hospital Medical School, and author of important medical works, is now the President of our Council. I may also be permitted to mention that he was Secretary of the Committee to which the public is indebted for the admirable *Nomenclature of Disease* published by the London College of Physicians, and distributed by the Government, at the public expense, to every member of the profession. He is a sound, conciliatory, practical man, not in the least likely to be associated with a revolutionary movement; and this gentleman is heart and soul with us.

My Lord, the Committee of the Council is the body to whom the government of the Association is for the time being entrusted, and this body nominated, in 1867, a Subcommittee to examine how far it might be desirable to introduce direct representatives of the profession into the General Medical Council. That Subcommittee prepared the resolutions just read. These resolutions were debated in the Council of the Association on the occasion of the annual meeting of the Association in Dublin in 1867, and approved. They were then submitted to the general body of the Association, and never was a more striking manifestation in favour of any principle evinced than by the overwhelming vote taken on that occasion in their favour. The Subcommittee was then requested by the Association to take steps to carry the resolutions into effect; and with that object, had an interview with the General Medical Council in June 1868. The General Medical Council did not accept the overtures thus made. They were requested to approve of the introduction of the representative principle into the formation of the Council in the new Medical Acts Amendment Bill which they contemplated. They answered neither yea nor nay, but voted that the time for deciding the point was inopportune—that by approval they might be passing after a manner a vote of censure on themselves; and, whatever the profession might have done regarding them, they were clearly most chary of any such step on their own part. Several members of the General Medical Council strongly supported the principle, but were beaten on the point of its not being the right time—though what time could be more opportune than that when a modification of the Medical Act was under consideration, the Association was at a loss to conceive. At the annual meeting of the Association, held at Oxford last year, under the auspices of Dr. Acland as President, the question was again brought forward, and on that occasion was carried without a dissentient voice. The Subcommittee of the Council was, however, enlarged by the addition of members from the body of the Association, and all the resolutions have been gone through by the new Committee so constituted, and which now has the honour of waiting on your Lordship. There is not a dissentient voice

in the General Medical Council itself as to the necessity of an alteration of the Medical Act; and all we seek is that, when it is modified, direct representatives of the profession, elected by the votes of the registered members of the profession resident in the United Kingdom should be added to the General Medical Council in the proportion of one-fourth of its members.

The Association knows this to be the desire not only of the Association, but of the profession at large. A memorial was presented to the Council at this session by a body of the profession, independent of the Association, and in the course of a few days that memorial was signed by upwards of 5200 names. This memorial said—"It is respectfully, but very earnestly, submitted, that the influence and power for good of the General Medical Council would be greatly extended, with the profession and the public, if provision was made in a new Act of Parliament for the representation in the Council of the general body of practitioners of medicine and surgery, who are now, for the most part, deprived of any professional franchise."

Now, my Lord, this same memorial was being signed by the general body of practitioners at the rate of several hundreds a day. As at present constituted, the profession evinces but little interest in the proceedings of the Council; and so striking is this fact, that repeated reference has been made to it in the Council itself. The Association believes that when direct representatives are introduced, this apathy will be at an end, and questions of general interest will then find a larger part in its deliberations than at present.

They do not desire to overthrow Colleges. Still there is no doubt that Colleges rise and fall; but, while these institutions rise and fall, the profession must ever endure; and as the attainments of its members are enlarged, so will its influence extend. No valid objection to the introduction of direct representatives has ever been advanced. It has been stated that the question of fees and other trivial matters might then occupy the Council. Such questions form no part of our objects. We move in this matter with the sole view of increasing the influence and authority of the Council, elevating the profession, and increasing its power for good in relation to the public.

With these observations, I beg to present your Lordship with these addresses, which have been issued by the Committee; and to request your attention to the remarks of Dr. Sibson, their much esteemed President of Council.

Dr. SIBSON then addressed his Lordship as follows.

My Lord,—The Association that I have, on this occasion, the great honour to represent, numbers among its members above four thousand of the registered medical practitioners of England, Ireland, and Scotland.

The repeated representations of this Association, as you have just heard, led to the passing of the Medical Act and the formation of the General Council of Medical Education. With many of the results of that Act, and much of the labour of the Medical Council, the Association has great reason to be satisfied. But, while considerable improvements have been effected by the Council in medical education, we are compelled to say, that the existing state of medical education is greatly defective.

These defects mainly resolve themselves into three: 1. The defective character of the previous mental training of many medical students, owing to the low standard, in many instances, of the preliminary examination which the student must pass before he is admitted to his medical studies.

2. The number of examinations, at different boards, to which the student is obliged to submit before he becomes a member of the profession.

3. The most important defect, and that carrying with it the greatest amount of practical evil, is the fact that in several of the examining bodies (and they are those unfortunately to which the greatest number of the candidates for licences to practise resort) there is an absence of thoroughly practical and especially of clinical examinations. The students are not taken to the bedside of the patient, and desired by the examiner to investigate the case, make out its nature, and describe the characteristic symptoms and treatment of the disease.

I need scarcely tell your Lordship, for the proposition is indeed self-evident, that, if the student knows he will not be examined in the wards of a hospital, he deserts those wards when the period of his examinations approaches, and betakes himself to books, and to teachers whose whole business it is to prepare men to pass the examinations to which they are to be subjected. If, on the other hand, the student were aware that he would be examined carefully on hospital or other cases affected with disease, he would give his whole attention during the last two years of his studentship to the cases that fill the wards, and he would continue with increasing interest and intimacy to inquire into these cases up to the hour of his examination. I can, as a teacher, vouch for this fact; for those men who go up to the University of London and the College of Physicians, where the examinations are really clinical, go round the wards with increasing diligence towards the time of the final

test, and examine the cases in a more sifting manner, so as to mark out in each case the nature of the malady, and to acquire what may be termed the medical mind.

Before the passing of the Medical Act, it was the custom for all medical students to pass through an apprenticeship with medical men in active practice before resorting to the medical schools. A large amount of most precious time was undoubtedly wasted in the majority of instances when this practice was in vogue. But, notwithstanding that, these young men did acquire a familiarity with disease before they came up to the schools, and they, therefore, in a more or less imperfect manner, acquired some clinical or bedside knowledge of disease and its treatment.

We account for the defective state of medical education by the inadequate powers of the General Council of Medical Education to hold the Examining Boards in direct check; and also, and not to a less degree, by the Medical Council being itself composed of members elected by those very bodies—the Universities and Corporations—which it is the duty of the Council to watch over, and to report to your Lordship's Privy Council if their examinations be inadequate.

At present, as your Lordship well knows, out of a Council numbering twenty-four, seventeen are elected by those bodies. The Government nominees, amounting to six, are not in sufficient number, nor are they inspired by sufficient authority, to form an adequate counterpoise to the University and Corporation members. The plan that we have to submit to your Lordship, and to press with all the arguments and illustrations in our power, is the direct representation of the registered medical practitioners of Great Britain and Ireland in the Medical Council, in the proportion of one in four of the number composing that Council.

The registered practitioners of the United Kingdom are intimately acquainted with the medical wants of the people. It is their unanimous desire that the standard of the general preliminary education of the medical student should be raised, and that his medical teaching and examinations should be thoroughly practical. It is their wish to elevate the character and consideration, and thereby the power to do good of the body to which they belong; and I shall be borne out in the statement—by your Lordship, and indeed, by every one—that the profession which they constitute has, in the nature of things, a single eye for the public good, and exists only for the general welfare.

They may, therefore, be reasonably trusted to send as their representatives gentlemen who will bring up to the Council that practical knowledge of what the young medical man ought to know, when he is sent to practise his profession, often in a remote district where no other medical advice is at hand; of the kind of instruction he requires; of the style of education and of examination that will best fit him to undertake those all important duties with which he is about to be charged.

The machinery of the Act has made it perfectly easy for the registered medical practitioners to vote for their representatives in the Medical Council, by the simple and effectual means of nomination papers and voting papers, to be transmitted to the body of the profession by the registrars of the Medical Council in England, Scotland, and Ireland, and to be received back, duly signed, from the voters.

I place this question now before your Lordship, on the point of view of the great practical value of such a class of members, who ought, according to the views of our Association and its Committee, to form one-fourth of the whole number of the Council, and who would reinforce the Government nominees in forming a body of members who would act as an equipoise to the bias which the members sent in by the Examining Bodies, unconsciously perhaps, but still necessarily, have towards those Corporations and Universities by which they are sent.

In making this proposal, your Lordship will at once see that we do not wish in any way to override the important counsels of those distinguished men who are sent by the Examining Bodies into the Council.

Far from it. We wish to work hand in hand with them in the speedy attainment of the great objects at which we all aim, a better preliminary education, some Examining Board in each division of the Kingdom, and a more thorough and practical teaching of the profession. We recognise the importance in every way of the gentlemen sent in by those bodies. They are themselves almost necessarily among the most distinguished members of the bodies they represent; they all are, so to speak, at the advanced summit of medical science; they are accustomed to teach the medical student in the dissecting room, the laboratory, and the wards of the hospital, and they are, many of them, in the habit of examining the candidates for licences to practise the profession. It is impossible to frame the Council without these eminent men, who will at all times form one of the most important component parts of the body.

We do not wish, either, to see the government nominees dispensed with, or that they should in any way lose that completely independent position of the government when they are once appointed, that they at

present enjoy. They must be regarded in the same high, sacred, and irremovable character as Her Majesty's judges.

If the happy combination is completed at which we aim, one fourth part of the Council being sent by the Universities, another fourth by the Medical Corporations, another like share being constituted of the nominees of the government, and still another of the direct representatives of the medical profession, we shall have a body high in its knowledge of the science and practice of medicine, capable of guiding medical education, and of controlling medical examinations.

There is an important branch of this subject that sits near to the heart of the whole profession; one indeed, with regard to which they are to a man prepared to stand upon their constitutional rights. This Association contemplates that the time will come, and that very speedily, when there will be in each section of the kingdom one Examining Board for the admission of candidates into the medical profession.

It has been suggested by some men, who have failed to grasp this great question with true public spirit, that such an Examining Board ought to be appointed by the Executive Government. We at once take our stand in objecting to the formation of any such Government Boards. We do not say that the members of such a board would not be good men; they probably would, but they would be inevitably chosen by the responsible medical adviser of the government; and who will say that it is possible for any such man to select qualified men with the same certainty, fitness, freedom from bias and from personal friendship, that the great examining bodies of our country can?

The machinery for such a common Examining Board is already at hand. Let, for instance, in London, the College of Physicians appoint the Examiners in Medicine, Therapeutics, Forensic Medicine, and Physiology and Anatomy bearing on internal disease; the College of Surgeons, the Examiners in Surgery and in Descriptive Anatomy; and the Society of Apothecaries those on the knowledge of drugs. The same can be done elsewhere.

The Examining Board for the Medical Officers of the Army and Navy ought to be directly appointed by the Government, who pay those officers. But not so with the body of the profession, who pay their own education, their own examinations, their own medical corporations, and their own Medical Council. These are all entirely supported by the medical profession; and the Government, except by legislation, has no place upon which to stand to exercise the executive functions either of Examining Boards or of the Medical Council. The law finds its own examining bodies; the Church admits its members through its own prescribed channels, and by its own chosen men; and medicine will also take the same part in supporting and appointing its own Examining Bodies and Medical Council, subject to the control of the Imperial Legislature.

The whole of the ordinary funds that support the Medical Council have been provided by the registered medical practitioners of the United Kingdom. I need not say to your Lordship that this fact entitles the body of the profession to watch, through their representatives, the disposal by the Medical Council of those funds, which are directly derived from the registered medical practitioners.

It has been objected to our scheme that it would increase the numbers of the Council. But to effect this is no part of our plan; and, whether you retain the present number of members, increase it, or diminish it, what we ask for is that the proportion of members representing the profession shall be one in four.

A scheme has been put forth at various times, and quite recently, for what has been erroneously called the Representation of the Profession in the Medical Council. That scheme requires that all registered members or graduates of each corporation shall be entitled to vote in the election of its representative. Your Lordship will at once see that this is a mere change in the mode of electing the members chosen by the corporations and universities. It substitutes the many, for the present plan of the selected few, in choosing those members. These members would still be the members of the universities and corporations; they would not, they could not, represent the body of the profession as a profession—a body which can have no interest but the public good and can aim at nothing, save that which will directly promote the general welfare.

Dr. CHADWICK said that, as President-elect of this large Association, he desired to add that his sentiments were in entire unison with what had been stated by Dr. Waters and Dr. Sibson, and he could say that the whole profession would endorse the same views.

The LORD PRESIDENT asked if any practitioner was to be allowed to nominate a candidate for the General Medical Council.

Dr. SIBSON replied that every medical practitioner who could obtain eleven other practitioners to join with him was to have this power.

Mr. FORSTER, the Vice-President, asked how the machinery for this was to be devised.

Dr. SIBSON replied that the Subcommittee, under Dr. Waters, had devised this machinery, and it would be found perfect.

The LORD PRESIDENT said that there was no necessity for the matter to be gone into now; and he was sure the deputation would not expect any definite answer from him that day, for the matter was one which had been brought to his notice for the first time, and it should receive his full consideration. It was a matter of no inconsiderable difficulty, and it had been a great advantage to have seen and heard the deputation.

Thanks were given to his Lordship, and the deputation withdrew.

SEA-AIR AND HEART-DISEASE.

At a meeting of the Ladies' Sanitary Association, held on July 2nd, Mr. Alfred Haviland read a paper on "Sea-Air and Heart-Disease." Dr. Farr presided; and amongst the company present were Sir Thomas Watson, F.R.S., Dr. Richardson, F.R.S., Mr. G. J. Symons, Dr. Aldis, Dr. Garth Wilkinson, Dr. Hayle, Mr. Thornhill Harrison, Mr. J. Greville Fennell, La Comtesse de Noailles, The Hon. Mrs. Cowper, Mrs. Baines, Miss Griffiths, etc.

Mr. Haviland commenced by saying that his paper was the second chapter on the Geographical Distribution of Heart-disease in England and Wales; the first having been read last year at Birmingham, before the Social Science Congress, on which occasion he showed that neither geological site, water-supply, temperature, occupation, food, clothing, nor hereditary tendency, so far as the present generation is liable to be predisposed to heart-disease from its Scandinavian, its Saxon, or its Celtic origin, would account, as general causes, for the strange geographical groupings of the proportional mortality from the disease under discussion.

The statistics of heart-disease, which his maps illustrated, were the result of large numbers, 236,973 deaths from this cause; and the period embraced ten years—1851-60. The author's present object was to show how the mortality from this cause was influenced by propinquity to the sea-coast and the ventilation of the country by the means of the great natural inlets which admitted into the Midland districts the prevailing sea-winds. The average annual number of deaths to every ten thousand persons living was 12.7 throughout England, and this number he made the standard of comparison. All districts, or groups of districts, having a mortality *at or below* this number, were coloured *red*, and all *above* it *blue*. The map of England and Wales so coloured plainly showed, first, that the *red* or *minus*-average districts predominated along the coast-line, and secondly, that they stretched inland wherever an inlet presented itself, which was in the axis of the prevailing winds and the incidence of the tidal wave. The east coast, with its three great inlets of the Humber, the Wash, and the Thames, and comparatively low coast, had a mean mortality of 11.0, or 1.7 below the general average. The western coast, with its great inlets of the Bristol Channel, Cardigan Bay, the estuaries of the rivers Mersey and Dee, Morecambe Bay, and Solway Frith, besides the innumerable inlets along the courses of the Welsh rivers which flow into the St. George's Channel and the Irish Sea, had a mortality of only 10.4, or 2.3 below the mean; whilst the south coast, which was characterised by precipitous cliffs, by having no great inlet, and the mouths and courses of its rivers, as a rule, *at right angles to* instead of *in the axis of* the tidal wave and prevailing winds, had a relatively high mortality, being 13.3, or 0.6 above the mean. Again, when the coastal are compared with the inland districts, a remarkable contrast presents itself. For instance, if a line be drawn from Berwick to the Isle of Purbeck, corresponding to the 2° west longitude, it will cut through thirty-two *plus* average districts out of a total of forty-four—the mean mortality of which is 16.0 or 3.3 above the average—in other words, an increase in the number of deaths to the extent of more than one quarter, a rate which would, in round numbers, have represented in the ten years sixty thousand more deaths than actually took place, had the mortality not been modified by the *minus* average districts along the coast and up the great inlets from the sea. The author then proceeded to show that the geographical distribution of heart-disease taught us on a grand scale the direct advantages of free and unobstructed ventilation; a fact that would recommend itself to an association which had done so much towards the extension of practical hygiene, by the publication of cheap and valuable works on the necessity of thoroughly ventilating our dwellings. Having already given a general idea of the coast line, Mr. Haviland drew at-

tention to the inland *minus* average or *red* groups, which, without exception, follow the courses of the great sea-inlets; some of these penetrated many miles inland, whilst others stretch from one side of England to the other, forming broad belts of red groups which stand out in remarkable contrast to the surrounding *blue* districts, which are characterised by a high mortality. 1. A great horizontal belt stretches across England, from the Irish Sea to the German Ocean, and is uninterrupted by a single *plus* average district; on the west, it follows the course of the river Ribble to its source, and receives the full indraught of the westerly gales; on the east, it follows the river courses of the Humber, the Ouse, the Wharfe, and the Aire to their sources, and receives the full afflatus of the south-easterly winds which blow over the German Ocean; the mean mortality of this belt is 11.3 or 1.4 below the general average. 2. The next great inland group extends inland from the estuaries of the Mersey and Dee, along the red sandstone vale of Shropshire and Staffordshire until it met the Severn and Avon group which it joins, and with it and the *red minus* average districts along the coast of Wales completes a remarkable *red* cordon around the great *plus* average group of Herefordshire, Worcestershire, Shropshire, and Brecknockshire. This group receives the full afflatus of the north-west wind which, when it prevails, sweeps up this vale, which is also influenced by the flux and reflux of the sea and land breezes during the summer. The mean mortality of this group is 11.0, or 1.7 below the average. 3. The next is the Severn and Avon inland group, which runs up the course of these rivers from the Bristol Channel to the centre of England, whence it joins the inland group of the Wash, and thus forms a diagonal belt of low mortality from sea to sea. Through the Wash this extensive area is ventilated by the north-easterly winds, and through the Severn and Avon by the south-westerly, which blow up the Bristol Channel, besides enjoying the bidiurnal change consequent on the flux and reflux of the tidal wave and the sea and land breezes in the summer. The mortality along this group is 11.9, or 0.8 below the average. 4. The next great inland group of *minus* average districts is that of the Thames, which extends from the coasts of Essex and Kent to Kingston in Surrey, and has a mean mortality of 11.1, or 1.6 below the average. In this group we see the great influence of the sea-winds, which are guided up the river by the hills which flank its banks, and of the bidiurnal change of air consequent on the tidal flow and ebb. In conclusion, the author urged the necessity of our availing ourselves of the great practical lesson taught us, in these facts, by making practical use of them in the construction and reconstruction of our streets, the ventilation of which is of such paramount importance to the public health. He strongly pointed out that, as the inlet of the Thames is the great source of health to London, we should be very jealous how we allow its embankment to be encumbered by public buildings, which must act as barriers to the genial influences of the tides and the prevailing winds which sweep over the river, and would, if allowed to do so, blow up the innumerable narrow streets to the north of the Strand and cleanse them of the air-sewage which hangs about the alleys, the *culs-de-sac*, the quadrangles, and narrow streets of that wretched group of districts.

The author exhibited a coloured map of London, which showed that the mortality from heart-disease was greatest in those districts which were prevented from having their streets flushed by the prevalent winds on account of the defective plan of the streets, which were so built as to exclude the healthful influence of our natural street flushers.

Instead of building upon the banks of the Thames, it would be more in accordance with the practical science of the present day, and the dictates of common sense, to provide inlets to admit fresh air to the densely populated districts which, from the defective arrangement of their streets, are now excluded from it. Street-ventilation is a subject of great importance, and can only be carried out successfully by studying the several elements of our climate, and especially the *direction* and *force* of the prevailing winds; we have an accumulation of facts and statistics upon this subject, let them then be used for what they were originally intended, the public good.

Let the London people enjoy their river, the source of their health and wealth, and have its banks clothed with green sward and shady trees, which will prove a finer sight from the river than any architect can rear.

BEQUESTS.—Mr. Peter Maze, of Portland Place, has left the following bequests:—Bristol Infirmary, £1,000; and General Hospital at Bristol, £100.

LONDON HOSPITAL.—The distribution of prizes at the London Hospital Medical College will take place on July 19th, at 2 P.M. The Right Honourable G. Joachim Göschen, M.P., President of the Poor-Law Board, will preside.

ASSOCIATION INTELLIGENCE.

BRITISH MEDICAL ASSOCIATION:
ANNUAL MEETING.

THE Thirty-seventh Annual Meeting of the British Medical Association will be held in Leeds, on Tuesday, Wednesday, Thursday, and Friday, the 27th, 28th, 29th, and 30th days of July.

President—H. W. ACLAND, M.D., LL.D., F.R.S., Regius Professor of Medicine in the University of Oxford.

President-Elect—CHARLES CHADWICK, M.D., F.R.C.P., Senior Physician to the Leeds Infirmary.

An *Address in Medicine* will be delivered by Sir WILLIAM JENNER, Bart., M.D., F.R.S., Physician in Ordinary to Her Majesty, and Physician to University College Hospital.

An *Address in Surgery* will be delivered by THOMAS NUNNELEY, Esq., F.R.C.S., Surgeon to the Leeds Infirmary.

An *Address in Midwifery* will be delivered by T. E. BEATTY, B.A., M.D., Dublin.

The business of the meeting will be conducted under *five* sections:

Section A. MEDICINE.—*Presidents*, W. T. Gairdner, M.D. *Vice-Presidents*, J. T. Banks, M.D.; and J. D. Heaton, M.D. *Secretaries*, T. Clifford Allbutt, M.D., 38, Park Square, Leeds; H. Charlton Bastian, M.D., F.R.S., 81, Avenue Road, London, N.W.

Section B. SURGERY.—*President*, William Hey, Esq., F.R.C.S. *Vice-Presidents*, George Southam, Esq., F.R.C.S.; and W. Stokes, un., M.D. *Secretaries*, W. Fairlie Clarke, Esq., F.R.C.S., 1, Curzon Street, Mayfair, London, W.; and T. R. Jessop, Esq., F.R.C.S., 32, Park Square, Leeds.

Section C. MIDWIFERY.—*President*, Arthur Farre, M.D., F.R.S. *Vice-Presidents*, S. Berry, Esq.; and W. O. Priestley, M.D. *Secretaries*, G. H. Kidd, M.D., 17, Merrion Square East, Dublin; and J. Thorburn, M.D., 333, Brighton Place, Oxford Street, Manchester.

Section D. PHYSIOLOGY.—*President*, J. Hughes Bennett, M.D., F.R.S. *Vice-Presidents*, Lionel S. Beale, M.B., F.R.S.; and A. T. H. Waters, M.D. *Secretaries*, E. Chapman, Esq., M.A., Frewen Hall, Oxford; H. Power, M.B., 45, Seymour Street, Portman Square, London, W.

Section E. PUBLIC MEDICINE.—*President*, W. Farr, M.D., D.C.L., F.R.S. *Vice-Presidents*, E. D. Mapother, M.D.; and A. P. Stewart, M.D. *Secretaries*, G. H. Philipson, M.D., Saville Row, Newcastle-on-Tyne; and A. Wiltshire, M.D., 8, Richmond Terrace, Whitehall, S.W.

TUESDAY, July 27th.

1 P.M.—MEETING OF COMMITTEE OF COUNCIL—Town Hall.

3 P.M.—MEETING OF GENERAL COUNCIL—Town Hall.

8 P.M.—FIRST GENERAL MEETING—Lecture Room, Philosophical Hall.—The retiring President, Professor ACLAND, M.D., F.R.S., will resign his office.—The new President, Dr. CHADWICK, will deliver his Inaugural Address.—The Council's Report will be read, and discussion taken thereon.—Election of General Secretary.—Election of Auditors.—The Report of the Medical Benevolent Fund will be read.—Any motions of which notice may have been given.

WEDNESDAY, July 28th.

8.30 A.M.—PUBLIC BREAKFAST of the Association—Town Hall.

9.30 A.M.—MEETING OF NEW COUNCIL—Town Hall.—Special business: To elect new President of the Council.

10.30 A.M.—Committee on Registration of Diseases—Town Hall.

11 A.M.—SECOND GENERAL MEETING—Lecture Room, Philosophical Hall.—Appoint Place of Meeting in 1870 and President-elect.

12 A.M.—Address in Medicine, by Sir W. JENNER, Bart., M.D.

2 P.M.—MEETINGS OF SECTIONS—Town Hall.—Adjourn at 5.30.

9 P.M.—President's *Soirée*—Victoria Hall, Town Hall.

THURSDAY, July 29th.

10 A.M.—THIRD GENERAL MEETING—Town Hall.—Reports of Committees—Dr. E. Waters will present a Report from the Representation Committee.—Captain Galton's paper on Hospital Construction, with discussion.

2 P.M.—Address in Midwifery, by Dr. BEATTY—Lecture Room, Philosophical Hall.

3 P.M.—MEETING OF SECTIONS—Town Hall.—Adjourn at 5.30.

6 P.M.—PUBLIC DINNER of the Association—Victoria Hall, Town Hall.

FRIDAY, July 30th.

10 A.M.—FOURTH GENERAL MEETING.—Address in Surgery, by

THOMAS NUNNELEY, Esq., F.R.C.S.—Lecture Room, Philosophical Hall.

11 A.M.—MEETINGS OF SECTIONS—Town Hall.

3.30 P.M.—CONCLUDING GENERAL MEETING—Town Hall.

Reception Room.—A room will be opened in the Philosophical Hall, Park Row, as a reception room, on Tuesday, July 27th, at 10 A.M., and on the following days at 8 A.M., for the issue of tickets to members, and for supplying lists and prices of lodgings, and other information.

Members and others who require information with respect to the meeting are requested to make application in this room.

Gentlemen are requested to proceed direct to this room immediately on their arrival—to enter their names and addresses, and to obtain the tickets necessary to secure admission to all the proceedings.

Letters, parcels, etc., may be left in this room, in the care of the clerks.

Arrangements will be made for the receipt and postage of letters in this room.

The General Post-office and the several Telegraph Offices are in Park Row, close to the reception room.

Editor's and Secretary's Room.—A room for the use of the Secretary and the Editor will be provided in the Town Hall.

Gentlemen wishing to communicate with these officials, are requested to make application in this room.

Hotels.—The following are the principal Hotels in the town: those at the head of the list being the most commodious. The Queen's, attached to the Wellington Station; The Great Northern Railway Station Hotel, attached to the Central Station; White Horse, Boar Lane; Victoria, Great George's Street, close to the Town Hall; Bull and Mouth, Briggate; Gill's West Riding Hotel, Wellington Street; Andrews' Temperance Boarding House, 20, Park Place; Beecroft's Hotel, Bishopgate Street, close to the Wellington Station; Golden Lion, Briggate.*

Gentlemen wishing for accommodation in the above, should communicate *without delay* with the managers of the respective houses.

Lodgings.—Members requiring private lodgings, are requested to apply *at once* to Dr. Eddison, Park Square, Leeds, stating the required number of sitting-rooms and bed-rooms, and *about* the terms expected, when the Local Committee will do their best to secure what may be desired.

Places of Meeting.—All Council, General and Sectional Meetings, will be held in the Town Hall, by the kind permission of the Mayor and Town Council of Leeds.

The General Addresses will be delivered in the Lecture Theatre of the Philosophical Hall.

The Annual Public Breakfast, Public Dinner, and President's *Soirée*, will be held in the Victoria Hall, Town Hall.

A *Soirée* will be given by Dr. Heaton, President of the Leeds Literary and Philosophical Society, in the rooms of that Institution, on Friday evening, the 30th.

The Annual Museum and the Annual Library, together with the Exhibition of Surgical Instruments, will be held in the Leeds School of Medicine, Park Street, close to the Infirmary.

Papers.—Gentlemen desirous of reading papers, cases, or any other communications, are requested to give notice of the same to the General Secretary, at their earliest convenience. All papers must be in the hands of the General Secretary, or of one of the Secretaries of the Sections to which the paper belongs, on or before Saturday, July 24th.

Authors are requested to prepare beforehand short abstracts of their papers for publication. The papers (and abstracts) read in the different Sections are to be handed to the Secretaries of the Sections for publication in the JOURNAL of the Association. If, owing to want of space, any papers read cannot be printed in the JOURNAL, they will be returned on application to the office, 37, Great Queen Street, London, W.C.

No paper shall occupy more than *twenty* minutes in delivery. All subsequent speakers not to exceed *ten* minutes.

Gentlemen intending to visit Leeds during the Meeting are requested to send their names *without delay* to Dr. Eddison, Park Square, Leeds.

Annual Museum: Notice to Exhibitors.—Rooms will be provided at the School of Medicine for the Museum, in which it is intended to exhibit all new objects of interest to the profession, such as: 1. New Instruments and Appliances in Medicine and Surgery. 2. New Drugs and new Preparations. 3. New Books—English and Foreign. 4. Pathological Preparations. 5. Photographs, Drawings, Casts, and Models of Pathological Specimens. 6. Models of New Inventions relating to Public Health, etc. 7. New Preparations of Food. The Museum

* By an error in punctuation last week, the locality of some of the hotels was incorrectly stated. The list as here given is correct.—EDITOR.

will be opened on Tuesday Morning the 27th, and will remain open until the Evening of Friday the 30th. All objects intended for exhibition must be addressed "*Care of Dr. Eddison, the School of Medicine, Leeds*:" and be delivered on or before Monday the 19th, and must be removed from the Museum on Saturday the 31st July, or not later than Monday the 2nd of August. No object can be exhibited unless it is accompanied by a written or printed description, and a short reference for insertion in the Catalogue. Intending Exhibitors are requested to apply to Dr. Eddison for any information they require, and to inform him as soon as possible what they intend to exhibit, and how much space they are likely to need. In case any members prefer bringing preparations with them, they are particularly requested to forward short descriptions beforehand, in order that they may appear in the Catalogue. Adequate space and the necessary fittings for properly exhibiting the objects sent will be provided; but all expenses connected with packing and carriage, and all risk from injury or loss, must be borne by the Exhibitors.

Notices of Motion.—The following notices have been given.

Dr. DAVEY: To alter Law VIII, by substituting the word "twenty" for "ten" members, to be elected members of the Committee of Council.

Mr. GAMGEE: That a Committee be appointed to inquire into the income and expenditure of the British Medical Association, with a view to ascertain if its resources admit of being more efficiently employed, than they now are, for the advancement of science and for the promotion of the material and social interests of the medical profession.

The Rev. Dr. BELL has given the following notices.

1. To move that, if the first general Meeting for business be held in the evening, it be adjourned at ten o'clock, if the business be not concluded by that hour.

2. To call attention to the "Financial Statement" given in the JOURNAL of 17th April: (a) in relation to the items of expenditure and income in the publication of the JOURNAL; (b) the stipends of the officers, especially that of the General Secretary.

3. To ask, in reference to the Meeting of the Committee of Council of 9th June, 1869, second resolution (a) whether the cheque books of the Local Secretaries, as well as of the General Secretary, be included in the audit; (b) in whose name the General Secretary keeps the banking account of subscriptions received by him.

4. To move that the Ten (or Twenty, according to Dr. Davey's notice) elected members of the Committee of Council, be not eligible for re-election, after serving two (or three) years, in greater number than one-half, until they have been non-members for a like period.*

5. To draw attention to the propriety of not electing an Editor of the JOURNAL on the eve of the Annual General Meeting, and making arrangements for alterations in the JOURNAL;† also to the advisability of nominating at the previous General Annual Meeting the Gentlemen who are to read Addresses at the next Annual Meeting.

6. To suggest that the Notices of motion for the General Annual Meeting be sent direct to the Editor instead of through the General Secretary.

Papers.—The following Papers have been promised:—

S. Hey, F.R.C.S. On the Beneficial Results of Undesigned and Accidental Hæmorrhage in certain cases.

P. C. Little, F.R.C.S.I. On Railway and other Accidents; with Cases and Observations.

E. Gaylor, L.R.C.P. On the Professional and Commercial Abuses of the Club System.

Lawson Tait, L.R.C.P.Ed. On Fungous Tumour of the Dura Mater. On Idio-Muscular Contraction.

J. Braxton Hicks, M.D., F.R.S. On the Use of the Intra-Uterine Douche in Offensive Lochia, as a rule of practice. Cases showing the use of Perchloride of Iron in Flooding.

T. P. Heslop, M.D. How do the Sick Children of the Poor obtain Medical Attendance?

R. Hibbert Taylor, M.D. A case of Poisoning with Extract of Belladonna; with detailed account of *post mortem* appearance.

Wm. Squire, L.R.C.P. On the Temperature-Variations occasioned by Vaccination, and its effects upon the Health of Infants.

A. S. Myrtle, M.D. On Hydro-Therapeutics—the resources of Harrogate specially considered.

* This is an alteration of one of the Laws of the Association, and therefore cannot be brought forward without giving two months' notice, in accordance with Law 21:—"Any member wishing to propose a new law, or an alteration of an existing law, must send notice to the Secretary at least *two* months previous to the annual meeting, and specify the change proposed. The Secretary shall immediately cause such notice to be published in the JOURNAL, which publication shall be repeated three times at least, and it shall be announced in the Report of the Council."—T. W. W.

† This is already provided for by a resolution of the Committee of Council, passed at their meeting on June 9th. The election of Editor will take place after the Leeds meeting, at a time to be there announced.—T. W. W.

Vicent Jackson, M.R.C.S. On the Hypodermic Administration of Alcoholic Stimulants.

T. C. Allbutt, M.A., M.D. On the Propagation of Enteric Fever.

John Birkett, F.R.C.S. On the Causes of Death after Amputations of the Limbs in Hospitals.

C. B. Fox, M.D. Remarks on Ear-Cough, and its mode of production.

J. M. Fothergill, M.D. On Uræmic Diarrhoea.

F. E. Anstie, M.D. On the Limits of Stimulation.

J. Russell Reynolds, M.D. On Certain Forms of Paralysis depending on Idea.

J. Russell Reynolds, M.D. On the Treatment of Rheumatic Fever by Perchloride of Iron.

J. B. Sanderson, M.D. On the Practical and Pathological Bearing of Recent Researches as to the Artificial Production of Tubercle.

J. B. Sanderson, M.D. On the Various Methods of Measuring and Recording the Movements of the Chest, for the purposes of Clinical Observation.

C. G. Wheelhouse, F.R.C.S. On the Use of the Probe Dilator in Operations Involving the Posterior Portions of the Urethra.

T. P. Teale, M.A., F.R.C.S. A Demonstration of Rectangular Stumps, by Patients, Photographs, and Casts. [Mr. Teale will be glad to receive contributions of patients, photographs, and casts of rectangular stumps from as many different sources as possible].

H. Blarc, M.D. On Animal Vaccination.

W. S. Playfair, M.D. On the Treatment of Chronic Uterine Catarrh.

C. A. Hemingway, M.R.C.S. On the Reduction of Compound Fracture, with Protrusion of Bone, by the Use of the Lever.

M'Call Anderson, M.D. On some of the more recent Methods of Treating certain Diseases of the Skin.

W. H. Broadbent, M.D. A brief account of a recent Investigation of the Structure of the Cerebral Hemisphere, with remarks.

Edward Ballard, M.D. On the Evils arising from the present mode of taking Medical and Scientific Evidence in our Courts of Justice.

James Cumming, M.D. On some Points in the Pathology of Delirium Tremens.

Richard Rendle, M.R.C.S. On the Use of Protoxide of Nitrogen in General Surgery, and on a New Mode of Producing Rapid Anæsthesia.

Holmes Coote, F.R.C.S. On Hospitalism.

T. Holmes, F.R.C.S. On Hospitalism.

W. F. Teevan, B.A., F.R.C.S. Stricture of the Urethra: its Prevention, Early Detection, and Best Method of Treatment.

Victor de Méric, F.R.C.S. On cases of Syphilitic Affection of the Third Nerve, producing Mydriasis with and without Ptosis.

Edward Lund, F.R.C.S. On the Use of Antiseptic Cere-cloth for Covering Wounds.

W. Stokes, Junr., M.D. On Temporary Deligation of the Abdominal Aorta.

W. Stokes, Junr., M.D. On a New Operation for Hare Lip.

D. Nicholson, M.D. On the Body Weight and Urea in a case of starvation.

G. H. Philipson, M.D. On the Registration of Diseases.

C. B. Taylor, M.D. Brief Notes (on Cataract Extraction) from Berlin, Wiesbaden, and Utrecht.

Protheroe Smith, M.D. An Aid to Parturition, and to the Treatment of Displacement of the Uterus by a new Mechanical Appliance.

T. R. Jessop, F.R.C.S. Short Notice of a fatal case of Emphysema produced by violent Screaming.

R. T. Land, M.D. A case of Femoral Aneurism successfully treated by Ligature of the External Iliac Artery.

C. H. Moore, F.R.C.S. On certain Causes of Mammary Cancer.

Henry Lee, F.R.C.S. On Albumen in the Urine after Surgical Operations.

T. J. Dyke, F.R.C.S. On [the] Practical Working of the Sanitary Act of 1866, and the Diseases Prevention Act of 1865.

C. H. F. Routh, M.D. On the Treatment of Certain Forms of Uterine Cancer.

J. Wallace, M.D. On Hydrothorax and Empyema; Thoracentesis and Forcible Extraction of the Fluid by Suction; with Cases.

Staff-Surgeon T. B. Moriarty. On the Absence of Typhus and Typhoid Fever in Tropical Africa.

G. H. B. Macleod, M.D. On Amputation at the Ankle-joint.

G. H. B. Macleod, M.D. On the Immediate Treatment of Stricture.

G. Southam, F.R.C.S. On some of the Advantages of Tapping in the Treatment of Ovarian Tumours.

C. B. Fox, M.D. Remarks on Clinical Thermometers.

John Mulvany, M.D., R.N. On Oleum Petrolii as a Medicinal Agent.

P. M. Braidwood, M.D. On Animal Vaccination.

J. Mulvany, M.D. On Permanganate of Potassa in Neuralgia and Crude Tubercle.

James Braithwaite, M.D. On a mode of applying the Midwifery Forceps productive of less pain to, and disturbance of, the Patient, than that usually adopted.

R. Elliot, M.D. Is the Adjustment of the Eye to Vision at various distances dependent on the action of the lens or other similarly acting component parts of the Eyeball by refractifying and focifying light, and by the magnification of objects?

R. Elliot, M.D. Do the Movements of the Iris by excluding the peripheral rays of the optic pencil, and admitting only such as are practically parallel, not claim our attention in explanation of the adjustment of vision to various distances?

W. P. Bain, M.D. On a Portable Spirometer, with a short demonstration of the different modes of Artificial Respiration.

J. R. Leake, M.R.C.S. On the Treatment of Palpitation with Delirium by Digitalis.

G. Oliver, M.B. The Atmosphere of Towns in its Sanitary Aspect.

* * No Paper shall exceed *twenty* minutes in the reading, and all subsequent speakers must not exceed *ten* minutes.

All speakers at the general meetings must not exceed *ten* minutes each.

T. WATKIN WILLIAMS, *General Secretary*.

13, Newhall Street, Birmingham, July 15th, 1869.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held in London, July 12th, 1869.

PRESENT:—Dr. Sibson, F.R.S. (in the Chair); Mr. Bartleet; Dr. Bryan; Mr. Ceely; Dr. Chadwick; Mr. Clayton; Mr. Edye; Dr. Falconer; Mr. Hodgson; Mr. Nicholson; Dr. Simpson; Mr. Heckstal Smith; Mr. Southam; Mr. Steele; Dr. E. Waters; Dr. Wilkinson; and Mr. T. Watkin Williams (General Secretary).

The following resolutions were unanimously passed.

1. That the Programme of the Annual Meeting be adhered to.

2. That all speeches at the General Meeting at Leeds be limited to *ten* minutes.

3. That, in reference to the last clause presented at Oxford by Dr. Bell's Committee, the Treasurer be requested to ascertain, for the information of the Committee, the greatest number of JOURNALS issued during the year, as well to those who have paid their subscriptions as to those in arrears.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.

13, Newhall Street, Birmingham, July 14th, 1869.

CUMBERLAND AND WESTMORLAND BRANCH: ANNUAL MEETING.

THE annual meeting of the Cumberland and Westmorland Branch was held at the New Crown Hotel, Penrith, on Wednesday, the 23rd of June, 1869, under the Presidency of MICHAEL W. TAYLOR, M.D., of Penrith. There was a large attendance of members from both counties. The minutes of the preceding meeting were read and confirmed.

Report of Council.—The Secretary, Dr. H. Barnes, read the Report of the Council.

"The Council of the Cumberland and Westmorland Branch of the British Medical Association, in presenting their first annual report, congratulate the members on the great success which this newly formed Branch has met with. During the past year, the Council have elected twenty new members. Two have been removed by death, and one has left the district, thus leaving at the commencement of our second year seventy members—nearly two-thirds of the total number of medical men practising in the two counties. One of the gentlemen lost to us by death was Dr. Fidler of Whitehaven, an old established and much respected practitioner, most active in promoting the interests of the Branch, and a regular attendant at all the meetings. The Council beg to express their sympathy with his family and the profession in Whitehaven at the loss which they have sustained by his death.

"*Increase of Members.*—The number of new members who have joined us during the past year furnishes the best indication both of the necessity and usefulness of such a Society. This accession of strength entitles this Branch to an additional delegate on the General Council of the Association; and the Council of this Branch were much pleased with the gratifying reception which the representatives of this Branch—Dr. Tiffen (Wigton) and Dr. Campbell (Carlisle)—met with at the Oxford meeting last year. In addition, the Branch is thus made one of the most flourishing in the Association, there being only ten larger and many smaller in existence. These results should lead to increased in-

dividual efforts to augment our numbers, and thus add to the usefulness of the Society.

"*Meetings held.*—At two intermediate meetings held in October and April, as agreed upon at the inaugural meeting last year, a number of interesting papers and cases were communicated; and at the last meeting a petition to Parliament was adopted in favour of a Direct Representation of the Profession in the General Council of Medical Education. Through the efforts of individual members of the Branch, the attention of all county and borough members of Parliament residing in the two counties have been favourably directed to this subject; and when the Medical Act Amendment Bill comes forward in the House of Commons, these representations cannot fail to be of some effect.

"*Parliamentary Bills Committee.*—Your Council being invited to co-operate with the Parliamentary Bills Committee of the Association, have nominated W. B. Page, Esq., of Carlisle, as the representative of the Branch on that Committee, and have to request that any member interested in any amendment of any Bill relating to medical or sanitary subjects, will communicate with that gentleman, so that his representations may be duly laid before the Committee.

"*Statement of Accounts.*—The Council have examined the treasurer's books, and find that the amount received from subscriptions during the past year has been £8, and the expenditure £7:7:5, leaving a balance in hand on the 19th of June of 12s. 7d. This expenditure includes all the expenses of organising the Branch, and all expenses connected with the preliminary meeting prior to its formation last year.

"Signed on behalf of the Council,

"M. W. TAYLOR, M.D., *President-Elect*.

"HENRY BARNES, M.D., *Honorary Secretary*."

On the motion of Dr. DODGSON (Cockermouth), the Report of the Council was adopted.

Votes of Thanks were accorded to the retiring President, the Secretary, and the other members of Council, for their services during the past year.

Office-bearers.—The following gentlemen were elected as office-bearers for the ensuing year, viz.: *President-elect*, T. F. P'Anson, M.D. (Whitehaven); *Honorary Secretary and Treasurer*, H. Barnes, M.D. (Carlisle); *Members of Council*, T. S. Clouston, M.D.; W. Reeves, Esq.; R. Elliott, M.D. (Carlisle); W. T. Greaves, Esq. (Penrith); T. Green, M.D. (Kendal); and H. Dodgson, M.D. (Cockermouth).

The following gentlemen were elected as the *Representatives of the Branch on the General Council*:—R. Elliot, M.D.; T. S. Clouston, M.D.; T. M. Fothergill, M.D.; and H. Barnes, M.D., *ex officio*.

Some formal alterations in the rules were agreed to on the motion of Dr. Clouston.

President's Address.—Dr. TAYLOR, on taking the chair as President, delivered an inaugural address. He began by returning thanks for the honour of having been chosen as their President, and paid a tribute to his predecessor in the chair, the venerable Dr. Barnes of Carlisle, who was elected as the first President of the Branch, and who may be regarded as the patriarch of the profession in the north of England. Dr. Taylor then proceeded to draw a parallel of the past and present systems of opinion in medicine. In the first part of his discourse, he referred to the systems and codes which swayed medical progress more or less in posterior times, and the errors of the deductive methods of logic, and the worship of authorities. In the second part of his address, he showed the foundation of the rational and eclectic principles and practice now prevailing; the adoption of the inductive method, and the progress of exact observation, in recent times, and the renunciation of hypotheses and systems. He illustrated how the practice in different diseases had been tacitly changed by the body of the profession in deference to a juster pathology, and improved knowledge of final causes in disease, gained in modern times; how, by the many physical aids to our senses, enlisted in medical research, the etiology, diagnosis, and history of disease, were assuming more and more the certainty and exactitude of a science; but he warned his hearers against regarding too exclusively lesions and the results of diseased action, and overlooking the succession of symptoms which precede them, and by reposing too confidently on the powers of Nature, or an expectant treatment only, allowing medicine to be shorn of that attribute which lends a charm to its practice, and by which alone it is technically estimated by the world; viz., its power of healing, or the art of therapeutics. He expressed a fear lest the advanced pathology of the modern school, regarding exudation as the essence and necessity of inflammation, and decrying the use of antiphlogistics, was running too much into a fashion of undervaluing the resources of our art, and time-honoured remedies. He referred to the controversy of blood-letting in pneumonia; and pronounced strongly his conviction that in country districts, away from the pernicious influences of towns, amid a vigorous and primitive population, pneumonia

still exhibits to the full the sthenic characters described by Cullen and Gregory; and that, under such circumstances, and early in the disease, blood-letting is beneficial. Another noble feature in medical progress was indicated; viz., its application towards the prevention of disease—in which direction, in the future, we may look for its greatest influence: in sanitary measures for the abatement of epidemics; in the destruction within and without the body, of miasmatic and zymotic poisons; in hygiene; in diet and food medicines, in combating the tendency to those degenerations of tissues and organs which enter so largely into the causation of mortality at the present day. Dr. Taylor concluded by congratulating the members on the successful establishment of an Association, which for the first time in this large district has afforded opportunities for practitioners assembling together for intercommunion, and the discussion of the results of their medical observation and experience.

Medical Officer of Clubs.—Dr. HENDERSON (Kirkby Stephen) introduced the subject of the remuneration of medical officers of sick clubs and benefit societies, which led to an interesting and prolonged discussion, in which the President, Dr. Dodgson, Mr. Taplin, Dr. Henry, Mr. Reeves, Dr. Maclaren, Mr. Greaves, and Dr. Dickson took part.

On the motion of Mr. REEVES, a committee was appointed to inquire into the subject, and to report to a future meeting; the committee to consist of Dr. Henderson of Kirkby Stephen, Mr. Taplin of Kirkoswald, Mr. Hall and Mr. Reeves of Carlisle, and Dr. Dickson of Whitehaven.

Medical Advertising.—Dr. FOTHERGILL proposed a resolution on indirect medical advertising, which was seconded by Mr. REEVES; but, owing to want of time, its consideration was postponed.

Dinner.—After the conclusion of the meeting, many of the members dined together, Dr. Taylor occupying the chair, and Dr. I'Anson, President-elect, the vice-chair.

CORRESPONDENCE.

ELECTIONS AT THE COLLEGE OF SURGEONS.

SIR,—Now that “the battle is over, the victory won,” it is surely time that no more “after-carnage should be done”; and I must beg your indulgence for one of the victims of the fray, who has not only been somewhat sharply, if not rudely, handled at the time, but who now, like a gladiator of old when wounded and down, appears in danger of being remorselessly immolated.

For several years past, I have been requested to come forward for the Council of the College of Surgeons; but I felt that there were so many men, my seniors, who had at least an equal right with my myself to any honour that the surgical profession has in its gift, that I determined not to present myself to the Fellows until those claims had, in my opinion, been satisfied; and, as far back as 1862, I wrote to the journals to that effect. This year I was again most strongly urged, and the necessary papers were brought to me by a zealous friend. I signed them in a moment of weakness; and I then found that I had immersed myself in a “sea of trouble.” I had, in the first instance, to procure the signatures of nine Fellows; six to the effect that I was a fit and proper person for the honours I sought, and three to certify that I did not practise as an apothecary.

I was thus obliged to apply personally or by letter to nine friends. Here was the commencement of a canvass, if not by the candidate, at least by his friends. Every one of those to whom I spoke had questions to ask, principles to test, advice to give, assistance to offer. Had this been all, I could have answered the one, satisfied the other, accepted the advice, and gratefully declined the proffered aid. But, to my surprise, when I spoke to two or three most excellent friends and worthy Fellows, on whose votes, if not support, I had fully relied, I was met with a serious countenance, an ominous shake of the head, or a blank look of commiseration at my ignorance of how affairs are managed at college elections, and with the invariable remark, “My dear fellow, you are *too late*, you haven’t a chance,” or perhaps with the more homely but not less cordial phraseology, “My dear fellow, if you had only come forward last year, you might have walked over the course with a pipe in your mouth, but this year, I am so sorry; however, next time, etc.”

I found that numbers of my friends were pledged. They expressed their regret; but one was pledged to A, another to B and C; had been so for months—for years even. It was in vain I gently hinted that each Fellow had three votes, and that I might perhaps have one of the spare ones. It was useless. I found that many most excellent men, who most sincerely had the interest of the College and of the profession at heart, had been pledged for months to support one or two men, *irrespective of any other candidate who might come forward.*

I thought, indeed, that I was, as I had repeatedly been told “too

late”; and that, although the election did not take place for the next six weeks. I had determined to withdraw my papers, when some of my more intimate and valued friends dissuaded me; and, finding that the Fellows had already, and for months past, been most actively canvassed for other candidates, and that many had been pledged since previous elections, they determined to do their best to secure my seat at the Council Board. Amongst these, none was more anxious for my success than my former pupil and my old and valued friend, Mr. Berkeley Hill, who, with that zeal and energy, that generosity of feeling and kindness of heart that characterise all his actions, wrote not only to many mutual friends but, unfortunately, as it turned out, to some with whom, although classed among mine, he was not personally acquainted. This letter was a simple statement of facts; and amongst others, that, as exertions were being made for other candidates, I should be passed by unless my friends supported me. It contained no request for a vote—and was merely meant as a summons to my friends to support me. I may observe that I had not seen this letter before it was sent out; but I confess that, when it was sent to me by a friend, and I did read it, I saw nothing to object to in its tone, and, indeed, in other respects it appeared to me to contrast most favourably with the numerous and strongly worded epistles that I have on most former occasions had addressed to me, urging me to vote for and to support particular candidates. But, surely, since the celebrated letter which Mr. Pickwick on a well-known occasion wrote so “injudiciously” to Mrs. Bardell, no letter has attained greater notoriety, or has been more incessantly used, than that “injudicious” one so kindly written, and in so friendly a spirit, on my behalf.

Had Mr. Berkeley Hill only remembered that which every school-boy knows, but which so many wise and good men have forgotten, to their cost, that “*littera scripta manet*”; had he contented himself with whispering his seductive strains into the coy but, as it proved, the not wholly unwilling ears of the Fellows; had he adopted the more usual and safer course of an active personal house-to-house canvass before, and of button-holding his friends at the College on the day of election, he would have escaped that outburst of virtuous indignation with which he has been assailed, and he would, possibly, have better served his friend at less risk to himself.

No one can deplore more sincerely than I do the existence of canvassing at elections of the College of Surgeons, or, indeed, in any other institution, professional, political, and social. No doubt, every elector ought to be influenced by the highest and purest motives. He should give his vote to the best man, without favour or affection; he should not allow professional rivalry, personal animosity, the jealousy of schools, or the influence of party feeling to warp his judgment or disturb his choice. But as we do not exactly live in an Utopia, as all the influences that I have just named are tolerably rife amongst us, the only course open to those who desire the success of a candidate, whether it be on public or on private grounds, is to counteract these opposing influences, by securing him all the support in their power. This, doubtless, is very lamentable; but it is a system that has not only existed in college elections, as every Fellow in a prominent position must know, for many years past, in fact, ever since the Fellows woke up to a sense of their power in the College; but it is forced upon the candidate and his friends by the very mode of election at the College of Surgeons—by which a candidate for the Council has to seek his own election—to send to the College for the necessary papers and to obtain nine signatures to these. The application necessary for this preliminary step constitutes in itself an act of canvass, and inaugurates the whole system. There are, in my opinion, only two methods by which canvassing can be abolished at the College of Surgeons. The first is by allowing all country Fellows to vote by properly attested voting papers. But for this a new charter would be required. If adopted, I believe, however, that, owing to the large size of the constituency, it would be effectual—for, out of the 1,400 Fellows not 400 reside in the Metropolitan District. The other plan would be to grant the power of meeting to the Fellows. As this is a question of bye-law only, it may possibly be obtained from or granted by the Council.

The College of Physicians has been adduced as an example of an institution with a popular element, in which the elections take place without canvassing, which is there a disqualification to a candidate. But the cases of the two Colleges are altogether dissimilar. In the College of Physicians, the candidate is nominated by the Council, and his name is then submitted to the Fellows, a small, compact, and chiefly Metropolitan body, for election; whilst, in the College of Surgeons the candidate has to seek his own election, to send to the College for papers, to obtain nine signatures to them, and then, to leave the rest in the hands of his friends amongst the Fellows. I am, etc.,

July 10th, 1869.

JOHN ERIC ERICHSEN.

* * Mr. Erichsen’s defence of a friend who has exposed himself to

some degree of obloquy on his account, is only what could be expected from an honourable man. We can assure him that we have no intention of "remorselessly immolating" Mr. Berkeley Hill, whom a single indiscreet act does not prevent us from regarding as a most worthy and useful member of the profession. Mr. Erichsen makes out plainly, that his friends were obliged, in his defence, to have recourse to a certain amount of canvassing: but his concluding remarks shew that he is quite at one with us as to the evil of the system.

DEBATING COLUMN FOR DISCUSSION OF PAPERS, ETC., PUBLISHED IN THE "JOURNAL".

THE TREATMENT OF DELIRIUM TREMENS.

SIR,—In the report on the Treatment of Delirium Tremens, I see no mention made of tincture of sesquichloride of iron as a remedy. I have found such marked benefit from its employment in half-drachm doses, combined sometimes with small quantities of tincture of digitalis and solution of morphia, at others with infusion of quassia, that I think it quite worthy the attention of the profession.

I allow no stimulants; as much food as can be taken; iced drinks; and, if vomiting be present, mustard to the epigastrium. In the few cases where I have yet had the opportunity of employing this plan of treatment, I have had every reason to be most satisfied. I am, etc.,

St. Leonard's, July 1869.

GEORGE F. GILES.

THE PROVIDENT SYSTEM AS A REMEDY FOR HOSPITAL ABUSES.

SIR,—Your article of July 3rd, entitled "The Provident System as a Remedy for Hospital Abuses", contains most important suggestions. The days of the privileged system in our hospitals are evidently numbered; and the question before the profession is, What shall take its place? Some suggest the free system; but I think any one who has read your able and exhaustive articles on the working of this system at the Royal Free Hospital (BRITISH MEDICAL JOURNAL, July 4th, July 11th, and July 18th, 1868), will be convinced that it is not effectual in checking the admission of patients who are able to pay regular fees, and that it affords no remedy for the excessive and superficial work required in out-patient departments, which is of such doubtful advantage to the patients, and so unsatisfactory to the physicians and surgeons who prescribe for them. It might be added to the advantages of the provident system mentioned in your article, that the patients would attach themselves to particular hospitals, and their medical antecedents would be known. Thus much time would be saved in making correct diagnoses, even though the out-patient rooms continued to be thronged as they are at present.

The provident system is well worthy of the attention of the Committee of the Metropolitan Counties Branch appointed to make suggestions for hospital reform; the combined action of our hospital authorities is essential for the success of the provident system. The want of combined action has been the rock on which many good provident dispensaries have broken up.

I am, etc., M.D.

London, July 6th, 1869.

ON THE USE OF OBSTETRIC INSTRUMENTS.

SIR,—Having read with much interest Dr. Swayne's remarks on the use of the midwifery forceps in the BRITISH MEDICAL JOURNAL for May 29th, I thought it might be of some service to contribute the evidence afforded by my practice of the truth of his deduction, that that operation is not necessarily a dangerous one.

In attending 1,587 labours at the full term of gestation, I have also used the forceps 90 times, one in 17.63 cases, but in no instance has the patient died, or been placed in any danger, through their use. Of the children, 8 were still-born—1 in 11. Dr. Swayne justly observes that two of the deaths, which occurred in his practice after the use of the forceps, were not traceable to their influence. Might he not have said the same of the other two cases—those which died of puerperal fever? for how could the forceps cause the fever? It is, on the other hand, easy to understand how a protracted delay in their use should lead to it by allowing the irritability of the uterus to become exhausted, and consequently its contraction after labour imperfect, so as to facilitate the absorption of septic fluids into blood rendered peculiarly obnoxious to their influence by more than an ordinary amount of effete matter, the result of the previous unusual exertion. What danger can there be in the gentle introduction of the blade of the forceps, if its point be kept close to the head of the child? The only difficulty I have found in the application of the instrument, has been in cases where the head is firmly impacted high up in the inlet to the pelvic cavity. It is then

sometimes not easy, after passing up the forceps, to slide the blades laterally over the head so as to make them parallel. The chief point to be observed in overcoming this difficulty has seemed to me to be to keep the handles as far back as possible.

When employment of the forceps is necessitated partially by rigidity of the perinæum, much care is necessary to avoid laceration of that part; but even in cases when I thought while it was distended that this would almost certainly happen, I have succeeded in avoiding it by abstaining altogether from direct traction, and gently and gradually turning the head on its axis till the handles of the forceps came into contact with the mother's abdomen.

In all cases I have used the long forceps with a lateral curve. With them there is no need to move the patient up to the edge of the bed.

With regard to the time at which I use the forceps: If the obstruction is at the inlet to the pelvis, I wait till the uterine action begins to fail, till the abdomen becomes tender or pain in it constant, or till the patient is plainly becoming exhausted, as the case may be; if at the outlet or in the cavity of the pelvis, till it appears that the labour would not be completed naturally, or only after very prolonged and painful efforts, that is, for one or two hours after all progress has ceased, according to the severity of the pains.

I may say, in conclusion, that I have used the forceps in 20 or 30 more cases besides those which I have mentioned, with equally favourable results; but I did not include them, because I have no notes of the cases.

I am, etc.,

E. G. GILBERT.

Bilston, June 1869.

SIR,—Nearly ten years ago, I attended the systematic lectures of Professor Simpson; and, if I may quote from memory, I remember the value he placed upon the styptic powers of the perchloride of iron and glycerine in unavoidable and accidental hæmorrhage; and, indeed, in all hæmorrhages arising from the uterus or maternal passages. Applied with a sponge, as he directs, I can affirm, from considerable experience, it is perfectly safe; but, I fear, notwithstanding the high authority of Dr. Barnes, and the practical examples of Mr. Norris, that the dread of injecting air into the uterine sinuses will debar the profession from applying the remedy in the manner which they recommend.

While agreeing with others that contraction of the uterus stops *post partum* hæmorrhage—a fact of almost every day observation—I shall abstain from forming any conclusion regarding the statement made by Dr. Barnes, that he has "observed that the hæmorrhage has stopped although the uterus has remained large and uncontracted." Was there not *sufficient contraction* to clot the openings of the uterine sinuses, or did Nature falsify her usual mode of procedure by an accidental anomaly, by peculiar causes, anatomical or physiological? In reading the discussion on this subject, I was struck with the horror of the situation so graphically put by Dr. Barnes—for it calls up the memory of old experiences—when he asks, "Has not Mr. Steele, like many others, given ergot, deluged the patient with cold water, filled the vagina with ice, and still stood over the flooding woman, compressing the uterus and aorta till exhaustion compelled him to give way to another, who in his turn has been tired out, and in spite of all, has not the woman bled to death?" And a little farther on he continues: "I, like Dr. Norris, have seen patients sink after the use of the perchloride of iron", the cause being "the remedy came too late." But there is a class of causes—not, that I am aware of, mentioned in books—which will account for this failure; namely, the adherence and retention of a very small portion of the placenta or membranes, *in utero*, so small that, on examining the expelled placenta and membranes, the absence of any part could not be detected. During the past winter, I have seen three such cases: the uterus was in all contracted, with no laceration of cervix or vagina, and yet the hæmorrhage was fearful. The first case I saw in consultation with another medical man, who had faithfully done all Dr. Barnes mentions, and who supposed his patient had a fibroid tumour of the uterus, from the peculiar feeling communicated to the finger on examining the uterine cavity. I had repeatedly seen such cases, and at once removed the supposed fibroid tumour, and shewed it to be part of the placenta, hardly as large as a walnut. Hæmorrhage at once ceased, and the pale, almost pulseless and dying woman, rapidly rallied. My second case arose from *adherent* retention of a small portion of membrane; and the third occurred in the hands of my partner, Dr. Bruce, who recognised the cause of hæmorrhage, and in like manner removed it. To detect an adherent portion of membrane is more difficult than a part of the placenta; and the smaller the retained portion the greater will be the difficulty, and *vice versa*. To apply the perchloride without removing an ascertained cause of hæmorrhage would not be correct practice; hence my remarks.

I am, etc.,

J. WALLACE, M.D. Edin.

Great George Square, Liverpool.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Monday, July 5th.

NURSES IN IRISH DISPENSARIES, ETC.—The Earl of Kimberley presented petitions in favour of providing a supply of skilled nurses attached to the dispensaries, poor houses, and hospitals in Ireland, from medical practitioners of the dispensaries, poor houses, and hospitals in Ireland, and from medical practitioners of Cork and of Kilkenny.

HOUSE OF COMMONS.—Friday July 2nd.

THE CATTLE PLAGUE IN ROUMANIA.—Mr. Turner asked the Vice President of the Committee of Council on Education whether any steps had been taken to procure a report by a competent veterinary surgeon on the cattle plague in Roumania, in accordance with a suggestion made by Her Majesty's consul at Jassy, in a dispatch dated January 1st, 1869. —Mr. W. E. Forster said the dispatch referred to was duly considered by his noble friend the President of the Council, and, after having fully weighed the matter and the other information the Government possessed on the subject, he did not think it was a case in respect to which the Treasury should be asked to go to the expense of procuring a report.

Monday, July 5th.

MEMORIAL OF FARADAY.—In reply to Dr. Lyon Playfair, Mr. Lowe justified his refusal to propose a grant of public money towards the erection of a statue of the late Professor Faraday by a reference to practice; the result of which was that, "putting aside kings," the National Exchequer had contributed to the erection of only two statues within the limits of the metropolis—those of Lord Nelson and Sir B. Franklin. The Chancellor of the Exchequer concluded his remarks with a declaration that "that nation is not in the ascending scale that is prodigal of rewards."

REPORT ON THE VENTILATION OF PRISONS.—Mr. Lusk asked the Secretary of State for War if he could lay upon the table of the House the report to the Army Sanitary Commission of the experiments in ventilation of prisons made by Dr. de Chaumont (Assistant Professor of Hygiene at Netley) in Horsemonger-lane, Chatham, etc.—Mr. Cardwell said this report had been considered by the Army Sanitary Committee, and was about to be sent to the Home Office. Until the Home Office had considered it, it would be premature to lay the report upon the table of the House.

THE MEDICAL OFFICERS' SUPERANNUATION (IRELAND) BILL.—The House went into Committee on this Bill.—Mr. Ayrton moved the addition of words at the end of Clause 2, providing that no payments towards the objects of the Bill should be made out of moneys voted by Parliament.—Mr. Synan protested against the Amendment.—The Committee divided with the following result. For the amendment, 44; against it, 10; majority, 34. The provision was therefore added to the Bill, which passed through Committee.

Wednesday, July 14th.

STILLBORN CHILDREN.—Dr. Brewer asked the Secretary of State for the Home Department whether he had any information on which he could rely of the large and still increasing number of infants who were alleged to be buried as "stillborn;" and whether it was the intention of Her Majesty's Government to render the registration of the burial of such children in all cases compulsory.—Mr. Bruce said he was afraid the information possessed by the Home Department on this subject was defective. The only answer he could give to the question was that this subject formed an important part of the inquiry being carried on by the Sanitary Commission, the members of which were prosecuting their labours with a view to remedy the defects in the Act.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 1st, 1869.

Ashby, Alfred, Staines
Hitchcock, Henry Knight, Devizes

At the same Court, the following passed the first examination.

Madeley, E., King's College
Smith, W. R., St. Bartholomew's Hos.

As Assistants in compounding and dispensing medicines.

Cape, J. S., Wellington
Michell, F. J., Falmouth
Robson, J. C., Darlington

Mitchell, W., Westminster Hospital
Williams, J., University College

Sequeira, E. C., Brazil, South America
Wilkinson, T., Bishop Auckland

On Thursday, July 8th.

Ballantine, G., Westbourne Square, W.
Drew, A. S., Stow-in-the-Wold
Hallam, Arthur, Sheffield

Hudson, H. E., Cranbrook
Jones, Richard Mansell, Denbigh
Manby, Alan Reeve, East Rudham

At the same Court, the following passed the first examination.

Deshon, F. P., Middlesex Hospital
Leigh, J. T., Charing Cross Hospital
Lucas, T. P., Westminster Hospital

May, Thomas, Westminster Hospital
Mugliston, H. B., London Hospital
Parsons, S., University College

As Assistants in compounding and dispensing medicines.

Airey, George, Wigan
Chilwell, Joseph, Tamworth
Masson, George, 43, London Bridge

Stooke, Arthur, Old Ford
Twemlow, Richard, Manchester

MEDICAL VACANCIES.

THE following vacancies are declared:—

ABERDEEN ROYAL LUNATIC ASYLUM—Assistant Medical Officer.
ADDENBROOKE HOSPITAL, Cambridge—Physician.
BALLYSHANNON UNION, co. Donegal—Medical Officer for the Ballintra Dispensary District (£60 per annum, and Vaccination Fees): election, 3rd August.
BATTLE UNION, Sussex—Medical Officer for District No. 6 (£50 per annum, and extra fees): applications, 21st; election, 22nd.
BEDFORD UNION—Medical Officer for the Turvey District.
BRAMLEY UNION, Yorkshire—Medical Officer for the Wortley District (£30 per annum, and extra fees). Medical Officer for the Armley District (£25 per annum, and extra fees): both elections, 26th.
CASTLECOMER UNION, co. Kilkenny—Medical Officer for the Workhouse (£70 per annum): election, 19th. Medical Officer for the Castlecomer Dispensary District (£100 per annum, and Vaccination and Registration Fees): election, 19th.
DORSET COUNTY LUNATIC ASYLUMS, Dorchester—Assistant Medical Officer (£100 per annum, with furnished house, board, etc.): applications, 31st.
GLASGOW ROYAL INFIRMARY—Physician.
HAY UNION, Brecknockshire—Medical Officer for the Radnorshire District (£45 per annum, and extra fees, which amounted last year to £37:15): application, 4th August; election, 5th August.
KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND—King's Professor of the Institutes of Medicine: applications, 1st October; appointment, 18th October.
METROPOLITAN EAR INFIRMARY, Sackville Street—Surgeon.
MORPETH UNION, Northumberland—Medical Officer for District No. 7: election, 21st.
MULLINGAR UNION, co. Westmeath—Medical Officer for the Castletown Geoghegan Dispensary District (£90 per annum, and Vaccination and Registration Fees): election, 20th.
NORTH STAFFORDSHIRE INFIRMARY—Medical Officer.
RATHDRUM UNION, co. Wicklow—Medical Officer for the Workhouse (£100 per annum): election, 20th. Medical Officer for the Rathdrum Dispensary District (£100 per annum, and Vaccination and Registration Fees): election, 20th.
ROYAL INFIRMARY SCHOOL OF MEDICINE, Liverpool—Lecturer on Botany and Demonstrator of Anatomy.
ROYAL SEA-BATHING INFIRMARY, Margate—Resident Surgeon (£100 per annum, and board and residence): applications, 23rd.
ROYAL SOCIETY OF MUSICIANS—Surgeon.
ROYAL SURREY COUNTY HOSPITAL, Guildford—Dispenser and Assistant-Secretary (£70 per annum): applications, 19th.
SHILLELAGH UNION, co. Wicklow—Medical Officer, etc., for the Tinahely Dispensary District (£100 per annum, and Registration and Vaccination Fees): applications, 21st.
SUNDERLAND GENERAL HOSPITAL—Assistant House-Surgeon (£30 per annum, with board, residence, and washing): applications, 24th.
ULVERSTON UNION, Lancashire—Medical Officer for the Ulverstone District (£35 per annum, and extra fees).
UNIVERSITY COLLEGE HOSPITAL—Resident Medical Officer: applications, 17th.
UNIVERSITY OF EDINBURGH—Professor of Clinical Surgery; Professor of General Pathology.
WESTMINSTER HOSPITAL—Resident House-Surgeon: applications, 17th; appointment, 27th.
WHITEHAVEN AND WEST CUMBERLAND INFIRMARY—House-Surgeon (£100 per annum, with furnished apartments, fire, gas, and attendance): applications, 30th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BOND, Henry J. H., M.D., appointed Consulting-Physician to Addenbrooke's Hospital, Cambridge.
COOPER, Frank W., Esq., appointed Public Vaccinator for the Wanstead and Leytonstone District of the West Ham Union.
***COUCH**, Thomas Q., Esq., appointed Surgeon of the Cornwall Rangers Militia, vice J. Ward, Esq., resigned.
***EDIS**, Arthur W., M.B., appointed Physician to the British Lying-in Hospital.
O'DONNELL, Henry J., Esq., appointed Honorary Surgeon to the Royal South London Ophthalmic Hospital.
OPPENHEIM, Lewis, Esq., appointed Assistant-Surgeon to the Royal South London Ophthalmic Hospital.
***SMITH**, Heywood, M.B., appointed Physician to the British Lying-in Hospital.

BIRTHS.

BRYANT.—On July 3rd, at 2, Finsbury Square, the wife of *Thomas Bryant, Esq., Surgeon, of a daughter.
DOWSON.—On July 1st, at Park Street, W., the wife of E. Dowson, M.D., of a son.
DRYLAND.—On July 9th, at Kettering, the wife of J. W. Dryland, Esq., Surgeon, of a daughter, who survived only a few hours.
CUOLAHAN.—On July 10th, at Grange Road, Bermondsey, the wife of *Hugh Cuolahan, M.D., of a daughter.

GOODE.—On July 7th, at Derby, the wife of *Henry Goode, M.B., of a son.
 GOODWIN.—On June 28th, at Ashbourne, Derbyshire, the wife of Robert D. Goodwin, Esq., Surgeon, of a son.
 GRABHAM.—On July 8th, at Pontefract, the wife of Chas. Grabham, M.B., of a son.
 LINDSAY.—On July 14th, at Hanwell, the wife of *J. Murray Lindsay, M.D., of a daughter.
 MITCHELL.—On July 8th, at Lowther Cottages, Holloway, the widow of the late T. H. Mitchell, Esq., Surgeon, of a son, stillborn.
 MOORE.—On June 30th, at the Royal Dockyard, Portsmouth, the wife of George Moore, Esq., Surgeon Royal Navy, of a son.
 OWENS.—On June 28th, at East Farleigh, Kent, the wife of Edward M. Owens, L.R.C.P.Ed., of a daughter.
 PEMBERTON.—On June 24th, at Brighton, the wife of George R. Pemberton, M.D., Surgeon-Major Bengal Army, of a daughter.
 REED.—On June 27th, at Hertford Street, Mayfair, the wife of F. C. Reed, M.D., of a son.
 ROLSTON.—On June 25th, at Clarendon Villas, Plumstead Common, the wife of P. W. Rolston, Esq., Surgeon Royal Navy, of a son.
 SOPER.—On July 9th, at Clapham Rise, the wife of *William Soper, Esq., Surgeon, of a son.
 WARD.—On July 7th, at Woolwich, the wife of William P. Ward, Esq., Surgeon-Major Royal Artillery, of a son.

MARRIAGES.

BRVSON, W. G., M.D., to Margaret Frances Fothergill, youngest daughter of the late Spencer Wood SHOTTER, Esq., of London, at Warsar, Ontario, on June 1st.
 CLARK, J. E., Esq., Assistant-Surgeon 38th Regiment, to Esther, youngest daughter of E. W. BEVAN, Esq., of Brecon, at St. George's, Hanover Square, on June 23rd.
 FINLAY, William, F.R.C.P.Ed., to Catherine, daughter of the late Andrew PATERSON, Esq., of Edinburgh, on July 1st.
 *GOOD, Joseph, M.D., of Wilton, to Harriette Elizabeth Anne, eldest daughter of W. DAY, Esq., of Alvediston House, Salisbury, at Alvediston, on July 1st.
 LEES, James, Esq., to Emily, second daughter of John BRADY, Esq., M.P., at St. Peter's, Cornhill, on June 29th.
 *MORGAN, Herbert M., L.R.C.P., Lichfield, to Catherine Jane, only child of the late James WEBB, Esq., of Stafford and Lichfield, on June 26th.
 MUTH, William, L.R.C.P.Ed., to Annie, daughter of the late Samuel BRUNDRETT, Esq., Moston, Manchester, at Orton, Westmorland, on July 8th.
 RAYNER, John, M.D., of Highbury New Park, to Frances S., only child of the late W. B. COLES, Esq., of Curry Rivel, at Hackney, on July 1st.

DEATHS.

BOLTON, John, Esq., Surgeon, at Souillac, Mauritius, aged 45, on May 11th.
 BURNSIDE, M., Esq., Surgeon R.N., at Delaune Road, Kennington Park, aged 74, on July 7th.
 COOPER.—On July 7th, at Clapham Rise, Jane, wife of J. Cooper, Esq., L.R.C.P.
 ELLIOT, Wm., M.D., late of Stratford, Essex, at Red Hill, aged 72, on June 23rd.
 FULLERTON.—On July 10th, Mary, wife of J. C. Fullerton, Esq., Surgeon, of Barnsbury.
 *GODFREY, Nathaniel, Esq., Surgeon, Turvey, Bedfordshire, aged 63, on July 4th.
 LOMAX.—On June 30th, at Stafford, Sarah, wife of *H. T. Lomax, Esq., Surgeon.
 MACLACHLAN.—On June 22nd, at Ventnor, aged 57, Ann, wife of D. MacLachlan, M.D., late Physician to the Royal Hospital, Chelsea.
 PHILLIPS, Philip L., M.D., of Torquay, at Exeter, aged 57, on July 2nd.
 REID.—On July 5th, at Hazelwood, Banffshire, aged 8, Alexander Daniel, younger son of Daniel Reid, M.D.
 *SNAITH, Frederick, M.D., at Boston, aged 62, on July 7th.
 WATSON, George Henry, Esq., Surgeon, at Hounslow, aged 38, on June 3rd.
 *WHITFIELD, Henry, Esq., Surgeon, at Ashford, Kent, aged 63, on July 7th.
 *YEARSLEY, James, M.D., at 15, Savile Row, aged 64, on July 9th.

DR. PROTHEROE SMITH has been elected a Corresponding Member of the Gynæcological Society of Boston, United States.

QUEKETT MICROSCOPICAL CLUB.—The annual excursion and dinner of this society took place at Leatherhead on Wednesday, June 23rd. In the evening, a large company dined together. After the usual loyal toasts, the President, Mr. Arthur Durham, proposed the toast of the evening. He said that he did not wish to ask the members to drink success or prosperity to the Quekett Club, since it already enjoyed both in the highest degree. His toast was simply "The continuance of the same prosperity in the future." The past success he attributed to the hearty good fellowship and absence of all unnecessary formality which distinguished the meetings. Various other toasts were drunk, including the health of the President, the President-elect, Mr. Le Neve Foster; and the Honorary Secretary, Mr. Bywater, to whose disinterested exertions the Club owed much. At the last monthly meeting of the Club at University College, the names of several gentlemen were proposed for election as members of the committee at the annual meeting to be held this month. Mr. Highley read a paper describing a new method of oblique illumination, devised by the Rev. J. B. Reade, President of the Royal Microscopical Society. After some observations by Dr. Braithwaite on the movements of the peristome of the Funaria Hygrometrica, the meeting resolved itself into a *conversazione*.

IN consequence of the pressure on our space by the report of the proceedings of the Medical Council, we are compelled to defer several reports of Branch meetings and other matter until next week.

ERRATUM.—In our Report on Delirium Tremens (JOURNAL, July 3rd, p. 7), in Dr. Murchison's treatment, col. i, line 12 from bottom, for "real", read "renal".

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
 TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.
 WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.
 THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
 FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
 SATURDAYSt. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE BUSINESS OF THE GENERAL MEETING.

SIR,—In the last number of the JOURNAL, there is a letter signed "T. Watkin Williams, General Secretary," in relation to one from me in the previous number of the JOURNAL. Mr. Williams states that "the first paragraph, if it means anything, means that I had withheld for at least one week a communication that he had sent to me." I am quite willing to accept the first view of the matter, and to say that it did not really mean anything; that it was not meant to cast any reflection upon any one; but only to convey the idea that it had been meant for the JOURNAL of the 3rd instant. Mr. Williams ought to have stated that he had received a note from me, wherein I explained why my notices had not reached him at the time I expected. Indeed, I think he ought not to have had any wrong suspicions after the receipt of this note; but he seems to think all that I do is directed against him. The additional notice (6) that I sent might have produced a wrong impression upon his mind; but it was penned on account of my feeling that if I could have sent it direct to the Editor, a post would have been saved, and not to cause suspicion in Mr. Williams's mind.

Had I not been "called out" on this occasion by Mr. Williams, I should not have said anything about the notes that were appended to my notices in the JOURNAL, and signed "T. W. W."; but I cannot now help asking whether it be the province of the "General Secretary" to act thus? I may state that I could not lay hold of the Rules at the moment I needed them, and did not remember the two months' notice in regard to the alteration in the constitution of the Committee of Council; and as to the note of "T. W. W." about the Editor of the JOURNAL, how could I be supposed to know that which was not stated in the Report of the Committee of Council's Meeting of the 9th, as given in the JOURNAL of the 19th June?

I am, etc.,
 The Parsonage, Goolc, July 13th, 1869.

FETID ODOR FROM THE FEET.

SIR,—I should esteem it a favour if some member would be good enough to name a remedy for sweating feet. I have a case where the skin under the heels and toes is white, and damp, like washed leather, and most offensive. The girl is 18, of a ruddy complexion, stout, and in good general health. I know there was a correspondence on this subject in the JOURNAL lately, but I cannot lay my hands on the numbers.

I am, etc.,
 ** Our correspondent will find some remedies mentioned in the JOURNAL for May 1st, page 409.

REPORTS OF MEDICAL OFFICERS.

WE have received the following correspondence for publication.

July 6th, 1869.
 Sir,—I am desired by Mr. Göschen to inform you that the Board, having considered the Memorials of the Medical Officers which were presented to him by you, have decided to rescind Article 5 of the Order of the 4th April 1868, which requires the Workhouse Medical Officers to report to this Board, and to require them in future to make the half-yearly reports only to the Guardians of their respective unions.
 I am, sir, your obedient servant,
 J. Rogers, Esq., M.D., etc.
 FRANCIS D. LONGE.

33, Dean Street, Soho, July 8th, 1869.
 Sir,—I beg to acknowledge your letter of the 6th instant, in which you inform me, at the desire of Mr. Göschen, that the Poor-Law Board have decided to rescind Article 5 of the Order of the 4th of April 1868, and that in future Workhouse Medical Officers will be required to make the half-yearly reports to the Guardians of their respective unions only.

I have not yet had an opportunity of communicating with the gentlemen who entrusted the memorial to me the decision of the Poor-Law Board; but I feel satisfied that they will fully appreciate the consideration of the Poor-Law Board in rescinding the article in the general Order above referred to.

Will you please convey to Mr. Göschen my estimation of the interest he exhibited in the Poor-Law Medical Service on the occasion of the presentation of the Memorial, a feeling which was shared by all the gentlemen who accompanied me.
 Francis D. Longe, Esq. I am, sir, yours obediently, JOS. ROGERS.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. Richards, not later than *Thursday*, twelve o'clock.

BERRY DEFENCE FUND.

SIR,—The above fund has been established for the purpose of defraying the expenses of Mr. O. W. Berry, M.R.C.S. Eng., of New Wimbledon, Surrey, incurred in the defence of the false charge brought against him by the servant girl, Cecilia Jones, and his subsequent prosecution of her for perjury. The following is the first subscription list. By inserting which, you will greatly oblige,
July 7th, 1869.

E. SANDWELL, *Hon. Sec.*

N. H. Clifton, Esq. (Islington), £1:1; W. Travers, Esq. (Kensington), £1:1; R. B. Moore, Esq. (Wolverhampton), £1:1; T. A. Turner, Esq. (Chelsea), £1:1; Dr. E. Sandwell (Soho), £1:1; E. Child, Esq. (New Malden), £1:1; Dr. Mackinley, (Isleworth), £1:1; H. Woolcott, Esq. (Charing Cross Hospital), £1:1; Dr. J. Skegg (St. Martin's Place), £1:1; Dr. S. S. White (Brixton), 10s. 6d.; W. Naughtin, Esq. (Baker Street), 10s. 6d.; Dr. Farre, (Waterloo Road), 10s. 6d.; J. F. Clarke, Esq., 10s.; R. Bayley, Esq. (Kingston), 10s. 6d.; Rev. F. W. Russell (Charing Cross Hospital), 10s. 6d.; Dr. Langston (Broadway, Westminster), 10s.; W. G. Sutcliffe, Esq. (Battersea), 10s. 6d.; E. H. Linnekar, Esq., 10s.; J. A. Hayden, Esq. (Stepney), 10s. 6d.

A PUZZLING CASE.

SIR,—I should feel grateful if any surgeon would give me advice upon a case I have had under my hands for the last two years. Mrs. J. has not eaten anything for more than the period above stated. She has spasmodic twitching of all the voluntary muscles. There is great excoriation of the lower lip; she speaks but seldom; occasionally she whispers to me, when on a professional visit, "I am very ill." I have consulted several medical men, and feel quite at a loss how to treat the case. I have ordered milk injections, with 150 minims of tincture of opium, every morning. Swallowing appears to cause convulsive spasm of the œsophagus, great pain, and entire loss of speech. A hint would be gratefully received.

I am, etc.,

A MEMBER OF THE BRITISH MEDICAL ASSOCIATION.

THE OBSTETRICAL SOCIETY.

SIR,—In answer to a Fellow of the Obstetrical Society, I think it sufficient to say that the reason for not stating my opinion on the proceedings at the special meeting, was simply my belief in the utter hopelessness of opposing any measures, after the views expressed and carried in the third resolution. It appears to me that the proper and dignified course for the Obstetrical Society to have adopted, should have been either to accept or reject the proposals submitted for their consideration, instead of passing resolutions in every way at variance with the liberal spirit of the Royal Medical and Chirurgical Society.

I am, etc.,

N. HECKFORD.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, July 14th; The New York Medical Gazette, June 26th; The Parochial Critic, July 7th; The Durham County Advertiser, July 9th; The Newcastle Daily Journal, July 9th; The Boston Medical and Surgical Journal, June 24th; The Melbourne Leader, May 8th; The Indian Medical Gazette, June 8th; The Shadow, July 10th; The Birmingham Daily Gazette, July 13th; The Sussex Agricultural Express, July 13th; The Tavistock Gazette, July 9th; The Manchester Daily Examiner and Times, July 9th; The Scotsman, July 13th; The North Wales Chronicle, July 10th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. Paul, London; Dr. Miller, Edinburgh; Dr. Sibson, London; Dr. Rutherford,

Edinburgh; Amicus Curiae, Nottingham; Aliquis, Walsall; Mr. W. F. Teevan, London; Mr. A. Haviland, London; Mr. Erichsen, London; Mr. T. Watkin Williams, Birmingham; Dr. Powell, London; Dr. Chadwick, Leeds; Dr. Aitken, Edinburgh; Dr. Rumsey, Cheltenham; Dr. J. Sloane, Leicester; Fair Play; Dr. F. C. Webb, London; Dr. T. K. Chambers, London; Mr. J. Barber, Manchester; Dr. J. G. Davey, Northwoods, Bristol; Dr. Murray Lindsay, Hanwell; Dr. J. M. Bright, London.

LETTERS, ETC. (with enclosures) from:—

Mr. F. Le Gros Clark, London; Dr. J. Lockhart Clarke, London; Mr. Hulke, London; Dr. King, London; Dr. Heywood Smith, London; Dr. D. B. Hewitt, Dublin; Dr. Alexander Macalister, Dublin; Mr. P. C. De la Garde, Exeter; Mr. A. B. Steele, Liverpool; Dr. B. Kelly, Dublin; Dr. Snaith, Boston, Lincolnshire; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Mr. Lomax, Stafford; The Registrar of the Medical Society of London; Dr. Lomas, London; Dr. J. U. Huxley, Torquay; The Chairman of the Native Guano Company (Limited); Dr. A. T. H. Waters, Liverpool; Dr. T. J. Walker, Peterborough; Dr. J. Hughes Bennett, Edinburgh; Mr. Walter Tyrrell, Great Malvern; Mr. H. J. O'Donnell, London; Dr. C. Gibson, Newcastle-upon-Tyne; Mr. Wheelhouse, Leeds; Dr. Allbutt, Leeds; Dr. Bryan, Northampton; Mr. Jessop, Leeds; The Rev. Dr. Bell, Goole; Dr. T. O. Dudfield, London; Mr. W. Mutch, Orton; Dr. Septimus Gibbon, London; Mr. D. Kent Jones, Beaumaris; The Secretary of the Charing Cross Hospital; Dr. Edis, London; Rev. Dr. Haughton, Dublin; Dr. D. Dyce Brown, Aberdeen; Dr. Chiene, Edinburgh; Mr. W. Francis, London; Dr. J. Thompson Dickson, London; and Dr. Murchison, London.

BOOKS, ETC., RECEIVED.

Sound: a Course of Eight Lectures, delivered at the Royal Institution of Great Britain. By John Tyndall, LL.D., F.R.S. Second edition. London: 1869.
Thermometric Observations on Pneumonia. By Thomas W. Grimshaw, A.B., M.D. (Dub.) Dublin: 1869.
The Half-Yearly Abstract of the Medical Sciences. January to June, 1869. London, Edinburgh, and Dublin: 1869.
The Retrospect of Medicine; being a Half-Yearly Journal. Edited by W. Braithwaite, M.D., and J. Braithwaite, M.D. London. January to June, 1869. London, Edinburgh, and Dublin: 1869.
Practical Suggestions for Making and Inhaling Nitrous Oxide. By A. W. Sprague, A.M. Boston: 1869.
A Woman's Work in Water-Cure and Sanitary Education. By Mrs. M. S. Gove Nichols. London: 1869.
Cases of Syphilis treated without Mercury. By Robert William Dunn, M.R.C.S., and Charles R. Drysdale, M.D. London: 1869.
Report on the Sanitary Condition of the Parish of St. Mary, Islington, during the year 1868. By E. Ballard, M.D. London: 1869.
The Dublin Hospitals: their Grants and Governing Bodies. By E. D. Mapother, M.D. Dublin: 1869.
The Practice of Medicine. By Thomas Hawkes Tanner, M.D., F.L.S. In Two Volumes. Vols. I and II. Sixth Edition. London: 1869.
A Physician's Problems. By Charles Elam, M.D., M.R.C.P. London: 1869.
General Report of the Royal Hospital of Bethlem for 1868.

Results of Meteorological Observations, for the week ending Saturday, July 10th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.							Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	WIND.										RAIN.		
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.			Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell.	Amount in inches.
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm, etc.				
BATH..... Dr. Barter, F.M.S.	30.100	0.530	63.8	60.8	58.4	83	77.0	48.2	28.8	72.3	55.1	128.0	..	7.0	4.5	..	..	..	0.3	0.3	2.7	0.7	..	3	2.0	3	0.14
BOURNEMOUTH..... Dr. Compton, F.M.S.	30.196	0.460	60.9	57.6	54.7	81	70.5	46.1	24.4	68.2	52.7	146.0	42.3	2.8	3.2	0.3	0.3	0.3	..	..	3.3	2.3	..	0.3	1.6	1	0.01
DUBLIN..... Dr. J. W. Moore.	29.926	0.662	63.2	57.6	52.9	69	75.1	52.9	22.2	70.0	57.2	..	45.6	5.3	..	..	..	1.3	1	3.2	1.2	..	0.3	4.4	2	0.07	
KEW..... Dr. Treutler, F.L.S., etc.	30.148	0.532	64.7	58.5	53.4	66	78.3	48.8	29.5	74.0	55.3	145.3	40.2	4.5	6.4	0.3	..	..	0.7	2	1.7	0.7	1.3	0.3	2.8	1	0.01
LLANDUDNO..... Drs. Nicol and Dalton.	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
MALVERN..... Messrs. W. and J. Burrow.	30.104	0.543	61.4	58.2	55.5	81	74.4	48.3	26.1	71.6	53.4	157.2	44.0	6.8	5.3	..	..	..	0.3	0.6	3	3	..	..	0.5	2	0.08
SCARBOROUGH..... Dr. C. Fox, M.R.C.P., etc.	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
SIDMOUTH..... Dr. Mackenzie, F.M.S.	30.148	0.500	59.8	57.0	54.5	83	70.3	48.0	32.3	66.6	57.6	..	..	3.0	6.0	..	..	..	..	2	2	2	1	..	1	0	0
WORTHING..... W. J. Harris, Esq., M.R.C.S.E.	30.149	0.487	60.6	58.1	55.9	85	69.2	50.3	18.9	66.6	55.1	127.0 +	42.7	5.6	5.4	0.3	..	..	1	..	3.7	1.7	..	0.3	2.4	0	0

* Not received.

† This bulb is raised 4 feet above the grass.

REMARKS.—Barometric pressure has during the week been high and pretty uniform, the amount of range being due chiefly to the great height (30.422 at Kew) attained about the end of the week. Temperature has been generally high, and also attaining its maximum towards the end of the week; its range has been variable,—greatest at Sidmouth, least at Worthing. Winds have been principally south-westerly and of a generally moderate force, except in Dublin, where they were fresh or strong (Max. Force =7). The amount of clouds has been variable, the sky being almost covered at Bath, and nearly clear at Sidmouth. Little or no rain has fallen, the largest quantity was collected at Bath. Ozone has been fairly abundant. The public health is generally good.

Kew, July 14th, 1869.

W. J. TREUTLER.

LECTURES ON THE HISTOLOGY OF THE EYE: (BEING THE ARRIS AND GALE ANATOMICAL LECTURES.)

Delivered at the Royal College of Surgeons of England, June 1869.

BY

JOHN WHITAKER HULKE, F.R.S., F.R.C.S.,
Assistant-Surgeon to the Middlesex Hospital, and Surgeon to the Royal London
Ophthalmic Hospital.

LECTURE II.

MR. PRESIDENT AND GENTLEMEN,—We were occupied last Thursday with the minute anatomy of two of the non-vascular parts of the eyeball—the cornea and vitreous humour: to-day we come to the most vascular of all the ocular tunics.

The *Tunica Uvea*, so named from its resemblance to a grape or large berry, *uva*, consists of two segments—the iris and the choroid—which differ in their principal anatomical constituents and in the offices which they subserve in the physiology of vision, and agree mainly in both of them containing numerous blood-vessels and much pigment.

The *Choroid* corresponds to the coat of lamp-black with which we line the interior of the camera obscura, and serves the same purpose, absorbing the incident rays, and so lessening dispersion in proportion to the intensity of its pigmentation. But, the eye being a living camera, the choroid has additional functions of another kind. It directly ministers to the nutrition of the bacillary stratum of the retina in man, as also to that of all the retinal strata in those animals whose retinae are devoid of blood-vessels.

The *Iris* corresponds to the diaphragm in the cornea. Stretched across the anterior chamber, it stops out the most peripheral rays, which, in its absence, would pass through the edge of the lens, and in this way it lessens spherical aberration; then, by varying the size of the pupil, it regulates the quantity of light admitted to the retina; and, finally, it is an accessory of the apparatus of accommodation, although not in man an actual factor.

The iris is essentially a *muscular organ*. The contraction and dilatation of the pupil are due to muscular irritability, and not to vascular erectility. Their continuance after the heart has ceased to beat, and even after the head has been severed from the body, are facts which place this beyond discussion.

In mammalia, the muscular tissue is of the unstriped kind; while in birds and reptiles it is striped. One of the most useful chemical agents for demonstrating it is the chloride of palladium. The iris should be placed in a solution of this, containing from one-fourth to one-eighth per cent., until it acquires a deep straw tint. The palladium chloride hardens the tissue, without making it so granular and opaque as chromic acid does; and it beautifully preserves the nuclei. With this reagent, its demonstration is easy and certain in the eyes of white rabbits, where it is unobscured by pigment, which conceals it in human eyes.

The cells, which are not easily individually isolated, are long spindles containing a rod-like nucleus. They resemble closely the cells of the larger organic muscles. A cell-wall distinct from the protoplasm cannot be distinguished. The cells cohere in small flat bands, and these again combine in larger bundles. In man, I believe also in mammalia generally, in birds, and in reptiles, the muscular bundles are disposed in two sets, which have a radial and a circular direction, and constitute a sphincter and a dilator muscle of the pupil. (Fig. 1.)

In the white rabbit, as also in man, the muscular bundles of the sphincter pupillæ are disposed with great regularity in lines concentric with the pupil, at the edge of which they form a very distinct band upon the anterior surface. On the back of the iris, the outer border of the muscular ring is less distinct; and here, intersecting the radial bundles of the dilator, a thin layer of circular fibres is traceable for some distance towards the great circumference of the iris.

In birds, the circular bundles are not restricted to the neighbourhood

of the pupil; but, as H. Müller long since pointed out, they extend over the whole surface of the iris as far as the periphery. The dilator pupillæ consists, in this animal, of slender bundles running along the posterior surface of the iris from near the great circumference towards the pupil, separating and combining again in a plexus with long narrow meshes. On nearing the sphincter pupillæ, they spread slightly, and, intersecting with one another and with the bundles of the sphincter, are lost.

The peripheral relations of the radial muscular bundles are less easily made out. The difficulty is occasioned by the greater thickness of the iris, and by the parallel direction of the very muscular arteries. I am inclined to think that the bundles attach themselves to the elastic fibres, which the ligamentum pectinatum iridis prolongs inwards to the iris. This very remarkable net of elastic tissue, which fixes the great circumference of the iris to the margin of the anterior chamber, is derived

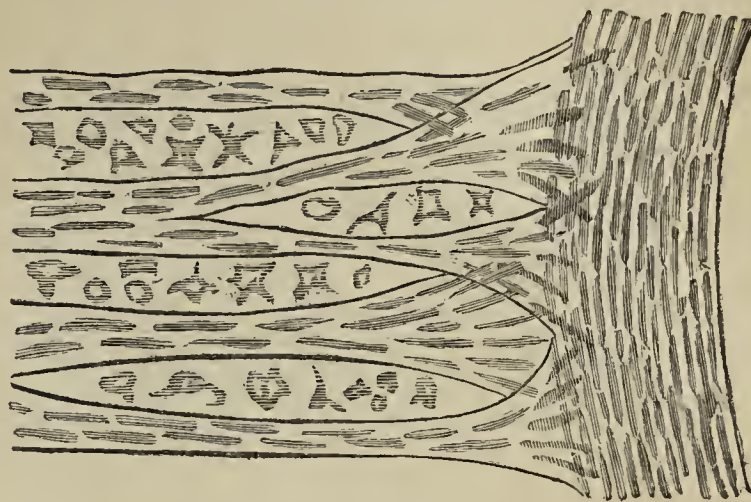


Fig. 1.

from the posterior elastic lamina of the cornea, which in my last lecture I mentioned as having peripheral relations with the ciliary muscle, iris, and sclerotic. These I shall now explain. The lamina at the circumference of the cornea resolves itself into fibrous tissue. This dehiscence begins first on its anterior surface, and goes on until the whole membrane is converted into fibres, which take three principal directions. One set passes backwards and outwards to the sclerotic, behind the circulus venosus in Schlemm's canal; another set goes directly backwards to the ciliary muscle; and a third set springs across the margin of the anterior chamber to the great circumference of the iris, on the anterior surface of which they form a network remarkable for its hard stiff outlines, from which fibres are produced upon the front and in the substance of the iris for a considerable distance towards the pupil.

The *blood-vessels* of the iris are very numerous. Its arteries come from the arterial circle formed by the inosculation of the two long posterior ciliary arteries, and known as the *circulus arteriosus iridis*. The mode of formation of this arterial circle is very variable; but the ordinary plan is, that each of the two long posterior ciliary arteries divides upon the outer surface of the ciliary muscle, near its front, into a couple of primary branches, which separate and encircle the iris, and meet the corresponding branches of the other long ciliary artery. The arterial circle thus made sends branches backwards to the ciliary muscle; others inwards to the ciliary processes; and a third set run forwards to the iris through the ligamentum pectinatum. These latter have, as Leber notices, very thick muscular walls. They run from the great circumference of the iris towards the pupil with a straight or wavy course, detaching branches to the capillary net, which is very abundant, especially at the anterior surface of the iris. On reaching the lesser circle of the iris (the little circlet of minute irregularities on the front of the iris near the pupil, which marks the attachment of the foetal pupillary membrane), the now greatly diminished arteries join here in a second arterial ring, the *circulus arteriosus minor iridis*. From the inner border of this, capillaries extend inward, encroaching slightly upon the sphincter, but not quite reaching the edge of the pupil.

The veins of the iris lie nearer its posterior than its anterior surface. They pass backwards, and, joining the veinlets of the ciliary processes, convey the venous blood from the iris to the vasa vorticosa.

The iris receives its *nerves* from the ciliary plexus—that exquisite net on the outer surface of the ciliary muscle. I can strongly recommend osmic acid for their microscopical demonstration. If the iris be placed in a solution of this acid holding about one-fourth to one-half a grain per cent., for about twenty-four hours, we get the nerves blackened, and the muscular tissue only slightly stained. Stronger solutions are not so useful as the weak ones, because they blacken more, and less

discriminatingly; and, if the preparations are left a little too long in them, everything is black alike, and indistinguishable. (Fig. 2.)



Fig. 2.

The nerves of the iris, most easily studied in white rabbits and guinea-pigs, are numerous. The larger bundles, containing several fibres, converge from the great circumference of the iris towards the lesser circle, forming, in their hitherward course, an open plexus, the larger meshes of which are occupied by a finer net. At the lesser circle, the nerves combine in a circular plexus, from which single fibres are traceable inwards in the sphincter nearly to the edge of the pupil. The coarser bundles have a very abundantly nucleated neurilemma. The nerve-tubes vary greatly in size, ranging between $\frac{1}{3375}$ " and $\frac{1}{1700}$ ". All such tubules have a medulla; they are dark-edged fibres; while the smallest pale fibres which I have traced were not more than $\frac{1}{14000}$ " in diameter.

The interstices between the muscular bundles and the meshes of the vascular and nervous nets are filled with a homogeneous connective substance, in which simple, jagged, and very large, irregular, and much branched connective-tissue corpuscles, plentifully occur. Many of these contain a granular pigment, which, by its quantity and distribution, produces the different colours of the iris.

The back of the iris is overlaid with a coat of pavement-epithelium, loaded with granular pigment, which is sometimes called the uvea or uveal surface. The cells are less regular in size and shape than those of the corresponding epithelium of the choroid.

The front of the iris also has an epithelium. It is much more delicate than that on the back, and more difficult to demonstrate. Weak solutions of nitrate of silver are useful for this purpose.

We now pass, gentlemen, to the *Choroid*, in which we recognise two subdivisions—a larger posterior portion, reaching from the optic nerve forwards as far as the jagged line which marks the termination of the nervous retina, ova serrata; and a smaller anterior portion, lying between this and the iris, which we call the ciliary body. So much of this latter as belongs properly to the apparatus of accommodation, it is not my purpose to describe in this lecture. My present remarks will relate more particularly to the posterior segment. Its principal characteristics are, its pigmentation, and its great vascularity. This latter much exceeds that of the iris; and, further, there is a peculiarity in the arrangement of the blood-vessels—the capillaries lie apart from the large vessels.

Enumerating the different tissues in the order in which they occur in passing from the inner to the outer surface of this coat, we first meet with a pavement-epithelium, borne upon a structureless membrane, the elastic lamina of the choroid (fig. 3); then the capillary net, called the chorio-capillaris, and by the older anatomists the tunica Ruyschiana; next, the choroidal stratum, in which the large vessels are imbedded; and, finally, a looser connective tissue, which unites the choroid and sclerotic, named sometimes the lamina fusca.

The choroidal epithelium is formed of a single layer of flat polygonal, mostly hexagonal cells, containing a nucleus and some granular pigment. (Fig. 4.) In fair persons, the pigment is present only in moderate quan-

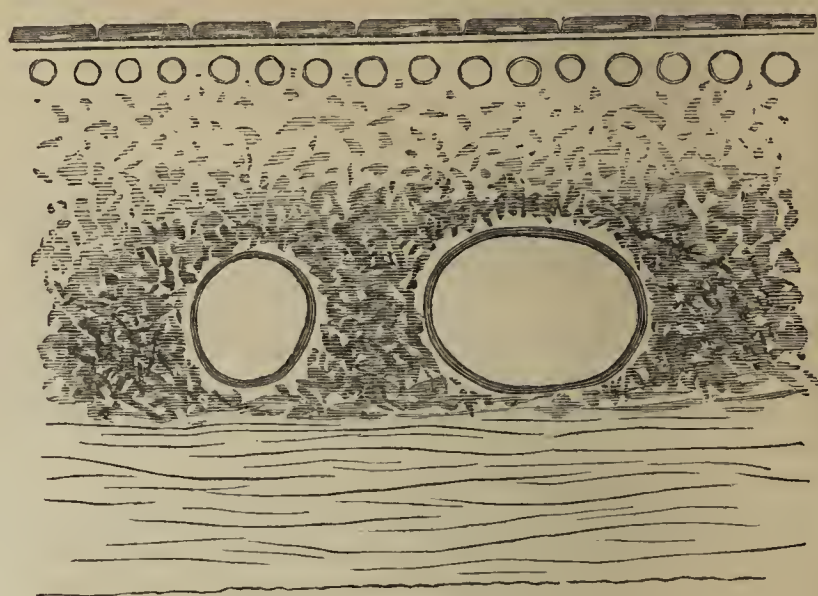


Fig. 3.

tity, and of light orange tint, and not enough to hide the nucleus from view; but, in swarthy Europeans, the quantity and intensity of the pigment are greater, and the nucleus is often concealed by it. In the darker Asiatic races and in Africans, it is usually quite hidden by the

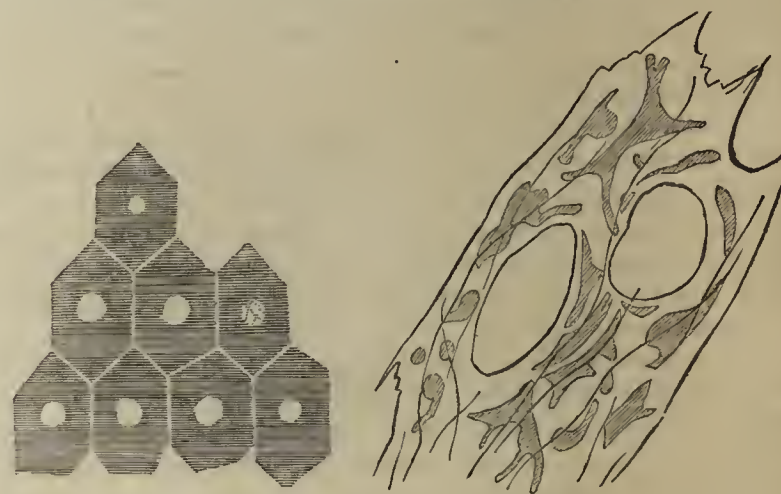


Fig. 4.

mass of black-brown pigment which loads the cells. In Albinos, in the white choroid of cetaceans, and upon the glistening silvery portion of the thyroid called the tapetum lucidum in ruminants, solipedes, and carnivores, the epithelium is also present, but it is devoid of pigment. In birds, reptiles, fish, and amphibia, brushes of pigmented tissue pass inwards from the epithelial cells between the retinal buccilli. In man, the diameter of the cells ranges between $\frac{1}{14000}$ th and $\frac{1}{21500}$ th of an inch; their average is about $\frac{1}{14500}$ th. These dimensions are occasionally far exceeded by the cells which occur in the black spots and fringes which generally surround the decolorised patches which mark former inflammatory foci. Some of these are four or six times the size of that of the largest normal cell; they are quite colossal microscopic structures, reaching $\frac{1}{430}$ ", and even $\frac{1}{235}$ "; while upon the decolorised patches the epithelial cells are diminutive, ragged, and scattered.

The epithelium rests on a very distinct structureless membrane—the *elastic lamina*. This is often the seat of circumscribed thickenings, which begin as little elevations of the inner surface, and grow into knobs, and globes, and glandiform masses, large enough to be seen, in a strong light, with the unaided eye. At a late stage, they are often impregnated with earthy salts, when they show concentric rings, which disappear with slight effervescence on adding dilute nitric acid. These colloid globes disturb the overlying epithelium; and by this irregularity of the choroidal surface, and by the size of the larger knobs, we ought to be able to recognise them in the living eye: indeed, in some cases, I have thought I could distinguish them, but in none of these have I yet had the opportunity of confirming my diagnosis by dissection. The affection is one of those degenerations common in old age, but which

also occurs in young persons as a sequel of long continued local inflammation.

The choroid is supplied with arterial blood by the short posterior and the anterior ciliary arteries. The former, about twenty in number, pierce the posterior segment of the sclerotic, some near the posterior pole, others further forwards. The hindermost are distributed to the sclera and choroid around the optic nerve; and, here inosculating with the capillaries of the nerve, they establish a collateral channel, through which a little blood can enter the retina when the trunk of the arteria centralis is plugged by an embolus. The remaining short posterior ciliary arteries run forwards with a straight course, sending off short branches through the stroma to the capillary net, where they break up quickly in an arborescent manner. The foremost of these arteries inosculate in front of the equator with the anterior ciliary arteries (branches of the muscular), which supply this region of the choroid. The capillaries form a net immediately at the outer surface of the elastic lamina, the meshes of which are smaller and less regular in the posterior segment of the choroid than in the anterior, where they are wider and longer. The vessels are large; and in all situations the interstices of the net are relatively narrow, less broad than the diameter of one of the overlying epithelial cells. We can recognise the collective effect of the

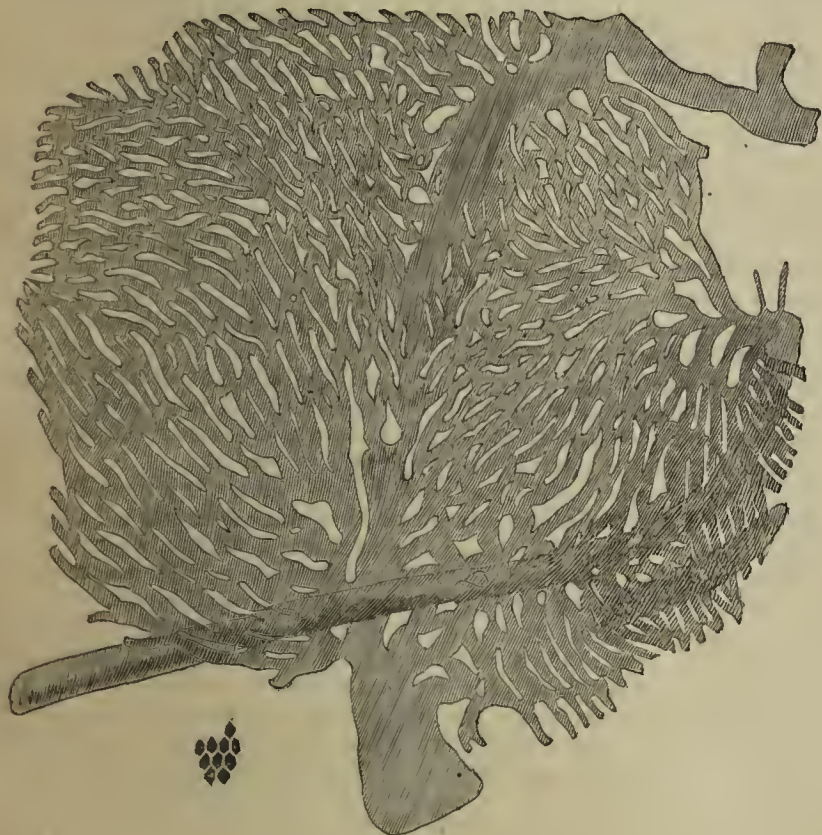


Fig. 5.

capillary net, but not the individual vessels composing it in the living eye. (Fig. 5.)

The blood of all the choroidal capillaries is collected by the well known venous whorls, vasa vorticosa, which empty their contents by four short wide trunks which pierce the sclerotic very obliquely a little behind the equator. The valvular form of these sclerotic canals has been noticed by Leber, who adds the remark, that it would tend to hinder the exit of the venous blood whenever there is an increased pressure on the inner surface of the eyeball.

The stroma in which all the larger arteries and veins are bedded is a modified connective substance. It contains, like that of the iris, branched pigmented corpuscles, which hang together in nets and membranes, and send off long and very fine elastic fibres. The thin layer of looser tissue external to the large vessels—the lamina fusca—has an essentially similar structure.

Besides the branched and irregular pigment-cells, the stroma always contains many pale, inconspicuous, roundly oval, and round cells and nuclei, of about the size of lymph-corpuscles, which increase considerably in number in inflammation, and which are, I think, the tissue out of which the formed elementary products of inflammation are evolved.

The nerves which we meet with in the choroid come from the ciliary ganglion; they lie quite on the outer surface, often in grooves in the inner surface of the sclerotic; and they all pass forwards to the plexus on the outer surface of the ciliary muscle. Whether any are distributed to the choroidal tissues, has not yet been made out with certainty; but

there is this in favour of it, that, in the posterior segment, very fine bundles of fibres, as well as single tubules, occur.

In both the choroid and in the ciliary plexus, pale as well as dark edged nerve-fibres occur. In both situations, ganglion-cells are present. These latter were, I think, discovered first by H. Müller and by Schweigger. Their demonstration is not always easy, or even a certain matter. Sometimes they are readily found; and, when one is perceived, others are usually soon brought into view near it; but fifty or a hundred preparations may be made without finding a single cell.

In front of the ora serrata, the inner surface of the choroid exhibits a circle of vascular plaits. First rising gently above the surface, and then projecting freely, these compose the pars striata of Zinn and the familiar ciliary processes. They are covered with a pigmented pavement-epithelium, the cells of which are less uniform than those of the posterior segment of the choroid. Each ciliary process is a vascular plait, composed of large capillaries, which receive their arterial blood by two or three branches, which come off directly by a short trunk from the circulus arteriosus major iridis, or which arise, nearly as often together with one of the arteries proceeding from the iris. The little arteries enter the outer surface (or rather edge) of the processes; and small veinlets run along the inner or free border; and they form a long meshed venous capillary plexus, which conveys the venous blood backwards to the vasa vorticosa. This venous capillary plexus not only transmits all the blood from the ciliary processes, but it also receives veins from the iris, as also some from the ciliary muscle.

To recapitulate briefly the distribution of the blood-vessels to the tunica uvea, its anterior segment, the iris, receives its arteries from the circle formed by the long post-ciliary arteries; and it sends its veins to join those of the ciliary processes and the vasa vorticosa. The ciliary processes receive their principal supply of arterial blood from the greater arterial circle of the iris, but derive some also from the anterior ciliary arteries. These last vessels also supply in part the ciliary muscle, which also receives branches from the great iritic circle, and sends veinlets to the circulus venosi. The posterior segment of the uvea is supplied by the short posterior ciliary arteries, and empties all its venous blood through the vasa vorticosa. These last vessels, therefore, transmit all the blood from the chorio-capillaris, that of the ciliary processes, that coming from the iris, and much of that from the ciliary muscle.

The large number of nuclei or masses of germinal matter in the stroma of the iris, and the abundant blood-supply, are circumstances which make inflammation of the tunica uvea one of the commonest of the internal inflammations of the eyeball. In iritis, the cell-growth is often so excessively active, that large accumulations of nascent granulation-tissue are formed. Such are the so-called beads of lymph, with whose appearance in the front of the iris every one present is familiar. They are not masses of exudation adhering to the anterior surface of the iris, but masses of young cell-tissue evolved in the substance of the iris—nodes, if you will, or minute gummy tumours, not differing essentially in their nature from a periosteal node or a subcutaneous gummy tubercle. I am not denying the occurrence of free exudations in iritis: such doubtless occur. One has only to harden an inflamed eyeball in chromic acid to find the iris coated, and the anterior chamber filled with an albuminous coagulum. We often see, too, in the living eye, in the course of iritis, flocculi floating in the aqueous humour, which are fibrillated fibrinous coagula. The yellow so-called pus in hypopion is also a free product of the iris. I have often examined it, and always found it a soft, but consistent, and not fluid mass, made up of a web of delicate fibrillæ and spherical corpuscles. In the posterior segment of the uvea, we also find inflammation producing alterations of the parenchyma, and exudation at the capillary surface. These last often upheave the retina, thrusting it towards the axis of the eyeball, at the expense of the vitreous humour. This may go on till the retina is quite stripped from the choroid, and constricted in the form of a pillar or slender funnel, fixed at the optic nerve entrance and at the ora retinæ. Often both forms, parenchymatous and serous inflammation, proceed simultaneously; and outgrowths of granulation-tissue project into the free space now existing between the choroid and the constricted retina. These are very liable to ossification; they are the seat of true bone-formation, which, I believe, never takes place in the normal ocular tissues. In this way, bony cups are formed around the optic nerve and rings of bone in the ciliary region—the two situations where ossifications are very commonly found. Generally, only a shell of bone is formed (the ossification, I think, always begins at the choroidal surface, and extends inwards); but sometimes the subretinal space is traversed by bony spicules; and these bases have been recorded as ossifications of the vitreous humour, the constricted retina being mistaken for the hyaloid canal.

The uvea is probably the seat of most ocular tumours occurring in

adult life; and these generally originate in its posterior segment, the iris enjoying remarkable immunity from these neoplasms. Indeed, the only primary tumours of the iris which have come under my personal observation have been congenital solid tumours, the histology of which is unknown to me, and cysts of which I have now seen several, and examined a few. They are evolved *in* the iris, and bulge into the anterior chamber, as also to a less extent backwards; and they consist of a delicate hyaloid membrane, lined by a very beautiful pavement-epithelium.

The tumours which are most common in the posterior segment of the uvea are sarcomata and cancers. I am inclined to think that the majority are sarcomas. I employ these terms with a strict anatomical definition, and without reference to their clinical history. Sarcomas are histioid, cancers organoid in their fine structure; and the former may, and often do, exhibit clinical features of the most malignant type. Both begin in the choroidal stroma; they often seem to split the choroid, and bulge inwards, displacing the retina, and wasting the corpus vitreum.

THE MODE OF ADMISSION OF PATIENTS INTO BRITISH HOSPITALS.*

By T. P. HESLOP, M.D.,

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THE notion that rather generally prevails, both among the general public and members of the medical profession, as regards the utility of our hospitals, would be considerably modified were their administration better understood. There can be no doubt that much good springs from the worst governed of these institutions; but the existence of this good is purchased in the worst possible manner—in a manner which combines all that is repulsive to science and humanity—while it is essentially based on an appeal to the meanest part of our nature. That an institution for the relief of the sick poor should be set up and maintained on the principle that those rich men who give of their superfluity towards its support should dictate as to who should be admitted to, and who should be withheld from, its benefits, is an affront to medical science, and an outrage on charity and religion. I feel that this bare statement of the case, without fact or argument, should be sufficient to ensure the hearty concurrence of the Association in the statement, that the system by which patients are admitted to the benefits of the great majority of English hospitals is a vicious system, and ought to be abolished. Let me, however, detain you for a few minutes, while I ask—What is the aim of these charities? What do they profess to accomplish? How far do they succeed in effecting their object?

The aim of hospitals proper is to provide lodging, maintenance, medical appliances, and the advice of skilled physicians and surgeons, for persons who are either affected with such dangerous maladies as to require special skill, both in the medical attendance and in the nursing; or, who are in such a position of life as to require charitable assistance, even if their disorder be of an ordinary character. The latter category includes individuals who are more or less temporarily placed in difficulties from sickness, bad time of trade, nature of the season, or from moral causes, such as drunkenness. Let it be observed, however, that it excludes all those who, either from age, chronic nature of malady, physical or mental incapacity, or want of work, are thrown out of the possibility of effecting self-maintenance, and thus become fit subjects for the care of Government in those countries, like ours, where the absolutely destitute become emphatically children of the State. The only exception to the excluding influences of such cases as these, is to be found in my first category. Should a pauper become the subject of a dangerous disorder, requiring special skill for its treatment, he then becomes a fit object of private charity. He rightly applies at the door of the renowned hospital, though it may have been opened by the contributions of private benevolence. This exception is by no means universally entertained. It is believed by some that the fact of hospitals, so maintained, undertaking the care of these unhappy persons under such circumstances, tends to put off a just administration of the Poor-law system, and to blind the Government to the inefficiency of our workhouse medical service. It may be so; but I have ever held, both in practice and in writing, that we, knowing the deficiencies of that service, are bound to serve paupers in their extremity, at the expense of voluntary charity, until the conscience of the governing classes shall be awakened to a higher sense of duty.

My first division needs but slight explanation. There are many per-

sons fully competent to remunerate a private practitioner, who are very far from being able to pay the ordinary fees of eminent consulting practitioners. If such an one suffer from stone in the bladder, cataract, ovarian disease, hydatids of the liver, and such like, he or she needs a skilled opinion, a hand made dexterous by experience, and a nurse who has other faculties than those of drinking and sleeping. There can be no doubt that persons so circumstanced are, in the completest sense, fit persons for the reception of hospital relief. I believe that founders have had these specially in view when endowing medical charities; for how else than through them can those deserving and honest people, neither rich nor very poor, who become afflicted with formidable maladies or accidents, obtain the service of the chiefs of the profession? Here I make no exception. As I repudiated the inhumanity which would exclude the pauper from hospitals even when suffering from conditions for which no adequate provision has been made in our Poor-law system, so do I refuse to take part or lot with those who, in obedience to a selfishness which is only professional in name, clamorously demand the exclusion of all who can in any manner recompense any medical man whatever for his services. I shall not speak of the want of modesty of such a view; I prefer to declare that it is opposed to the best traditions of medicine.

That which hospitals do in fact more or less explicitly profess to accomplish is as follows. They profess to be open at all times to the sick and hurt; to offer an asylum wherein protection and skilled treatment may be found; to ensure to the hospital population, as above defined, an amount of comfort and a range of scientific knowledge which, but for such institutions, would be totally beyond the power of that population to obtain, and, by consequence, would become the particular privilege of the rich.

The monks, both of the east and west, in past times; the Governments of continental Europe; the founders of some of the Scotch infirmaries in our own times, have endeavoured to extend this particular privilege of the rich to all people possessing the rightful claims derived from suffering and small means. Disease has been held to level all distinctions; and, under the guiding hand and voice of charity, science has lavished her choicest treasures on tens of thousands of poor creatures who would otherwise have only known enough of those treasures to lament the lot that placed them beyond their reach.

In England, a state of things exists which renders it impossible that hospitals can fulfil the object for which they were established. I have known and openly asserted this, in various ways, for many years past; but those to whom the subject is new will find all needful information in the sixth Report of the Medical Officer of the Privy Council. It contains the elaborate, but far too little known, Report of Dr. Bristowe and Mr. Holmes on the hospitals of the United Kingdom. There the hospital system of England is to be found depicted in its true colours by impartial observers; there are the proofs that so far are our hospitals from carrying out the aim for which they exist, they uniformly, though in different degrees, fail to perform the good they profess to accomplish. I will give the substance, and, as far as possible, the very words of their conclusions on this subject. In London, as contrasted with Paris, hospitals are private institutions, and receive only such cases as the governors of the hospitals choose to admit. Such rules as are approved by the governing body fix what cases each hospital shall receive, and these regulations differ for each. Most of them exclude fever and measles. Several exclude, by rule, all cases of fever. The number of beds is also fixed solely according to the salubrity or convenience of the hospital, and not at all by the wants of the district. The beds are allotted to medicine and surgery in proportions quite different from those in which such cases occur in actual practice. In the great majority of London hospitals, which depend entirely, or almost entirely, on private bounty, it has been found necessary, in order to conciliate the subscribers, to allow them a kind of right of nominating the recipients of their charity. A larger or smaller proportion, according to circumstances, are received from considerations of urgency; that is to say, for purely medical reasons; but the bulk of the patients are received, partly on account of the gravity of the disease, and partly because they bring a subscriber's letter; that is to say, partly for private reasons.

In English country hospitals, properly so called, no proportion is kept between the number of the beds and the wants of the district. All cases of infectious disease are in most cases excluded—a regulation which involves the exclusion of almost all acute medical cases. The right of the subscribers to nominate the inmates of the hospital is far more rigidly enforced than in London: the proportion of accidents and urgent cases admitted without such nomination is smaller. These establishments are practically reduced to the treatment of accidents and cases of chronic disease. At the Radcliffe Infirmary, in this city, in 1862, out of 896 patients admitted, only 10 medical cases were taken in

* Read in the Public Medicine Section before the Annual Meeting of the British Medical Association in Oxford, August 1868.

without letters, on account of urgency. In the country districts of England, the hospitals are reserved for the chronic cases—hence the extraordinary detention of the patients. In Colchester, the number of patients per bed was 5.8 per annum; in Gloucester, 6.09; in Ipswich, 6.3; even in a town so important as Norwich, only 7.7. In St. George's, London, the number arrived at 12.09; in the Liverpool Royal Infirmary it reached 13.08. In many country hospitals, the beds are taken for some time beforehand; in many, the subscribers would not think they obtained fair value for their subscription unless their nominee were admitted, however little prospect there might be of his receiving more benefit by treatment at the hospital than at home; and not only admitted, but kept for the full "term" as it is called; that is to say, the time during which a letter is good. The consequence is, and must be, that the hospital is looked upon amongst the poor as a private charity, as far as *disease* is concerned; and admission into it is sought through private channels, just as into an almshouse: in fact, these country hospitals have become in great measure sick clubs, in which the employer pays instead of the patient. At hospitals of the purely country class, urgent medical cases hardly ever present themselves, except on the day of the weekly admission, and then very rarely. Such a hospital, therefore, usually contains a few grave accidents, and a still smaller number of cases requiring surgical operation, amongst a much larger number of chronic invalids. Another effect of this strict adherence to the letter system is, that the hospital is seldom, if ever, full, and that the daily average of patients is very greatly below the number of beds. Out of 4,093 beds made up in the rural hospitals, only 2,813 were occupied at the time of the visit of the reporters. The regulations which exclude grave cases of disease from our country hospitals, and diminish their proportion in many town hospitals, by throwing the nomination of patients into the hands of non-medical persons, is a cause of the comparative salubrity of such hospitals. In any other point of view they cannot help regarding such regulations as an unmixed evil. The greater salubrity of the hospital is obtained only by its omitting to perform its most important duty—that of affording succour and safety to those among the poor who are in the most grievous danger. The evils of this system appear to be known even where it is still adhered to, since many of the hospitals at which the system of weekly admission by letter still prevails, dwell with complacency on the large proportion of their patients who have been admitted on the free system. The reporters proceed to make the following remarkable declaration:—"We may be accused of trespassing beyond our province in thus entering to a certain extent on the question of the general effect of such rules, apart from their sanitary influence; but we could not resist putting on record distinctly our conviction, forced on us by a comparison of the hospitals in English counties with those of London, and of these latter with the Scotch and Parisian, that our system is a much inferior one to both of theirs, and that it tends to reduce to the smallest possible amount the good which is done by our large establishments and liberal expenditure of money." They go on to show that the great majority of English country hospitals exclude all fevers, while they admit wholesale chronic cases, trivial cases, petty accidents, and so forth. To what cause is all this wrong attributed by these gentlemen? Here are their own words, as given on page 525: "We have already drawn attention to the effect which systems of admission exercise upon the medical and surgical practice of hospitals. We have shown that admissions limited to special days, and especially the plan of admission by governors' letters, tend (especially in rural hospitals) to fill the beds with chronic or trivial cases, which are retained in the house, not for any actual benefit they are likely to receive, but out of deference to the recommendations which secured their admission."

I shall make but one further quotation from the Report, to which I beg to refer all who sincerely desire to be informed upon the intolerable evils of our English hospital system and their real causes. After referring to certain passages in the Report of the Dundee Infirmary, they say: "We have quoted the above passages to show how perfectly feasible it is to maintain in a high state of efficiency an establishment which shall really fulfil the purposes of a hospital—an institution, that is, from which no poor man labouring under serious disease shall be turned away; which shall not present the monstrous anomaly, that the more violent and dangerous the disease, the less chance is there of the patient's reception; and which shall not be so surrounded with formalities and privileges as to be regarded, and in fact to become, not the public refuge for the sick poor, but a private institution for the relief of the subscribers' nominees. It must be surely far more easy to make provision for the relief of all cases of sufficient urgency in a small country place, than in a large manufacturing town like Dundee; nor is the accommodation that would be required for such a purpose wanting in most of our country towns; only the habit of making the hospital a place for the treatment of chronic cases—by the letter-system, by the ex-

clusion of fevers, and by giving up such a disproportionate number of beds to surgical cases—has become almost inveterate; and it appears to be the most natural thing in the world, that a number of cases of chronic rheumatism, hysteria, bad legs, scrofula, etc., should occupy the hospital beds, and receive the care of the practitioners of best repute in the neighbourhood, while patients labouring under those acute diseases in which the absence or presence of quiet, fresh air, careful nursing, proper diet, skilful and deliberate medical treatment, and careful diagnosis, involves death or life, should be left in their squalid crowded cottages, fed probably on casual charity, and attended as best they may be by the overworked parish doctor or his apprentice."

Such, then, is the manner in which English hospitals subserve the purposes for which they were constructed; and such are the regulations which have brought about these results. But, if experience tells so conclusive a history as to the inherent faultiness of the regulations, and as to the imperfect mode in which our hospitals carry out in practice their great function, it might still be maintained that some modification of the system of admission by letters of recommendation, or, in other words, by privileged notes, would change all this, and render them more fitting representatives of the charity and science of the time. The system is, however, incapable of such a modification. It will not lend itself to the requirements of a just administration. It can easily be proved, on *à priori* grounds alone, apart from experience, that the privileged system of admitting patients to hospitals must necessarily lead to the impairment of their efficiency. Every well ordered hospital endeavours to do the largest amount of good to the largest number of patients; to circulate through the smallest number of beds, in the shortest possible time, the largest number of the fittest—*i. e.*, the most urgent—cases, both in the social and the personal sense. We have already seen how these endeavours are frustrated by the privileged system; but I wish to impress on you that, in the nature of things, they must be frustrated under that system. Let us assume for a moment that governors invariably select with the utmost wisdom and the greatest conscientiousness those to whom they give their tickets of admission; let us assume that the lazy drone with dyspepsia, the pampered dependent with sore legs, the wife of the selfish tradesman with hysteria, would have no chance of getting a ticket, if that ticket were wanted for a poor artisan suffering from fever, acute rheumatism, or calculus; let it be granted that, at the particular moment when the governor bestows his ticket, it gets into the hands of the fittest person known to him,—does it therefore follow that the individual so privileged is the fittest person for the hospital functionaries to admit on the day and hour of his application? It may be, and must often be, quite the contrary. The duty of selecting for admission, among urgent cases, the most urgent, cannot be performed outside the hospital. It must be performed daily and hourly within its walls, without other bias than strictly medical considerations, if the institution is to fulfil its mission, as I have just delineated it. I cannot put this point better than it has been enforced by a lady in the able Report of the Committee appointed to consider and report upon the erection of fever wards in connection with the famous infirmary of this city. The Report is signed by clergymen, members of the Town Council, and by those distinguished members of our Association, Drs. Acland and Tuckwell, and Professor Rolleston. The reporters urgently advise that these wards be administered on the free principle; and the lady quoted expresses her opinions as follows: "In the course of my small experience, I have seen the continual recurrence of most serious evils from the difficulty of obtaining turns*; and I believe that many lives have been lost (humanly speaking) from this cause. Even where, by the process of a sort of house-to-house visitation of all one's friends, one succeeds in obtaining a turn, it is seldom at the right moment, or for the most urgent cases. It has often happened that a turn has been given to an apparently needful case the one day, and that the next an infinitely more urgent one has presented itself, for which no help was to be obtained; and as, by a curious fatality, the persons who possess the turns are generally those who do not know any patients, it constantly occurs that, while many helpless sufferers have been sent away without hope of admission, some one, a few doors off, has let his turns lie idle till the close of the year made them useless. A young married woman in St. Ebbe's nursed her sister-in-law through low or typhoid fever, of which she died, and fell ill herself of the same complaint. Being young and healthy, there seemed no reason why she should not recover; but in her own home she had every conceivable disadvantage. To go to the infirmary seemed the only chance; and her friends earnestly wished it, and tried all they could to get a turn. When the first attempt was made, she was still sitting up, with the baby on her knee. When, ten days later, I succeeded in getting a turn which had been *forgotten* in a friend's desk, she was so much worse that it was necessary

* A "Turn", in Oxford Hospital language, means a Governor's letter.

to ask a physician's opinion as to the possibility of removing her. His answer was, that it was too late; and too late it proved, for she died in a few days."

A system which renders possible such results as these is a cruel irony on charity, absurd in principle, and most disastrous in practice.

ON THE OCCURRENCE OF AMAUROTIC AMBLYOPIA, LONG AFTER THE INJURY, IN CASES OF CONCUSSION OF THE SPINAL MARROW.*

By THOMAS WHARTON JONES, F.R.S.,

Professor of Ophthalmic Medicine and Surgery in University College, London;
Ophthalmic Surgeon to the Hospital; etc.

CASE I.—In the early part of last year (1868), my attention was directed to the following case in University College Hospital, under the care of Mr. Erichsen. R. S., a man aged about 35, two years before fell from the top of a house on his back and injured his spine. Since then he suffered from muscular weakness, especially of the right extremities, and was now altogether in a broken down state of body. His mind and spirits were at the same time much depressed. Three weeks before I saw the man, the sight of his right eye had become so dim that he had a difficulty in making out even the largest letters with it. This failure of the sight was accompanied by photops, or an appearance which he compared to "fireworks", before his eye; by haloes all round the gas-lights; and by pains in the region of the right eye and side of the face, extending to the back of the neck. The left eye presented indications of having been, at some former period, affected with iritis. On inquiry, the patient stated that the attack occurred many years before the accident. The sight of the eye in question had not been impaired by the inflammation; but subsequently to the occurrence of the dimness of the right eye, the sight of the left began to fail also, and that in a similar manner. Two or three months before his attention was drawn to the failure of the sight of his right eye, the man found that after reading for five minutes or so the eyes began to water, and that after reading for half an hour he had to give up altogether, in consequence of the occurrence of pain over the eyebrow. The pupil of the right eye contracted freely on exposure to light. Under the ophthalmoscope, I observed in the right eye a bluish whiteness of the optic disc on the side next the temple (apparently on the nasal side), with congestion and blackish discoloration of the retina all round, from granular pigmentous deposit—appearances indicative of degeneration of structure.

CASE II.—In the beginning of June 1868, I was consulted respecting the sight of Mr. O., a gentleman aged 48, who, in November 1866, suffered a shock of the brain and spinal marrow from a railway collision, while in a second-class carriage. Since the accident, the patient's energies, both bodily and mental, had become much impaired. He was unable to read longer than five or ten minutes at a time; and it was only with the right eye that he was able to do this. In November 1867—that is, one year after the injury—dimness of the sight of the left eye was first discovered. On examination in June 1868—that is, eighteen months after the injury—I found that the patient could see with the left eye no better than to make out the large letters called Two-line Great Primer. The pupil was still quite natural in its movements. On making an ophthalmoscopic exploration, I found the optic disc the seat of vascular injection and granular deposit, so that it was of a blackish red hue. The retina, all round the disc, presented a similar discoloration. The centre of the disc, where the retinal trunks emerge, was free from vascular injection and pigmentous deposit, but was unnaturally white. Though Mr. O. could still see distinctly enough with the right eye to make out letters of every size, he could not, as before mentioned, continue to read any length of time with it. Under the ophthalmoscope, I found in the right eye congestion and discoloration of the disc and retina similar to what I found in the left, though in a less advanced stage.

CASE III.—Mr. L., aged 31, suffered a shock of the brain and spinal marrow in a railway collision, while in a second-class carriage, on the 4th of September 1866, and was laid up for three months in consequence. Since then he had found himself unhinged, both bodily and mentally. On the 3d of July 1867, ten months after the injury, he first consulted me respecting his eyes, which had been failing him. He complained of a haze which now and then came over the sight, especially that of the right eye; of inability to exert the eyes as formerly; of pain in his head when he made the attempt; of motes which he saw

floating before him; of the appearance, sometimes, as if of flashes of light in the dark; of haloes around the lights; and of undue retention of impressions. Since the patient first consulted me, I have seen him every now and then. Of the several examinations of the eyes which I made, the following is the result of one instituted on the 3rd of July of the present year—just one year and ten months from the date of the accident. Both pupils were active, but when the left eye was kept closed, the pupil of the right eye became somewhat more dilated than when both eyes were exposed to the light. There was some external congestion. The right eye being examined under the ophthalmoscope, the optic disc was seen to present on the temporal (apparently nasal) side a bluish white aspect, and to be opaque and irregular-looking at its circumference all round. Both it and the adjacent retina were in a state of anæmic congestion. Similar appearances, though in a less degree, were observed in the left eye.

CASE IV.—The following is an extract from a newspaper report of a trial at Westminster, on the 25th of June, 1868. The railway accident occurred on the 20th of September 1866:—"The plaintiff, about 44 years of age, appeared to be in a very nervous and feeble state. Being asleep at the moment of the collision, he had only an indistinct knowledge of a blow on the head. When he recovered consciousness, he found himself on his knees, leaning over on one side. Since the accident, has suffered a constant pain in the head, with numbness and weakness of the left extremities. *Later, there was the symptom of a shadow before the left eye.*"

In the cases which I have now related, the failure of sight, it is to be remarked, was not experienced until some considerable time after the injury. This would seem to shew that the affection of the eyes arose from a disturbance of the circulation, and consequent impairment of the nutrition, leading slowly to degeneration of structure of the optic nerve and retina.

Inquiry into the nature of the connection between the injury of the spinal marrow, on the one hand; and the affection of the eyes and sight, on the other.—The part of the sympathetic nervous system, on which the healthy circulation in the eye and the due nutrition of the organ depend, has its roots in the spinal marrow in the region of the lower part of the neck and upper part of the back. Thence the nerve fibres pass to the sympathetic in the neck through the hypoglossal nerve and the anterior roots of the two last cervical and two or three uppermost dorsal spinal nerves. From the sympathetic in the neck, the internal carotid plexus arises, and from this are detached fibrils, which, having passed from the cranium into the orbit, enter the eyeball, and are distributed to the muscular walls of the arteries of its internal tunics. Through these fibrils the sympathetic governs the contractions of the walls* of the arteries, and so regulates the variations in the width of their calibre. Variations in the width of the arteries of an organ imply, it is to be remembered, modifications in the flow of blood in the part, independently of the general effect of the heart's action. Thus it is that the healthy circulation in the eyes and certain other parts of the head, and their due nutrition, depend on the integrity of the sympathetic nerves in the neck.

Lesion of the sympathetic nerves in the neck is followed by such a disturbance of the circulation in the eye, and consequently such changes in the nutritive process, as to lead to degeneration of structure and impairment of function.

In the cases which have been related, the roots of the sympathetic in the neck must necessarily have participated in the injury which the spinal marrow sustained from the concussion in the accidents, on which the failure of sight supervened. The effect has been the disturbance of the circulation in the optic nerves and the internal tunics of the eyes, from which the deteriorated nutrition, causing the impairment of sight, has directly resulted.

That the eyes thus suffer from injury of the sympathetic nerves in the neck, the old experiments of Petit, and the more recent ones of Reid, Claude Bernard, Brown-Séquard, and many others have demonstrated. Section of the sympathetic in the neck of a dog, cat, or rabbit, in the experiments referred to, was followed by vascular congestion and disturbed nutrition of the eye of the same side, leading, in some cases, to destruction of the organ by penetrating ulceration, or even sloughing, of the cornea, and evacuation of the humours.

The occurrence of inflammatory congestion of the eye after section of the sympathetic in the neck was, in the first edition of my work on *Ophthalmic Medicine and Surgery*, attributed to the consequent paralysis of the walls of the blood-vessels of the eye; and microscopical observations recorded in my essay on the *State of the Blood and the Blood-vessels in Inflammation*, published in 1850, shewed, in illustration and cor-

* The radiating muscular fibres of the iris are also under the government of the same part of the sympathetic nerve, being supplied with nerve-fibrils therefrom. But this is a point which does not immediately belong to our present subject.

roboration of this view, that section of the ischiatic nerve in the frog, which contains, mixed up with the ordinary sensitive and motor fibrils, the sympathetic filaments which are distributed to the arteries of the limbs, was followed by dilatation of the arteries, with a fuller and more rapid circulation in the web. The blood in the capillaries and veins being, at the same time, unusually loaded with red corpuscles, the general effect to the naked eye was increased redness, not only of the web, but of the whole limb.* An eventual result was opacity of the web, indicating an altered state of nutrition.

In the cases related in the first part of this paper, the eyes, though seriously impaired in function, have not suffered disorganisation such as was observed in the animals subjected to the experiment of dividing the trunk of the sympathetic in the neck. In the latter cases, the influence of the sympathetic on the circulation in the eye was completely cut off. In the former, the injury to the sympathetic, from the concussion of the spinal marrow, has been such only as to impair and pervert its influence on the circulation in the eye. It is to be remarked that the subjective symptoms which first attract notice in such cases may exist for some time without any material alteration of structure being distinctly observable under the ophthalmoscope. It is also to be remarked, in conclusion, that the inability which the patients laboured under to exert their sight for any ordinary length of time, which accompanied the amaurotic failure of sight, was different from the common form of asthenopia. The inability to exert the sight was owing, partly, to the irritable congested state of the eyes, and was, partly, one manifestation, among others, of the impaired energy of body—sense and mind generally—which we saw to be a characteristic of all the cases which have been passed under review.

TWO FATAL CASES OF CONVULSIONS OF A PECULIAR CHARACTER.

By THOMAS DALTON, M.D., Llandudno.

I VENTURE to send for publication a short record of two cases of convulsions which have come under my observation during the last three years, as they seem to me to possess several features of interest: 1, in the suddenness of the seizure; 2, in the nature of the convulsions; and, 3, in the apparent uselessness of all remedial measures, at least of such as were tried. As the cases are very much alike in their leading characteristics, I propose to give the history of one somewhat in detail, and then to mention any important points of difference observed in the second case.

CASE I.—The patient was a boy aged nine. He was small for his age, but appeared to have enjoyed uniform good health. He had never been known to have convulsions of any kind. His parents were poor, but he had been adopted by the persons with whom he was living at the time of the attack. He had been with them for about three weeks, and during that time had eaten voraciously of food to which he had not been accustomed—chiefly meat and pastry. He had appeared to be in perfect health till the day I was sent for. He went to bed quite well the night before, but about four o'clock in the morning he awoke complaining of great pain in the stomach; after having rather a large dose of brandy and water, he went to sleep again; about nine he awoke, and almost immediately afterwards “had a fit.” When I arrived, the patient was in bed, and was just beginning with a convulsion, apparently of an epileptic character. He was immediately put into a warm bath with some mustard in it. The convulsion soon passed off; the patient was put to bed again; a bladder of ice applied to the head, and a powder of calomel and jalapine given. When I called again, in a little more than an hour, I was told that the convulsions had returned, and that they came on very frequently. I now saw that they had changed in their character, for during the attack the patient presented very much the appearance of one suffering from tetanus, save only that he was insensible both during the attack and the interval. After the paroxysm passed off, he remained quiet for about ten minutes, and during that time the pupils were natural and quite sensible to light; he then began to breathe quickly (the respirations often amounting to 50 per minute); the pupils became fully dilated and the eyes fixed; there was slight mus-

cular twitchings of the arms and legs; next, the sterno-mastoid muscles became rigid; the rigidity soon extended to the muscles of the limbs and back, so that there was complete opisthotonos; the arms and legs were semiflexed, and the thumbs bent in on the palm. There was no foaming at the mouth, but the tongue was protruded, and the jaws clenched so firmly that it was with the greatest difficulty any thing could be kept between the teeth. During the paroxysms, respiration was almost in abeyance, there being merely an occasional sobbing gasp. This state of spasm usually lasted from one to two minutes, then it went off quite suddenly, and all the muscles were almost instantly and perfectly relaxed. Though unconscious, the patient was very susceptible of any noise or motion in the room; in fact, a paroxysm might at any time be induced by merely shaking the bed, or still more certainly by making any attempt to get him to swallow. The symptoms continued much the same till death, which took place about ten o'clock next morning, or about twenty-four hours after the first attack. I should mention that the bowels were freely moved during the night, and that for the last two hours of his life there was a very loud churning sound in the abdomen during the paroxysms. A *post mortem* examination was made the same afternoon by Dr. Nicol and myself. We examined the head, thorax, and abdomen, but not the spinal cord, as the friends, unfortunately, objected. All the organs appeared perfectly healthy. The only approach to any morbid appearance was in the brain, the whole substance of which was somewhat soft and friable, but there was no true softening of any particular part—no congestion and no effusion. On examining the stomach and intestines, we found that they contained a very large quantity of bile; in largest quantity in the small intestine. There was not a trace of any undigested food or feculent matter; in fact, the bilious fluid formed the sole contents of the intestines.

CASE II.—In this case, the patient was a little girl aged eight; not naturally robust, but generally enjoying fair health. She had been languid and heavy the day before, but in the evening seemed better. When I first saw the child, she was cold, pale, and collapsed, with a weak laboured pulse of only forty. She had been put into a warm bath before my arrival, and I was told that the fit had lasted about five minutes. I had her put to bed immediately, and gave her a little brandy and water, which she swallowed; the pulse soon improved, and she presented the appearance of a child after an ordinary epileptic fit. I then left, promising to call again in three or four hours. On my return from visiting a patient in the country, I found that my partner, Dr. Nicol, had been called to the patient, as the convulsions had returned. The pulse was now 120, and the convulsions of a different character. It struck both of us that the case was likely to prove similar to that just narrated. Our fears turned out to be but too well founded, for the disease followed almost an identical course both in its progress and results, except that in this case the child lived longer (forty hours) after the first attack.

I must now say a few words regarding the treatment adopted. In both cases we tried warm baths in the first instance, then ice to the head and spine (by means of Chapman's bag); at first this seemed to be of use, especially in the first case, but it soon lost its effect, and indeed, after a time, it seemed to do positive harm. We next had recourse to chloroform, and certainly, as a *palliative*, with most satisfactory results. If administered in time (*i.e.*, as soon as the breathing began to be hurried), it entirely prevented the spasm, but if a little longer delayed, it seemed to hurry on the attack, and to render suffocation more imminent; in fact, the symptoms it produced were at first rather alarming, but we found that, when persevered with, the spasm was overcome in a few seconds, and breathing resumed quite naturally. It was a remarkable fact, that in the second case the pulse invariably became stronger, slower, and more regular, whenever the chloroform was given. The administration of the chloroform was kept up in this case, by Dr. Nicol and myself, without intermission, for sixteen hours, about five ounces of chloroform being used. During this time there were only half a dozen decided spasmodic attacks. However, greatly to our disappointment, as soon as it was given up, the attacks returned just as frequently and violently as before. We next determined to try the subcutaneous injection of atropine, still giving the chloroform when a paroxysm was threatened. The first time I injected about $\frac{1}{150}$ of a grain; but, as this had no apparent effect, in about two hours I injected again, increasing the dose to about $\frac{1}{80}$ of a grain. This seemed to do some good, for the patient soon became very quiet, the breathing regular, and there was no sign of spasm for upwards of three-quarters of an hour. At the end of that time the spasms returned; and though the injection was again tried, it entirely failed. I should mention that in this case (the second) the bowels were relieved by means of an enema, the long tube being used. The motion was copious, dark, and offensive; afterwards the strength was kept up by means of enemata of beef-tea and port wine.

* In 1852, Dr. Claude Bernard, in repeating the old experiment of cutting the sympathetic nerve in the neck of a cat or rabbit, discovered that, in addition to the effects on the pupil and on the circulation in the eye previously known, there supervened redness and heat of the ear and side of the head. Dr. Brown-Séquard, having cut the sympathetic in the neck, galvanised the end of the nerve above the section, and found that the increased redness and heat of the ear and side of the head were thereby diminished. This effect was owing to constriction of the arteries, in consequence of their circular muscular fibres having been excited to contraction by the stimulation to which the sympathetic was subjected by the galvanism.

In conclusion, I shall merely remark that in both cases I should have supposed the disease was idiopathic tetanus, but for the insensibility of the patient, and the *complete* relaxation of the muscles after the spasm was over. It was also, I think, remarkable that, in both cases, the convulsions were, *in the first instance*, of an ordinary epileptic character.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

BIRMINGHAM GENERAL HOSPITAL.

A CASE OF INHERITED SYPHILIS, WITH INTERSTITIAL KERATITIS
AND REPEATED ATTACKS OF LARYNGITIS. A CASE OF
APHTHOUS INFLAMMATION OF THE MOUTH,
EPIGLOTTIS, AND LARYNX.

(Under the care of JAMES RUSSELL, M.D., F.R.C.P.)

THE two cases which follow have nothing in common, excepting that in each the larynx participated in the general disease; but each presents particulars of interest.

CASE I.—J. K., aged 12. The father is admitted to have suffered from some venereal affection; he was transported, and died abroad. The mother, also, is stated to have had venereal disease. Their first child was born at eight months, and died a month afterwards. The second child lived four months, and died of inflammation of the bowels. No evidence of syphilitic infection was obtainable in either case. Our patient was the third child; one other died in the workhouse, of general wasting.

J. K. had sore eyes two days after birth; "they looked, under the lids, all like blood." They recovered by the help of some drops; but they again became "bad" after the measles, at the age of five, and have been subject to recurring attacks of inflammation ever since. Four years ago, he suffered from hoarseness and croupy cough; and, at various periods subsequently, the laryngeal inflammation has returned with increased severity. At his admission, the boy was affected with acute laryngitis of such severity that it seemed probable that tracheotomy would be required; but, under the influence of small doses of tartar emetic, with iodide of potassium, counterirritation, and steaming, the laryngeal symptoms subsided—so slowly, however, that, at the end of three weeks, the voice was a mere whisper, and the cough had occasionally a croupy sound. The patient never expectorated.

The boy is well made. The bridge of his nose is obviously flattened, though not sufficiently to constitute an absolute deformity. During the early period of his residence in the hospital, there was a mucous discharge from the nose. His complexion, though pallid, was clear. His two middle upper incisors manifested a decided tendency to the peg-shape, but were not notched. The glands of the neck were not enlarged. The right cornea was very opaque from interstitial deposit, and was surrounded by a dense zone of injected vessels; the left presented one or two spots. His epiglottis was so remarkably prone, that we only succeeded on two occasions in obtaining a transient glimpse of the interior of the larynx. We could just perceive general thickening of the lining membrane.

The patient remained in the hospital more than three months, and left with considerable hoarseness. During this period, an abscess formed over the larynx, and was attended with a remarkable amount of subcutaneous thickening; which, however, had nearly disappeared when he left. He was treated with steel, iodide of mercury, cod-liver oil, and good diet.

CASE II.—S. C., aged 59, was admitted in a state of extreme exhaustion, and almost in the last stage of emaciation, yet without affording evidence of any specific cachexia. He had no cough; but his voice was somewhat hoarse, and was reduced to a mere whisper. He suffered severe pain in swallowing, especially at the termination of the operation. The region of the larynx was free from tenderness. The tongue was covered with a thick coating of dirty-coloured fur; and the fauces were filled with sticky mucus, which he cleared away with much difficulty. Irregular patches of bright red vascularity covered the soft palate, surrounding groups of small aphthous ulcers, each the size of a millet-seed. The uvula was puffy. The gums were thickly speckled with minute yellow dots, the lower more abundantly than the upper; and were very vascular, but not spongy. Amongst the specks were one or two ulcers of the size of a split pea; two similar ulcers were observed

on the tip of the tongue; and the left angle of the mouth was superficially ulcerated. The laryngoscope exhibited the edge of the epiglottis of a brilliant red, and studded with aphthous ulcerations; its laryngeal surface also was very vascular. The interior of the larynx was free from swelling; but, just above the left vocal cord, a streak of a bright red colour presented itself. The anterior extremities of the vocal cords were also injected; but, except that their surface appeared somewhat spongy, they were healthy in other respects. It appeared that the loss of voice was chiefly due to an instinctive fear of effecting the necessary approximation of the vocal cords, in consequence of the general tenderness of all the parts concerned in the process.

The history which the patient gave simply amounted to a recital of something nearly approaching to starvation, protracted through the last twelve months, during which period the poor fellow had endeavoured to maintain himself and wife on wages not exceeding eight shillings a week, and latterly amounting only to five, out of which three shillings were paid for rent. The illness described above was of a fortnight's duration.

His treatment consisted merely of good diet and tonics, under which he rapidly improved, though his voice continued husky for more than a month.

DEVON AND EXETER HOSPITAL.

LIGATION OF THE AXILLARY ARTERY.

(Under the care of Mr. DE LA GARDE.)

MARCH 30th, 1869.—A. N. of Yeoford, aged 36, was run over by a locomotive, which cut off her left arm above the insertion of the deltoid. The humerus was splintered. There was skin enough, but it was thin, and bruised. Two large nerves, and the brachial veins, hung down loose, but the artery had retracted deeply. She lost a great deal of blood at the time, and was still very faint when she arrived at the hospital.

Mr. Delagarde waited three hours until she rallied. He was disposed to amputate at the shoulder, that he might reach the artery where quite sound; but this, though a simple operation as performed by him in several cases (see BRITISH MEDICAL JOURNAL, Sept. 21, 1867), is commonly regarded as formidable, and he was advised to leave the joint. Having, therefore, removed the more damaged integument, he sawed the bone an inch below the tuberosities, cut off the nerves and veins, and, seizing the artery, higher up, with his finger and thumb, drew it down, and, with difficulty, had it tied. The vessel, however, was full of blood, and beat at the spot. Chloroform was used, but it made her alarmingly faint.

A good deal of sloughing, chiefly of the flaps, ensued. Carbolic acid poultices were applied, with balsam of copaiba when the lymph began to organise. She had sherry, and, after April 5th, ale and full diet. She gained strength, the sloughs separated, and the wound was filling with granulations, when, on April 8th, early in the morning, whilst asleep, she bled so profusely that it was hard to revive her. Compression was made behind the clavicle, and there was no more hæmorrhage.

At 4 P.M., she had so far recovered that Mr. Delagarde tied the axillary artery. Her pulse was so feeble that ether-spray was used instead of chloroform. He divided the frozen skin close on the pectoral side of the cephalic vein, opening an abscess in which lay the ligature, and the sloughy end of the artery. The sawed end of the humerus was then held up, and, passing his finger under the tendon of the pectoral muscle, he divided it, and exposed the contents of the axilla. There were lymph deposits, but the artery, otherwise, seemed healthy, and was beating freely. Disconnecting it from the nerves and veins, he carried a fine ligature under it with Weiss's aneurismal needle, and then drawing in a stouter ligature (fearing the finer might cut the artery), tied it.

She bore this operation well. Every thing was done to support her, and she went on favourably until April 10th, at noon, when considerable hæmorrhage recurred. It was determined, if she were sufficiently restored, to tie the subclavian, but she died in an hour and a half without further loss of blood.

Mr. Delagarde tied the axillary rather than the subclavian artery, because the operation was less severe, was more easily done, and was well outside the trunk. Besides, this was the left side, and the artery was so unusually lapped over by the clavicle, that the bow of a key could scarcely be pressed down, and it is doubtful whether a ligature could have been put round it without dividing the bone. In the exhausted condition of the patient this would have been unjustifiable, except as a last resource.

REVIEWS AND NOTICES.

DISEASES AND INJURIES OF THE EYE: their Medical and Surgical Treatment. By GEORGE LAWSON, F.R.C.S., Surgeon to the Royal London Ophthalmic Hospital, and Assistant-Surgeon to the Middlesex Hospital. London: Henry Renshaw, 1869.

WE congratulate Mr. LAWSON on the production of such an excellent little work on ophthalmic diseases as this. Without depreciating the large and valuable treatises on this subject that have recently appeared, we have long felt that a manual was wanted which should serve as a text-book for students, and also should form a trustworthy guide for practitioners in dealing with eye diseases.

Well has Mr. Lawson supplied this want. He has described the various affections of the eye briefly, but yet clearly; and from the large experience he has acquired as Surgeon to the Royal London Ophthalmic Hospital, Moorfields, he has made his work *thoroughly practical*. In speaking of Iritis, Mr. Lawson has preferred to classify its varieties rather from an etiological than a pathological point of view. He says: "Some authors have classified iritis in accordance with the inflammatory exudation which is supposed to characterise each form of the disease, and have described iritis as plastic, serous, and suppurative. It should, however, be remembered, that iritis is seldom either solely plastic, serous, or suppurative; in rheumatic and syphilitic iritis, we have effusions both of serum and lymph, and traumatic iritis is often at first serous and afterwards suppurative. I prefer, therefore, where it is practicable, to prefix to the term iritis the name of its exciting cause, as it indicates the course of treatment to be adopted." In this we think the author has judged wisely; for what it is of the first importance for the surgeon to know, is the cause of the disease with which he is dealing—the *fons et origo mali*; without this knowledge he may indeed treat the various symptoms as they arise successfully, but he can hardly hope to bring about a radical cure.

In the chapter devoted to diseases of the Crystalline Lens, we find a number of operations described for the removal of soft and hard cataracts. But after reviewing them all, the writer's opinion is that "Graefe's Modified Linear Extraction is the operation which now gives the most general satisfaction for the removal of senile cataracts. It is the one which requires the least selection of cases, and yields the most favourable results." Mr. Lawson in some cases still recommends the old flap extraction. In speaking of it, he says: "When patients cannot or will not take chloroform, the flap extraction should be selected, if not contraindicated by some special cause, as it is not only the least painful of all the operations for cataract, but it is also the most expeditious."

The treatment of the eye after an extraction, and the casualties to which it is exposed, are carefully considered, and these are points of great importance; for there are, perhaps, few operations where the result depends so much on prompt as well as judicious after-treatment, and yet, strange to say, this is a thing which is often practically ignored; indeed, here and elsewhere we have noticed with pleasure that Mr. Lawson has entered into the medical as well as the surgical treatment of the diseases of the eye. Surgeons are so much in the habit of relying upon instruments, almost to the exclusion of drugs, that it is as well to remind them how much may be done by the latter, even in purely surgical cases.

Under the heading of Diseases of the Optic Nerve, Mr. Lawson has drawn attention to the similarity of signification of the words amblyopia and amaurosis, the former meaning *dull vision*, the latter *obscure*. He remarks that, "these synonymous terms have created great confusion, as they have not only been applied indifferently, but lately they have been used in combination. Thus a form of blindness has been described under the title of amaurotic amblyopia. It would be well to restrict the name of amblyopia to those impairments of sight which are apparently due to imperfect perception from defective innervation, or to a loss of the nervous sensibility of one eye from disease;" while he would use the term amaurosis to express "those cases of impaired vision and blindness which are due to cerebral or cerebro-spinal causes."

Mr. Lawson devotes a short paragraph to Atrophy of the Optic Nerve from Tobacco, but we cannot altogether agree with him when he says that smoking alone will not produce this affection; for, though undoubtedly there is in many of these cases of atrophy an additional cause (such as intemperance, dissipation, or undue mental strain), still we believe that some people have a peculiar idiosyncrasy, and are affected in this way by the use of tobacco. Indeed, we have seen several cases which we could not attribute to any other cause, and which appeared to be uncomplicated examples of tobacco atrophy.

In the paragraph on Colour-blindness, reference has been made to Professor Maxwell's researches on the mixture of the colours of the spectrum, from which he has shown that for the normal eye there are

three—and only three—elements of colour, and that the elementary sensation which the colour-blind do not possess is that which is excited in normal eyes by the extreme red end of the spectrum. This is a subject of great interest, and Professor Maxwell has so utilised his knowledge, that by means of red and green glasses, he has made colour-blind people distinguish the colours of a Turkey-carpet.

The chapter on the Anomalies of Refraction and Diseases of Accommodation has been most carefully written, and this difficult subject has been made as clear and simple as it is possible to do.

Mr. Lawson has already made himself an authority on injuries of the eye, and we need hardly say that throughout this book he has made good use of his experience when treating of them. We would specially refer to his articles on Sympathetic Ophthalmia, and on the somewhat rare disease of Distension of the Frontal Sinus.

At the end of the book, a formulary of prescriptions has been inserted, and also a page of new test-types, designed by the late Dr. Orestes Pray of New York, to aid in the diagnosis and correction of astigmatism.

The profession will find this Manual just the sort of work they want on eye-diseases; while to the student it will be invaluable as a text-book.

NOTES ON BOOKS.

The Pathology and Treatment of Stricture of the Urethra and Urinary Fistula. By Sir HENRY THOMPSON, F.R.C.S. London: Churchill and Sons. 1869.—It gives us much pleasure to announce that this excellent practical work has reached a third edition. The author has reduced the bulk of the work by upwards of eighty pages, by removing some controversial matter, and by omitting the illustrative cases. On the other hand, he has made some additions in reference to treatment.

Sound: a Course of Eight Lectures delivered at the Royal Institution of Great Britain. By JOHN TYNDALL, LL.D., F.R.S. Second Edition. Longmans. 1869.—Beyond a few corrections and a summary of M. Regnault's researches on the propagation of sound, this edition is the same as the former one. No student of acoustics can have a more simple or better guide than this book of Professor Tyndall. A proof that it was needed, and that it has so far answered its purpose, is afforded by the fact that it has been republished in the United States and translated into French and German.

PROGRESS OF MEDICAL SCIENCE.

A SINGULAR RESULT OF CHLOROFORM.—The following case occurred in the practice of Professor Dumreicher of Vienna. A healthy young woman, aged 22, went to the hospital to have a molar tooth extracted. She insisted on having an anæsthetic, and was therefore narcotised to a moderate degree. When she recovered, she was unable to utter a sound; there was spasm of the glottis, especially during micturition; but all the other functions were normally performed. During five weeks, the state of aphasia and aphonia persisted in spite of all treatment. At the time of reporting, she had been for three weeks able to speak a little. She appeared to derive most benefit from the use of the constant current.—*Allgem. Med. Centralzeitung*, No. 23, 1869; and *Gaz. Méd. de Strasbourg*, June 10th.

NEW METHODS OF APPLYING ACUPRESSURE.—At a meeting of the New York Medical Society, Dr. Peters read a paper on Acupressure, in which he described two additional methods—the "New York Twist", devised by Dr. Gurdon Buck, in which the extremity of the artery is seized by forceps, and rotated at least twice on its own axis; a pin or wire-threaded needle is then thrust entirely through the twisted artery, near the forceps, and secured by being pressed on into the soft tissues beyond. He also described Dr. Hutchinson's method, in which the artery is first exposed by the usual incisions; a loop of wire about eight inches long is laid in the wound parallel with the vessel, and on the side next the head-end of the pin; the pin is now carried through the flap, from its cutaneous surface, half an inch more or less (according to the depth of the vessel) back from the edge of the incision—say to bring it down to the level or plane of the artery, and then over the wire and beneath the vessel, without disturbing its vital and organic relations with the nerve, vein, or its sheath. When the pin has emerged from beneath the artery, the wire noose is thrown over the point-end, which is then carried through the opposite flap at a point corresponding to that at which it entered. The wire loop is next brought over the track of the vessel, which is now compressed between the pin below and the wire above; and, lastly, the wire is fixed by a half-turn around the pin. The removal of the pin, when the proper time arrives, liberates the loop, which can then be easily withdrawn.—*New York Medical Record*.

THE GENERAL MEDICAL COUNCIL ON EDUCATION AND REGISTRATION.

SESSION 1869.

MONDAY, JULY 12TH, 1869.*

DR. PAGET, President, took the Chair at 1 P.M.

Amendment of the Medical Acts.—The following Report was read; and, on the motion of Dr. ALEXANDER WOOD, seconded by Mr. COOPER, was ordered to be entered on the minutes.

The Committee on Amendment of the Medical Acts appointed July 1st, 1869, in considering the subject remitted to them, have reviewed the various Medical Acts, and also the clauses of the Medical Acts' Amendment Bill, agreed upon in former sessions of the Medical Council; and have paid particular attention to the suggestions in the communication from the Lord President of the Council, dated May 14th, 1869, and to the several documents referred to them by the Medical Council in the course of its present session, viz.: Memorial from the Garioch and Northern Medical Association; Letter from Dr. Prosser James; Memorial from the Lothians' Medical Association; Letter from Dr. Bulmer respecting Canadian Degrees; Letter from Dr. Forster respecting Registration in the Channel Islands; Memorial from Dr. Bell Fletcher and numerous other Members of the Medical Profession.

The Amendments of the Medical Act, which have been already much discussed and agreed to by the Council in former sessions, consist of clauses which relate—to the qualification of Members of Council; to regulations concerning the Register; to the Registration of Foreign and Colonial Qualifications; to additions to the list of qualifications; to the assumption of titles by unregistered persons, etc.

The Committee recommend that all these Clauses, except Clause XI, should be retained in their present form, in any Bill for Amendment of the Medical Acts. With respect to Clause XI, which is as follows, the Committee are of opinion that it should be reconsidered.

"XI. It shall be lawful for the General Council, by special orders, to dispense with such provisions of the Medical Acts, or with such part of any regulations made by authority of the said Acts, as to them shall seem fit, in favour of persons who shall make application to be registered under the said Acts on Foreign or Colonial Diplomas or Degrees: provided such persons shall have resided in the United Kingdom for a period of not less than *twelve months* immediately previous to making application to be registered: Provided the holders of those Diplomas or Degrees have a right to practise Medicine or Surgery in the countries where they have been granted: And provided the Council shall receive satisfactory evidence that those Degrees or Diplomas, or licences to practise have been granted after a course of study and Examinations such as to secure the possession by persons obtaining them of the requisite knowledge and skill for the practice of their profession."

The Council are aware that the Secretaries of State in successive Governments have, on former occasions, pressed upon the Council the necessity of dispensing with, or greatly relaxing, its regulations (by which those who obtain British qualifications are bound) in favour of persons holding Foreign or Colonial Diplomas or Degrees. The Council are aware that this condition appeared on former occasions as a *sine quâ non* to the consent of the Government to introduce any Bill for Amending the Medical Acts. The Committee are of opinion that the object aimed at may be attained most simply and safely by a slight modification of Sec. 46 of the Medical Act of 1858. This Section empowered the Council to dispense with its regulations in favour (*inter alios*) of "persons practising Medicine or Surgery within the United Kingdom on Foreign or Clinical diplomas or degrees, before the passing of this Act."

Adopting the form and provisions of the Section now cited, the new Clause would be as follows.

XI. "It shall be lawful for the General Council, by special orders, to dispense with such provisions of the Medical Acts, or with such parts of any Regulations made by the authority of the said Acts as to them shall seem fit, in favour of persons applying to have their names entered on the *Medical Register*, in virtue of Foreign or Colonial Diplomas or Degrees."

If this Clause should become part of an Amended Medical Act, it would then be the duty of the Council to consider how far and in what way its Regulations should be relaxed in favour of any person or persons applying to be registered on Foreign or Colonial Diplomas or Degrees. The Council would have to consider what is due out of professional comity to graduates of trustworthy and distinguished Colonial and Foreign Universities, and at the same time not to forget the regard that is due to the rights and privileges of the holders of British diplomas and degrees, which have been obtained after courses of study and examinations supervised and approved by the Council.

The communication from the Lord President of Council invites the consideration of the Medical Council to two points; and on one of these an opinion is expressed that the Medical Act is defective. In this opinion your Committee concur. They agree with the Lord President in considering that the Act is seriously defective, in that it allows a minimum qualification in Surgery to be registered without any qualification in Medicine, and similarly a minimum qualification in Medicine without any qualification in Surgery. The Act, indeed, not only permits, but requires, the Medical Council to place upon the Register any applicant possessing one such single qualification. The Council has no option or discretion in regard to such applications, but is bound by the Act to comply with them. The Committee agree with the Lord President in regarding this state of things as open to serious objection; the more so, as the number of persons thus practising both Medicine and Surgery on a simple qualification is undoubtedly very large. It appears, however, from the analysis of titles alluded to in the Lord President's communications, that the number of such persons is decreasing at the rate of about sixty a year, although the total number of persons on the Register is increasing in much larger numbers.

The Committee think that the Lord President should be made acquainted with what the Council have already done in endeavouring to remedy this defect in the Medical Act. The Council have included both Medicine and Surgery in a list of subjects, which they have recommended to the Licensing Bodies as "subjects without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered." But the Committee doubt whether the Medical Act would enable the Council to enforce the recommendation on any one of the Licensing Bodies that might refuse to adopt it. The Medical Corporations and Universities have (chiefly within the last few years) made Regulations which, by combining Examinations of different Bodies, or instituting separate Examinations in both Medicine and Surgery, have done much towards insuring that persons shall not in future be placed upon the Register without an adequate knowledge of both subjects. But the Committee are of opinion that the only adequate remedy for this acknowledged defect would be for the Council to accept, under an Amended Medical Act, such powers as would enable them in the future to refuse registration to any person, whatever his legal qualification may be, who has not passed sufficient examinations both in Medicine and Surgery.

On the other point on which the Lord President's letter invites the consideration of the Medical Council, his Lordship expresses no opinion. This point, as stated in his Lordship's communication, is, "whether, if new legislation is to take place, it would be desirable to change in any respect the constitution of the Council."

In discussing this question, the Committee have fully considered the views and wishes expressed in the memorials and letters which have been received by the Medical Council from members of the medical profession.

In reporting on a matter of so much importance as this—whether any, and, if any, what change should be made in the constitution of the Council—the Committee think it their duty not merely to lay before the Council the result of their deliberations, but to indicate also the principles and chief reasons by which they have been guided. There is one principle which is obvious and indisputable, viz., that the constitution of the Council should be such as may best fit it for the discharge of its duties, whatever these may be. In the Medical Act the Council is styled "The General Council of Medical Education and Registration." The duties imposed on the Council by the Act are four, viz., the supervision of Medical Education, the Registration of Qualified Medical Practitioners, the publication of a national Pharmacopœia, and a certain judicial function by the exercise of which the name of any registered practitioner "who shall be judged to have been guilty of infamous conduct in a professional respect," may be erased from the Register.

With regard to two of these duties little need be said. The Registration has been made in accordance with the Act, and with an accuracy which has never been questioned. A *British Pharmacopœia* has been published, which has been universally acknowledged to be one of the best in existence. In this work the task has been accomplished of reconciling the different views and varying practice of the three sister

* Concluded from page 63 of last number.

kingdoms. The new *British Pharmacopæia* is acknowledged in England to be an improvement on the old London Pharmacopæia; in Scotland it is preferred to the Edinburgh Pharmacopæia, and in Ireland to that of Dublin.

In regard, therefore, to those two duties of the Council, there is no reason (but rather the contrary, for proposing any change in its constitution).

With respect to its judicial function thus much must be said—that a Council elected by the suffrages of the profession, as advocated in the memorials, would be entirely out of harmony with the constitution of other courts of justice in the United Kingdom, or, indeed, in any European State whatever. A Council which should be in any considerable part elected by popular suffrages would not be allowed by the legislature to retain the judicial power which is exercised by the present Council.

With regard to the last and most important of the four duties of the Medical Council, viz., the supervision of Medical Education, the Council would observe that the powers and means by which this supervision is to be exercised are defined in the Act, sections 18, 20, and 21. These are, in general terms, a power of requiring from the Licensing Bodies information as to the courses of study and examination to be gone through in order to obtain a qualification entitling a person to be registered, and a power of visiting the examinations, and, lastly, a power of representing to the Privy Council any serious defects in the course of study or examinations of any Licensing Body, and so depriving the said Body of its privilege of granting qualifications until it shall have amended what was faulty or defective.

It is seen, therefore, that all the powers possessed by the Medical Council in respect to education, are exercised on or through the medium of the Medical Corporations and Universities, which confer the qualifications entitled to registration. Through supervision and visitation of examinations, and the communication of recommendations, a certain degree of control over the Licensing Bodies is conferred by the Act on the Medical Council.

Your Committee are of opinion that these Bodies which are in a certain sense and degree governed by the Medical Council are, for that very reason, entitled to be represented in the Council. This seems no more than is required by justice. Experience has also shown its usefulness in facilitating the adoption by the Licensing Bodies, of the views and recommendations of the Medical Council.

The Committee would observe also that the Universities and Medical Corporations are all, in various ways, peculiarly conversant with education, and with the best methods of testing the acquirements of persons seeking to enter the medical profession, and are thus peculiarly qualified for choosing the fittest persons for discharging those (the most important) functions of the Council which concern Medical Education and Examinations.

The Committee are of opinion that Crown nominees are a requisite element in any body which, like the Council, has not only occasionally to discharge judicial functions, but also to watch over and protect the interests of the profession at large and secure the welfare of the public.

The Committee are therefore of opinion that the Council as constituted by the Medical Act is well and suitably constituted for performing the function with which the Council was invested by that Act. The Committee thinks it right to add their opinion that the Council, thus constituted, has, in discharging its duties, met with a degree of success which is large in proportion to the period of its existence, and in relation to the work that had to be done, and the difficulties that had to be overcome. The variety in the views and practice as to medical education and examination which prevailed in the three divisions of the United Kingdom before the establishment of the Council has, of necessity, added greatly to its labours.

The Committee have very fully discussed certain suggestions contained in the memorials which have been received by the Council. One of these is, that in any Amended Act the control of the Council over the Licensing Bodies should be strengthened and enlarged. If such additional powers were conferred on the Council, the Committee are of opinion that this would be an additional reason for maintaining the representation of these bodies in the Council as at present.

Another suggestion is for the extension of the powers and functions of the Council over a variety of objects relating rather to professional practice than to education. At present the Council has no powers in such matters. Its powers are defined in the Medical Act, and, as already mentioned, are confined chiefly to medical education. The Council has no power to control the relations either between members of the profession, or between them and the Government, nor has it any means of regulating or interfering with in any way the remuneration of the profession, whether for private or public services. It may be a question whether it would be advantageous for the profession that such

power should be vested in the Council, whatever the constitution of the Council might be.

But the Committee are (unanimously) of opinion, that, if the legislature should think proper to invest the Council with such extended powers and fresh duties, the members of the profession at large, who would in that case be brought more within the sphere of action of the Council, should have a more direct influence than they have at present in the election of its members. In expressing this opinion, the Committee are fully aware of the many inconveniences that would be incurred, and the many difficulties that would have to be surmounted in any plan for representing the profession in the Council otherwise than as it is now represented, whether by the plan suggested in the memorial presented in the last session from the Committee of Council of the British Medical Association, or by the plan alluded to in some of the documents referred to this Committee, or by any other measure.

The Committee observe that the Lothians' Medical Association complain "that the funds by which the whole machinery of the Medical Act, including the General Council (is carried on) are derived.....from a tax imposed upon each graduate or licentiate in medicine and surgery registered under the Medical Act," and "that such taxation, without commensurate representation of the body of practitioners, is an act of injustice to the great body of registered medical practitioners throughout the country."

The Committee would remark that there can be no difference of opinion as to the principle that liability to taxation entitles to representation in the taxing body. But they would further remark that the fee paid once for all by medical practitioners for entering their names on the Register cannot, in the ordinary sense of the words, be called a tax; and that the Council possesses no power whatever of taxing the registered practitioners.

In the numerous signed memorial from Dr. Bell Fletcher and other members of the medical profession, it is suggested that "in any future Act of Parliament provision be made for instituting prosecutions under it by a public prosecutor or other public functionary, on behalf of the General Medical Council, instead of leaving the voluntary enforcement of the law to individuals." The Committee are of opinion that this is a suggestion to which the attention of the Government should be drawn.

The Committee recommend that the letter of Dr. Forster respecting registration in the Channel Islands be remitted to the Executive Committee, with instructions to institute further inquiries on the subject, and, if they think proper, make a suitable representation to the Secretary of State for the Home Department, or other Government authority.—G. E. PAGET, *Chairman*.

Dr. BENNETT moved and Dr. CHRISTISON seconded: "That Clause XI in the proposed Medical Amendment Act shall stand as follows:—'It shall be lawful for the General Council, by special orders, to dispense with such provisions of the Medical Acts, or with such parts of any regulations made by the authority of the said Acts, as to them shall seem fit, in favour of persons applying to have their names entered on the *Medical Register* in virtue of Foreign or Colonial Diplomas or Degrees.'"

SIR DOMINIC CORRIGAN moved as an amendment—"That it appears desirable, before any further attempt is made to introduce amendments of the Medical Acts, that a Royal Commission of Inquiry should issue, to take evidence from such members of the Medical Council, and such other persons as the Commission may see fit to examine, with the view of furnishing a report to serve as a basis for legislation."

SIR DOMINIC CORRIGAN said that he did not consider that it was right that such a Report should go before the Privy Council, as though it had the stamp of the Medical Council upon it, when the Council had not had the opportunity of studying its provisions. Before any resolutions were passed, he considered that the members of the Council, the licensing bodies, and the profession at large, should have the opportunity of expressing their opinion upon a measure of such great importance. There was no questioning the fact, that with the profession outside the Council were at loggerheads; and he thought this would be an excellent opportunity of reconciling conflicting opinions. After this had been done, a Report might be drawn up and submitted to the Privy Council for approval. It would thus possess the advantages of having been thoroughly discussed by those most interested in its bearings, and drawn up by Commissioners appointed by the Council and sanctioned by the Privy Council. Many were of opinion that delay would thereby ensue. But he did not think so. The delays were usually occasioned when Committees were brought from a long distance. But a Royal Commission was prompt in its actions. As a further reason for the appointment of this Commission, he drew the attention of the Council to the following passage in Mr. Simon's letter, in which it was stated that the Lord President felt that he could not undertake partial legislation on the

matter, but thought that a judgment of a more comprehensive sort must be the basis of any amended Bill to be introduced on the part of the Government. Then there was the question of the registration of Foreign degrees—to which he had so often objected. This could be well taken up by the Commission and the matter set at rest. The Council were asked to accept diplomas of which they had no knowledge, or guarantees that the holders had been examined. It was well to hold out the right hand of fellowship to our friends always. But if they looked to France, what did they do? The authorities would haul up and prosecute any Englishman if he dared to practise without having previously studied in the universities of the country. He therefore saw that the reciprocity was all on one side. Before concluding, he (Sir Dominic) would draw the attention of the Council to Clause XX of the Medical Act, in which provision was made for reporting to the Privy Council in the case of default on the part of Colleges or other Examining Bodies to keep the course of study and examination up to a proper standard. Here was another argument in favour of the proposed Royal Commission. If, however, the Council decided to send the Report of Committee to the Privy Council; he viewed such a course with considerable forebodings. He had laid the subject of the appointment of a Royal Commission before the Council, as the result of deep and anxious study. Ever since he had sat at that table, he had been in favour of it, and experience had all the more impressed it upon his mind. He would say: leave the licensing bodies alone, do not attempt to meddle with them. The Council could not get them to agree even upon so simple a question as the commencement of study; how then could they expect them in matters of so much greater importance? Have a State Examination, and leave that examination to be conducted by a recognised Board in London, Dublin, and Edinburgh; and say that to them should be committed the charge of students, such boards being made responsible that the men admitted to practise were capable of having the lives of the poor entrusted to their keeping. It had been argued that State Examinations should precede those of the licensing bodies; but he thought this would be a mistake. The State Examiners would consider that those who presented themselves from the licensing bodies, brought with them a guarantee that they had studied at a recognised medical school.

Dr. SMITH seconded the amendment.

Dr. ANDREW WOOD thanked Sir Dominic Corrigan for the temperate way in which he had brought forward the subject. He could not, however, agree in the remarks that the Council had been tardy in their operations. If they looked around in all directions, they would see the proofs of this in the many improvements wrought by their instrumentality. But great measures required time; the thing could not be done in a day. The Medical Act of 1858 took twenty-four years to mature. But he could not consent to Sir Dominic's amendment, because that would be as much as saying that the Act had been a failure; and they would have to go back twenty-four years and begin afresh. Sir Dominic had objected to the omission of Foreign diplomas; but who first suggested their admission? The Privy Council, in which Sir Dominic had so much faith. If any one doubted the right of the Council to make recommendations, the Act of Parliament supplied them with the warrant. Sir Dominic had endeavoured to throw cold water upon the visitation of examinations. But he considered those visitations of the utmost importance, as they were the only means which the Council had of satisfying themselves that the examinations had been properly conducted. Although of the opinion that some such recommendations as those contained in the Report should be carried, he nevertheless thought that, at the present moment, they were unprepared to pass a measure, upon which the Profession had not been asked an opinion.

Dr. ALEXANDER WOOD said that, as the Council was not charged with the composition of Acts of Parliament, it should not take upon itself the functions that did not properly belong to it.

After a few further remarks from one or two members, for and against the motion, the Council divided upon the Amendment, 4 being for and 13 against it. The motion of Dr. BENNETT was then put and carried.

Dr. CHRISTISON moved, and Dr. BENNETT seconded—"That, in the opinion of this Council, it is desirable that power be given to the Medical Council to refuse registration to any one who has not been sufficiently examined both in medicine and surgery."

An amendment was moved by Dr. ANDREW WOOD, and seconded by Dr. EMBLETON—"That it is desirable that power be given to the Medical Council to refuse registration to any person who has not both a legal qualification in medicine and a legal qualification in surgery."

The amendment was lost; the original motion was carried.

The following resolutions were then carried:

Moved by Dr. BENNETT, seconded by Dr. CHRISTISON—"That, having carefully considered the objects of the Medical Act of 1858, and

the constitution of the Council appointed under that Act to carry out its objects, the Council are of opinion that, for the purposes of the existing Act, the present Council is essentially well constituted."

Moved by Dr. BENNETT, seconded by Dr. APJOHN—"That the Council are of opinion that, if the Legislature should think proper to invest the Council with extensive powers and fresh duties, by which the profession at large would be brought more under the direct influence of the Council, then in that case the profession at large should have more direct influence in the appointment of members of Council."

Moved by Dr. STORRAR, seconded by Dr. A. SMITH—"That, in any future Act, provision should be made for instituting prosecutions by a public prosecutor or other authorised functionary, instead of leaving the enforcement of the law to the voluntary action of individuals of the public."

Dr. BENNETT moved, and Mr. HARGRAVE seconded—"That the Report of the Committee be adopted."—When this motion was put to the vote, there were eight for and eight against it; several members declining to vote. It was therefore not carried.

It was then moved by Sir D. CORRIGAN, seconded by Dr. A. SMITH, and agreed—"That the President be requested to write to the Lord President of the Council, to the effect that, on the receipt of his Lordship's communication of the 14th May, it was referred to a Committee of the General Council appointed to consider the amendments of the Medical Acts; that the enclosed was the Report submitted to the Council by the said Committee, but not as a whole adopted, and that the following resolutions were adopted."

Dr. BENNETT moved, Sir D. CORRIGAN seconded, and it was resolved—"That the President and Executive Committee shall be authorised (if it shall appear necessary) to confer with the Government on the subjects referred to in the Lord President's communication, and report the results of any such conference to this Council at their next meeting."

Report on Communications.—A report was presented from the Committee on Communications from Dr. John Harley, Mr. Courtauld, Dr. MacLoughlin, and Dr. Edwards Crisp, and was ordered to be adopted and entered on the minutes. It was to the effect that the Committee, after considering the letters, were of opinion that it did not fall within the province of the Council to interfere in the matters referred to in them; and recommended that the Secretary of the Council should be directed to reply to the authors accordingly.

Returns from Licensing Bodies.—The Committee on Returns from the Licensing Bodies of Professional Examinations and their results, and on the Registration of Students for the year 1868, presented a table, compiled from the returns, according to a recommendation of the Council, "that the returns from the licensing bodies be made annually, on the 1st of January, to the General Medical Council, stating the number and names of the candidates who have passed their first as well as their second examinations, and the number of those who have been rejected at the first and second examinations respectively." They reported also that the number of students registered during the year 1868 was as follows: In England, 483; in Scotland, 266; in Ireland, 175—total, 924.

The Case of L. A. La'Mert.—Dr. ALEXANDER WOOD moved, Mr. HARGRAVE seconded, and it was resolved—"That it be remitted to the Branch Council for England to investigate, according to the standing orders, the charges against Lima Abraham La'Mert, which led the Royal College of Surgeons of England, and the Royal College of Physicians of Edinburgh, to deprive him of his licence from these bodies respectively." "That in the event of the Branch Council for England coming to the conclusion that these charges can be substantiated, and involve infamous conduct in a professional respect, the Branch Council shall report the same to the Executive Committee." "That the Council by Clause IX of the Medical Act delegate to the Executive Committee their powers of summoning Lima Abraham La'Mert to appear before them, and of striking his name off the *Register* if they see cause."

The Recommendations, etc., of the Council.—The Committee appointed to rearrange the recommendations and opinions of the Medical Council on education, examinations, and registrations, presented a report. It was moved by Dr. ALEXANDER WOOD, seconded by Dr. EMBLETON, and agreed—"That the report of the Committee on the rearrangement of the recommendations and opinions of the Council on registration, education, and examination, be received and entered on the minutes, and that copies of the recommendations be printed and sent as usual to the licensing bodies." "That the following be included in the list of examinations which are considered sufficient evidence of preliminary examination in arts: 'Examination of (senior) candidates for honorary certificates under the local examinations of the University of Edinburgh.' 'Voluntary examinations of Christ's College, Canterbury, New Zealand.'"

State Medicine.—Dr. ACLAND moved, Dr. MACROBIN seconded, and

it was resolved—"That it be referred to the Executive Committee to consider with Mr. Ouvry the resolution of the Council with respect to the Report on State Medicine, and to take the steps necessary for carrying the resolution into effect." "That the State Medicine Committee be reappointed, so that the Report and Appendix on State Medicine be forwarded by the Committee, with the resolution of the Council thereon, to the licensing bodies and persons interested in the subject of State Medicine, requesting their observations thereon; and that the Committee present those communications, or a digest of them, to the next meeting of the Council."

The Pharmacopœia.—The Report of the Pharmacopœia Committee was read; and, on the motion of Dr. CHRISTISON, seconded by Dr. STORRAR, was received and adopted. The Report stated that, a re-issue of the *Pharmacopœia* having been required since last year's session, the corrections required in the *Pharmacopœia* of 1867 had been introduced into the work, which was in all other respects identical with the copies previously issued. The Committee had engaged during the past year the services of Dr. Redwood, in watching over the progress of pharmacy, and in making record of such corrections and additions as would hereafter facilitate the preparation of a future edition. He had submitted a Report to the Committee, which was reserved for future use. He had been requested to bring before the Pharmaceutical Society the substance of his first two reports to this Committee, with a view to the discussion of points needing inquiry or investigation. The Committee had expended £30 from the sum of £50 placed at their disposal. They recommended that the sum of £50 be again placed at their disposal.

On the motion of Dr. STORRAR, seconded by Sir D. CORRIGAN, the *Pharmacopœia* Committee was reappointed; to consist of Dr. Christison; Dr. Sharpey; Dr. A. Smith; and Dr. Quain.

Communications.—The following were read: 1. A memorial presented by the Obstetrical Society of London to Her Majesty's Secretary of State for the Home Department. 2. A memorial from the Medico-Ethical Association of Manchester on the subject of the Medical Act. 3. A communication from the Royal College of Surgeons of Edinburgh. —With reference to the last named document, it was resolved—"That the President of the Royal College of Surgeons of Edinburgh be informed that he is in error in supposing that the document to which he refers was not received by this Council; that the document was received and respectfully considered by the Council, but that it was not thought expedient to depart from their invariable practice of not inserting such communications on their minutes."

Concluding Business.—The following resolutions were then passed:

"That the powers and duties delegated to the Executive Committee, in accordance with Sect. IX of the Medical Act, shall be vested in the Committee until the next meeting of the General Medical Council."

"That the Executive Committee be requested to take such steps as they may deem best to obtain from the Government suitable apartments for the use of the Council."

"That a seventh volume of the Minutes of the General Medical Council, the Executive Committee, and the Branch Councils, with a complete index up to the present time, be published without any unnecessary delay."

"That the thanks of the Council are due, and are hereby tendered, to the treasurers, Dr. Sharpey and Dr. Quain, for their important services."

"That the thanks of the Council are eminently due, and are hereby offered, to the Royal College of Physicians, London, for their obliging and courteous accommodation during the present session of the Medical Council."

"That a gratuity of twenty guineas be given to the resident officials of the Royal College of Physicians, London, for services rendered to the Council."

"That the cordial thanks of this Council are due, and are hereby tendered, to Dr. Andrew Wood, for his unwearied exertions and invaluable services as chairman of the Business Committee during the past session of the Council."

"That the thanks of the Council are hereby cordially tendered to Dr. Paget, the President, for his kind, courteous, and efficient services during the latter part of the present session of the Medical Council."

The business of the session thus terminated.

SCURVY.—It is said that a considerable number of the soldiers who have arrived as invalids from the East Indies within the past few months have suffered to some extent from scurvy. It does not appear that any serious neglect as to the provisions of the various vessels can be proved, but in many instances a deficiency of fresh vegetables has been noticed, and in all the cases the quality of the lime-juice has been questioned.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 24TH, 1869.

THE ROYAL SANITARY COMMISSION.

"OMNE ignotum pro mirifico." The Royal Sanitary Commission, "dark with excess of light," is the Great Unknown of this wonderful session. Her Majesty's Ministers, her faithful Commons, Peers, and Right Reverend Prelates, are all compelled to show their cards in the great game of State craft, of which we all are interested observers. But who can tell—besides these awful and silent Commissioners themselves, who seem sworn not to divulge the secrets of their craft—what is going on in that snug "No. 15 Committee Room," where, twice a week or oftener, as the public prints inform us, these grim inquisitors meet in solemn conclave to torture their victims, and extract confessions that are big with life or death to the people of England and Wales? A curious subject for speculation, which Londoners may freely and calmly indulge, as this great heart of England is, by special licence, or special whim, exempted from the anatomy of these skilful sanitary doctors!

We have at length been somewhat *rudely* awakened to the consciousness that this is not a public but a private Commission. We—the British Medical and Social Science Associations—asked for a full, comprehensive, and searching inquiry, which we fondly imagined would be conducted openly and in the face of day. If there was any one inquiry more than another, which should have courted instead of shunning the public gaze, it was precisely this one. We do not profess—nor, to say the truth, do we care—to know the etiquette of Royal Commissions; but we know that there is a point beyond which the assumption of dignity and seclusion becomes at once ridiculous and intolerable. As it was avowedly in consequence of the earnest and persevering solicitations of the Joint-Committee that the Commission was appointed, it was naturally supposed that those who had paid special attention to Public Medicine, and had not grudged years of profitless toil and considerable pecuniary outlay in the service of the public, would at all events be welcomed as spectators, if not occasionally consulted as confidential advisers. Yet we have been informed, on credible authority, that the entrance to this Star Chamber is jealously guarded against all comers except those who are summoned to give evidence, and such as may be admitted by special favour of the chairman. One gentleman, who is well known as having taken a very active part in reference to this Commission, was about to walk into the Committee Room, as he had done twice before, to hear the examination of a particular witness, when he was challenged by name, and informed that the proceedings were private, as the presence of visitors was apt to disturb the Commission! To the offer that was made to take in his name to the chairman and request permission for him to enter, he returned an indignant refusal, saying that he neither wished nor would ask any favour from the Commission or their chairman. The same gentleman, having been repeatedly urged by an influential member of the

Commission to offer to the chairman any suggestions that might seem to him calculated to promote the objects of the inquiry, ventured to send in a list of witnesses who could give very valuable evidence on certain points which he specified, and received from the secretary the significant reply that, "if the chairman wishes any further information, he will communicate with you." Pity that the benighted public should not be allowed to profit by the omniscience of the Commission and its model chairman!

We, of course, and many others, are burning with impatience to know the results of this consummate knowledge which the Commission possesses of the subject it is appointed to investigate. And many also, like children who should never see half-done work, have a longing desire to see, and study with the admiration and deference to which they are entitled, the schedules which are understood to have been issued to the chairmen and clerks of Local Boards under the Public Health and Local Government Acts, and to the officers of local authorities in districts where these Acts are not in force. For, notwithstanding the mystery in which these wonderful documents have been shrouded, we submit that it is no easy matter to preserve a complete *incognito* when you take hundreds of people into your confidence. The inevitable consequence of such a procedure is the propagation of hearsay statements, and more or less vague rumours, which are accepted and reasoned on as if they were strictly true. We believe, however, we are not far wrong in stating that the Royal Sanitary Commission, in order to arrive at the truth respecting the good deeds or the misdeeds of local authorities, have adopted the rather peculiar method of sending their schedules to them—the said local authorities—alone, and inviting them to report upon themselves. And upon evidence such as this, unless her Majesty's Government can be induced to permit the employment of competent Assistant-Commissioners to check these returns by searching inquiries conducted on the spot, a Report will be drawn up and presented to Parliament, which will be quoted as infallible by some, and rejected as unworthy of the slightest confidence by others. We are further given to understand that not a few of the questions addressed in these schedules to the local authorities are so general in their tenour, and so slipshod in their terms, as to invite vague and evasive answers; while some of the omissions are of so extraordinary a nature as to compel the belief that the whole Commission, with its omniscient chairman, were half asleep in their Westminster snugery. We cannot believe, for instance, that, if their schedules had been first submitted to the ordeal of public inspection, they would have been allowed to go forth without a single question regarding the proportion of the population which draws its water-supply from pump-wells, the neighbourhoods in which these are situated, and the sources of contamination to which they are exposed. Such an omission is of itself destructive of the value of the inquiry. The day before the Social Science Association met at Birmingham, the water-supply of that town was universally considered immaculate. Before forty-eight hours were over, it was made plain to all that not only was the company's water often drawn from a very impure source, but that two-fifths of the population were regularly drinking pump-water saturated with impurities. Without a much more complete local inquiry than is said to be embraced in the schedules, the Royal Sanitary Commission will be a gigantic soap-bubble.

THE MEDICAL COUNCIL AND MEDICAL LEGISLATION.

THE proceedings of the Medical Council on the last day of its session, with regard to Medical Legislation, failed, we regret to say, of being such as might have been hoped for. It will be remembered that, on the first day of the meeting, an important letter from the medical officer of the Privy Council, written by direction of the Lord President, was read to the Council; and that a Committee was appointed to take the letter into consideration, and to report thereon to the Council. The Committee, after several meetings, during which it had before it, besides the Lord President's letter, various other documents relating to Medical Legislation, brought up a report, which was hurriedly discussed at the eleventh hour, and finally was *not* adopted by the Council. Eight members voted for, and eight against it, several declining to vote at all: and all that was really done, was to pass the resolutions of which a copy was given at page 63 of last week's JOURNAL.

The Report itself of the Committee, of which a copy is given at page 88, deals with these points; the Amendments of the Medical Act already proposed by the Council; the defect in the Medical Act in allowing single qualifications to be registered; and the question of alteration in the constitution of the Council. With regard to the Medical Acts Amendment Bill agreed on by the Council in former sessions, the Committee recommended the retention of all the clauses, with the exception of one relating to the admission of foreign graduates to the *Register*. As the clause—which was introduced at the instance of former Secretaries of States—formerly stood, it provided certain conditions which should be complied with by the holders of foreign or colonial diplomas or degrees. The Committee, however, recommended the substitution of a permissive clause in more general terms, to the effect that the Council should have power to dispense with the provisions of the Medical Acts in favour of persons applying to be registered in virtue of foreign degrees or diplomas. If there is any one point in regard to medical registration in which extreme care is required, it is the registration of degrees and diplomas over the granting of which the Council has no manner of control. It would be most just that there should be a complete reciprocity between this kingdom and foreign or colonial States with regard to the admission to practise of all who could give evidence of having gone through a full course of professional education and passed satisfactory examinations. But, as regards especially the admission of foreign degrees and diplomas to our *Register*, it is essential that very stringent rules should be laid down; and it is a very grave question, whether a Council, of which the constitution is liable to variations, and the members of which may at different times take different views of the same subject, should have the power—as we understand to be suggested in the proposed clause—of disposing of individual cases without having any fixed principle laid down by law for their guidance.

On the second point—the defect of the Medical Act in allowing registration in single qualifications—the Committee agreed with the Lord President, but pointed out that the Council had no power in the matter. They recommended, that power should be given to the Council in an amended Medical Act to refuse registration to all who had not passed sufficient examinations both in Medicine and in Surgery. This suggestion requires no comment; as it must meet with universal approval.

In that part of the Report which refers to the constitution of the Medical Council, and in the resolutions founded thereon, the Council has, after a show of resistance, acknowledged that the admission of the profession to representation is desirable. In making this confession, however, the Committee have strangely gone out of their way to make elaborate objections to proposals which have never, as far as we are aware, been made; certainly not by this Association, by the large body of medical men who have signed the memorial which was presented to

TABLES OF THE EDINBURGH COMMITTEE ON THE ACTION OF MERCURY.

[To be Inserted at page 420 of the "British Medical Journal", May 8th, 1869.]

TABLE I.—Effects of Corrosive Sublimate on Six Dogs without and with Biliary Fistula. (Pp. 412-13.)

A.—Dogs without Biliary Fistula.

Dog A, RETRIEVER, 12 MONTHS OLD, WEIGHT 30½ LBS.			Dog B, COLLIE, 5 MONTHS OLD, WEIGHT 18¼ LBS.			Dog C, SKYE TERRIER, 15 MONTHS OLD, WEIGHT 21½ LBS.		
Days.	Amount of Corrosive Sublimate given.	Effects.	Days.	Amount of Corrosive Sublimate given.	Effects.	Days.	Amount of Corrosive Sublimate given.	Effects.
1st day.	.05 grain.	Animal in excellent health—fæces of a light brown colour, semi-solid.	1st day.	.1 grain.	Animal in excellent health—fæces solid, brown.	1st day.	.3 grain.	Animal in excellent health—fæces solid, light brown.
2nd "	.1 "	No change.	2nd "	.1 "	No change.	2nd "	.7 "	No change.
3rd "	.1 "	"	3rd "	.1 "	"	3rd "	.8 "	"
4th "	.1 "	"	4th "	.5 "	"	4th "	.8 "	"
5th "	.2 "	"	5th "	.55 "	"	5th "	.8 "	"
6th "	.3 "	"	6th "	.7 "	"	6th "	1.6 "	Appetite impaired.
7th "	.4 "	"	7th "	.8 "	"	7th "	1.6 "	No change.
8th "	.4 "	Colour of fæces changed to a very dark brown. Animal in good health.	8th "	.8 "	Colour of fæces changed from brown to greenish brown, appetite impaired.	7th "	30 mins. tinct. opii given.	Slight diarrhœa. Fæces brown.
9th "	.5 "	"	9th "	No mercury.	Diarrhœa—fæces greenish yellow.	8th "	No medicine given.	Profuse salivation. Breath very fetid. Slight nasal discharge. Slight diarrhœa; fæces brown.
10th "	.55 "	"	10th "	¼ grain morph. mur. given.	Diarrhœa profuse—fæces contain blood. Slight nasal discharge.	9th "	.8 grain.	No change.
11th "	.7 "	"	11th "	No mercury.	Diarrhœa profuse—fæces of a slate-brown colour. Nasal discharge more abundant. Decided salivation. Gums unchanged.	10th "	..	Dog found lying in the morning with a stream of saliva flowing from its mouth. Breath very fetid. Ulcers on the gums, on the side of the tongue, and on the inside of the lips. The ulcers have a dark-grey surface. Slight diarrhœa; fæces contain blood. Dog died in the afternoon with slight convulsions. Weight 21¼ lbs.
12th "	.8 "	"	12th "	30 mins. tinct. opii given.	Nasal discharge—muco-purulent, very profuse. Salivation less marked than on previous day. Breath fetid. Diarrhœa has nearly ceased. Animal is constantly trembling—takes almost no food.			
13th "	.8 "	"	13th "	No medicine given.	Found dead. Weight 14¼ lbs.			
14th "	1.6 "	"						
15th "	1.6 "	Nasal discharge of mucus. No apparent salivation. Fæces as on the 8th day. Appetite unimpaired.						
16th "	1.6 grains. 20 mins. tinct. opii.	Nasal discharge unaltered. Slight diarrhœa. Fæces brownish-yellow.						
17th "	1.6 grain. 30 mins. tinct. opii.	Nasal discharge less marked. Diarrhœa more decided. Fæces greenish-brown, contain a little blood. Appetite impaired.						
18th "	.8 grain.	Salivation—not profuse however. Fetid breath. Slight ulceration under margin of tongue. Tongue pale and cedematous. No sponginess of gums. Profuse lachrymation. Nasal discharge, muco-purulent, profuse. Fæces fluid, bloody. Animal refuses all food.						
19th "	..	Dog found lying dead, with a stream of colourless fluid on the floor of the cage, which had evidently flowed from its mouth. Animal much emaciated. Weight 22 lbs.						
Total amount of Corrosive Sublimate given. } 12.2 grains, given during a period of 18 days.			4.25 grains, given during a period of 8 days.			7.2 grains, given during a period of 9 days.		
Mouth and Salivary Glands.—Tongue pale, slight ulceration under its right margin. Vascularity of salivary glands not increased.			APPEARANCES FOUND ON DISSECTION.			Mouth and Salivary Glands.—Tongue covered with a white fur. Ulcers inside lips on gums and below margin on tongue. Vascularity of salivary glands not increased.		
Stomach.—Distended by clear fluid tinged with bile. Mucous membrane healthy.			Mouth and Salivary Glands.—Tongue pale—cedematous. No ulceration. Vascularity of salivary glands not increased.			Stomach.—Empty. Mucous membrane healthy.		
Intestine.—Marked redness of mucous membrane of duodenum, jejunum, ileum, and large intestine. Small intestine contained fluid similar to that in the stomach.			Stomach.—Contained a quantity of partially-digested food. Mucous membrane healthy.			Intestine.—Marked redness of mucous membrane of duodenum. Slight redness of jejunum and ileum. Mucous membrane of large intestine marked with bright red striæ running longitudinally. Duodenum contained a little bile; the large intestine contained some bloody fecal matter.		
Liver and Gall-Bladder.—Engorgement of hepatic vein. Gall-bladder filled with greenish-yellow bile. Hepatic cells apparently normal.			Intestine.—The mucous membrane of the small intestine was marked with bright red lines and patches from the pyloric orifice of the stomach to the ileocolic valve. There are patches of lymph on the mucous membrane of the ileum. Large intestine is quite pallid. Duodenum contained some chyme of an orange-yellow colour.			Liver and Gall-Bladder.—Same as the preceding.		
Other Organs.—Pancreas very vascular. Hypodermic tissue cedematous where the injections had been made. Other organs normal.			Liver and Gall-Bladder.—Engorgement of hepatic vein. Gall-bladder filled with orange-yellow bile. Hepatic cells apparently normal.			Other Organs.—Pancreas very vascular. Hypodermic tissue cedematous where the injections had been made. Other organs normal.		

[This Table is continued next page.]

TABLE III.*—*Second Series of Observations on Dog 1. Daily amount of Bile secreted without Mercury.* (P. 413, col. ii; 414, col. i.)

1	2	3				4			5			6		
Date.	Weight of dog.	Amount of food, in grammes.				Quantity of bile secreted in 24 hours.			For each kilogramme of dog there were secreted.			For each 100 grammes of dry food there were secreted.		
	Kilogs.	Water.	Milk.	Bread.	Meat.	Fluid bile.	Bile solids.	Bile salts.	Fluid bile.	Bile solids.	Bile salts.	Fluid bile.	Bile solids.	Bile salts.
1867.						grammes.	grammes.	grammes.	grammes.	gramme.	gramme.	grammes.	grammes.	grammes.
June 29 - - -	16.8	None.	567	170.1	283.5	106.2	3.365	1.15						
" 30 - - -		"	"	"	"	148.0	+	+						
July 1 - - -		"	"	"	"	117.5	4.31	1.116						
" 2 - - -		"	"	"	"	185.1	6.60	2.010	11.01	0.392	0.119	80.6	2.87	0.87
" 3 - - -		"	"	"	"	81.6	2.978	0.821	4.85	0.177	0.019	35.5	1.29	0.35
" 4 - - -		"	"	"	"	149.5	5.80	1.615						
Mean - - -						131.31	4.71	1.343	7.82	0.28	0.079	57.21	2.05	0.58

The amount of dry food consumed daily during the above period amounted to 229.5 grammes.
for each kilogramme of dog amounted to 13.6 grammes.

* In cols. 5 and 6 the maximum, minimum, and mean quantities are calculated; the last, however, are estimated from the mean quantities of col. 4. + Not determined.

TABLE IV.*—*Third Series of Observations on Dog 1. Amount of Bile secreted in twenty-four hours when 5 grs. of Pilula Hydrargyri were given daily.* (P. 414, col. i.)

1	2	3				4			5			6		
Date.	Weight of dog.	Amount of food, in grammes.				Quantity of bile secreted in 24 hours.			For each kilogramme of dog there were secreted.			For each 100 grammes of dry food there were secreted.		
	Kilogs.	Water.	Milk.	Bread.	Meat.	Fluid bile.	Bile solids.	Bile salts.	Fluid bile.	Bile solids.	Bile salts.	Fluid bile.	Bile solids.	Bile salts.
1867.						grammes.	grammes.	grammes.	grammes.	gramme.	gramme.	grammes.	grammes.	gramme.
July 9 - - -	15	None.	567	170.1	283.5	100	4.27	1.10						
" 10 - - -		"	"	"	"	89	3.729	1.023						
" 11 - - -		"	"	"	"	170.6	6.19	1.74						
" 12 - - -		"	"	"	"	204.0	8.6	2.29	13.6	0.39	0.152	88.8	3.52	0.99
" 13 - - -		"	"	"	"	139.0	5.86	1.52						
" 14 - - -		"	"	"	"	127.6	5.13	1.50						
" 15 - - -		"	"	"	"	67.0	2.86	0.73	4.46	0.19	0.042	29.19	1.246	0.31
" 16 - - -		"	"	"	"									
" 17 - - -		"	"	"	"									
Mean - - -						127.6	5.16	1.38	8.50	0.344	0.09	55.6	2.24	0.601

NOTE.—The amount of dry food consumed daily during the above period amounted to 229.5 grammes.
for each kilogramme of dog amounted to 15.27 grammes.

* In columns 5 and 6 the maximum, minimum, and mean quantities only are calculated. The last, however, are estimated from the mean quantities of column 4.

TABLE V.—*Fourth Series of Observations on Dog 1. Amount of Bile secreted in twenty-four hours when 5 grs. of Pilula Hydrargyri were given daily.* (P. 414, col. i.)

1	2	3				4			5			6		
Date.	Weight of dog.	Amount of food, in grammes.				Quantity of bile secreted in 24 hours.			For each kilogramme of dog there were secreted.			For each 100 grammes of dry food there were secreted.		
	Kilogs.	Water.	Milk.	Bread.	Meat.	Fluid bile.	Bile solids.	Bile salts.	Fluid bile.	Bile solids.	Bile salts.	Fluid bile.	Bile solids.	Bile salts.
1867.						grammes.	grammes.	gramme.	grammes.	grammes.	grammes.	grammes.	grammes.	grammes.
July 23 - - -	15	None.	8.16	282	225.6	231.9	7.55	lost.						
" 24 - - -	"	"	"	"	"	56.7	1.61	lost.						
" 25 - - -	"	"	"	"	"	95.0	2.86	0.931						
" 26 - - -	"	"	"	"	"	49.1	1.73	lost.						
" 27 - - -	"	"	"	"	"	38.2	1.41	0.443						
" 28 - - -	"	"	"	"	"	175.0	4.88	1.66						
" 29 - - -	14.9	"	"	"	"	69.3	2.64	0.691						

* In this and all subsequent Tables the amount of medicine said to be given on any day was always given during the twenty-four hours *previous* to the bile collection of the same date.

TABLE VI.—*First Series of Observations on Dog 2. Daily amount of Bile secreted without Mercury.* (P. 414, col. ii.)

1	2	3				4			5			6		
Date.	Weight of dog.	Amount of food in grammes.				Quantity of bile secreted in 24 hours.			For each kilogramme of dog there were secreted.			For each 100 grammes of dry food there were secreted.		
	Kilogs.	Water.	Milk.	Bread.	Meat.	Fluid bile.	Bile solids.	Bile salts.	Fluid bile.	Bile solids.	Bile salts.	Fluid bile.	Bile solids.	Bile salts.
1867.						grammes.	grammes.	grammes.	grammes.	grammes.	grammes.	grammes.	grammes.	grammes.
September 21 - -	15.6	None.	564	None.	None.	130	7.29	1.41	8.333	0.467	0.09	230.0	12.9	2.51
" 22 - - -			564			81	4.48	0.907						
" 23 - - -	..	{ "Not accurately noted." Statement in book is "scarcely any food taken." }				94.15	6.072	1.205						
" 24 - - -		None.	225.6	None.	None.	94.70	5.750	1.01						
" 25 - - -	15.6	"	282	"	310.2	78.80	5.92	1.25	..	..	..	73.9	5.60	1.18
" 26 - - -		"	197.4	"	225	62.50	5.70	1.08						
" 27 - - -		Has only taken a little milk.				35.50	1.99	0.436	2.27	0.12	0.027			
Mean for seven days						82.46	5.31	1.042*	5.27	0.34	0.066			

NOTE.—On the 25th September the dry food consumed amounted to 105.7 grammes, or 6.7 grms. per kilog. of dog; on the 21st, 56.4 grms., or 3.6 grms. per kilog. of dog.

TABLE XIX.—*Second Series of Observations on Dog 5. Daily amount of Bile secreted before, during, and after Podophylline and Taraxacum were given. (P. 418, col. ii.)*

1 Date.	2 Weight of dog.	3 Amount of food in grammes.				4 Quantity of bile secreted in 24 hours.			5 Observations.
		Kilogs.	Water.	Milk.	Bread.	Spleen.	Fluid bile.	Bile solids.	
1868.							grms.	grms.	grms.
Aug. 23.	14.7		566	566	225.6	906.8	282.8	11.56	3.0
" 24.	"		"	"	"	"	220.9	10.42	2.84
" 25.	"		"	"	"	"	154.5	4.20	1.58
" 26.	14.6		"	"	"	"	150	1.95	0.52
" 27.	"		"	"	"	"	207	11.99	3.21
" 28.	"		"	"	"	842.1	396	10.21	2.42
" 29.	14		"	"	"	906.8	340	9.36	2.12
" 30.	"		"	"	"	"	Lost.	"	"
" 31.	"		"	"	"	"	Lost.	"	"
Sept. 1.	"		"	"	"	"	317	9.42	2.46
" 2.	"		"	"	"	"	355.5	10.61	3.02
" 3.	14.3		"	"	"	"	298	9.53	2.27

NOTE.—As the weight of the dog, and the amount of food eaten by it, were so constant in this case, we have not thought it necessary to calculate the amount of bile secreted per kilogramme weight of dog, or per 100 grammes of food consumed.

TABLE XX.—*Fifth Series of Observations on Dog 7. Daily amount of Bile secreted before and during the administration of Extract of Taraxacum. (P. 419, col. i).*

1 Date.	2 Weight of dog.	3 Amount of food, in grammes.				4 Quantity of bile secreted in 24 hours.			5 Observations.
		Kilogs.	Water.	Milk.	Bread.	Tripe.	Fluid bile.	Bile solids.	
1868.							grms.	grms.	grms.
Aug. 26.	29.4		846	564	225.6	1353.6	192	8.53	2.10
" 27.	"		"	"	"	"	176	10.52	2.36
" 28.	29.5		"	"	"	"	214	8.93	1.94
" 29.	"		"	"	"	"	188	9.64	2.12
" 30.	"		"	"	"	"	151	9.99	2.45
" 31.	29.3		"	"	"	None.	140	8.43	1.64
Sept. 2.	"		652	"	"	1353.6	212.2	12.9	3.76
" 3.	29.2		846	"	"	"	168	8.04	2.51
" 8.	31.2		"	"	"	"	251.1	12.17	3.21
" 9.	"		"	"	"	"	169.4	8.61	2.61
" 10.	"		"	"	"	"	180.6	8.84	1.98
" 11.	31		"	"	"	"	159	9.12	2.31

CONCLUDING NOTE.

IN a letter dated October 18th, 1866, I was informed by the Secretary of the British Medical Association, "That, in accordance with a resolution passed at the last Annual Meeting, the sum of £25 be granted out of the funds of the Association to a Committee to be appointed by, and under the direction of Professor Hughes Bennett, M.D., to investigate the Action of Mercury in Animals." In the appointment of the Committee, I was actuated solely by the desire of uniting into one focus all the varied kind of knowledge and ability, which, if brought to bear upon the inquiry, might insure success. The direction of the investigation, which was limited to the action of mercury on the biliary secretion, was rendered difficult by a variety of causes into which I cannot now enter at length. They were of three kinds: 1. Those connected with the inquiry itself; 2. Those interposed by the Senatus Academicus; 3. Those which originated in bringing different persons to work harmoniously together where so much labour and sacrifice of time was involved. I am satisfied that no direction of an investigation can be perfectly successful, unless the actual workers be remunerated, and the feeling of unrequited and unacknowledged labour be in this way removed. I have in my Report done all that a sense of justice appeared to me to demand in this respect, but am aware that anything but satisfaction has been the result. The experience thus acquired, however, will prove of the greatest value in any future inquiry. Notwithstanding the great difficulties which presented themselves, they have for the most part been overcome; the commission I accepted has been executed; and the Association may be congratulated on the valuable results obtained, which, in my opinion, have completely solved one of the most important therapeutical problems which ever agitated the medical profession.

The resolution of the Editor of the BRITISH MEDICAL JOURNAL to print the Report without the Tables, and without sending a proof to be laid before the Committee, was most unfortunate, and led to four of its members disclaiming any share in its production, on the ground that they had not seen it, as printed, before publication. Although this step is much to be regretted, the Tables now published, containing as they do all the facts arrived at by the Committee, will, I think, be found not only to justify the conclusions put forth in the Report, but serve as data to all those who take an interest in such an inquiry, or who desire to extend them by making similar researches.

The Report, as read at the Oxford meeting, has been published in a work entitled *Medicine in Modern Times* (London: Macmillan and Co., 1869). As read at Norwich, in an extended form, with the results of the experiments with podophylline and taraxacum, it appears in the *Transactions of the British Association for the Advancement of Science* for 1868. A reprint of this article, with the Tables placed in their proper order, in juxtaposition with the text, has been published by Edmonstone and Douglas, Edinburgh, and Hamilton, Adams, and Co., London. Lastly, it will be found in the pages of the BRITISH MEDICAL JOURNAL for July 25th, 1863, and for May 8th and July 24th, 1869.

The Committee at its last meeting, July 9th, 1869, audited and wound up its accounts. The total receipts from all sources were £116:5:3. The total expenditure was £116:17:10½, leaving a balance against the Committee of 12s. 7½d.

The Committee was then dissolved.

J. HUGHES BENNETT, *Chairman and Reporter.*

the Council by Dr. Bell Fletcher, or by the members of the Garioch and Lothians Associations. Where the Committee found the suggestion that the Council "should be in considerable part elected by popular suffrages," we do not know; nor can we imagine where they discovered the necessity for defending the claims of the Universities and Colleges to be represented, or for insisting on the importance of having Crown nominees to watch over the interests of the profession and the public. Certainly, the documents which have been drawn up on behalf of the Association, and the very numerous signed memorial presented by the deputation from Birmingham—which documents may be taken fairly as representing professional feeling—contain opinions the very contrary to those which the Committee have taken such trouble to refute. The Committee of our Association have expressly declared in favour of the Council being partly constituted of representatives of the Universities and Corporations, and of Government nominees. The Birmingham memorial states that "the influence and power for good of the General Medical Council would be greatly extended . . . if provision were made in a new Act of Parliament for the representation in the Council of the general body of practitioners of medicine and surgery." Here, again, reading the memorial in connexion with the explanations given by the deputation, we fail to discover any intimation that the memorialists desire anything more than the introduction into the Council of representatives of the registered practitioners.

The Council, in the resolutions founded on the Report, states that, for the present purposes of the Medical Act, the Council is essentially well constituted; but it allows that, if extended powers be given to the Council, the members of the profession should have a more direct influence than at present in the election of the members. Here the whole question at issue is conceded. No reasonable person can deny that the Council has been fettered in its desire to do good by the imperfections of the Medical Act; or that it has "met with a degree of success which is large in proportion to the period of its existence, and in relation to the work that had to be done and the difficulties to be overcome." All that is asked by the profession is, that medical legislation shall be made more perfect than it now is; that the Council, as the executive body, shall have greater powers to carry out the law; and that those powers, and the influence of the Council generally, shall be increased by the presence in it of men directly representing the profession, in addition to those elected by the Colleges and Universities and those nominated by the Crown. Both an amended Act and a more powerful Council are wanted. The best constituted Council that could be brought together could not act in a thoroughly satisfactory manner under the present imperfect provisions of the Medical Act; nor could the most perfect Medical Act be efficiently carried out by a Council in which all interests were not fairly represented.

The Committee, referring to the quasi-judicial power of the Council to remove from the *Register* the names of persons judged guilty of infamous conduct in a professional respect, say that such judicial power would not be allowed to a Council elected in any considerable part by popular suffrages. The Committee must have been in a very confused state when they made this statement. The power which the Council possesses over persons guilty of infamous conduct is analogous to that possessed by the members of the Bar, and by the Presbyteries and Sessions of the Church of Scotland; and in these bodies the popular element very largely predominates.

The whole work of the Council, then, at its recent session, in regard to medical legislation, has ended in the adoption of a few isolated resolutions. Much more satisfactory would it have been, if the Council had, in face of the declaration of the Lord President of the intention of the Government to legislate *de novo*, fully examined the Act from beginning to end, so as to be prepared with a complete legislative scheme to be proposed to Government. This however, was not done—the only attempt at a general dealing with medical legislation being the in-

judicious proposal of Sir Dominic Corrigan (which was not adopted) for the appointment of a Royal Commission. We much fear that the Council has condemned itself to the performance of a mere secondary part in medical legislation.

THE CONSTITUTION OF THE MEDICAL COUNCIL.

THERE is a rumour—whether correct or incorrect, we cannot say with certainty—that it is proposed, in future medical legislation, to abolish entirely the present Medical Council, and to substitute for it a Government Council composed mainly of members not belonging to the medical profession; and to institute a Board of Examiners appointed by the Government. Such a proposal as this for the constitution of a Council to regulate the profession cannot for a moment be entertained; and, if ever made, must be met by strenuous opposition on the part of the profession. Its adoption would only tend to the degradation of medicine; for it would imply an unfitness, which does not exist, on the part of the medical profession to direct the education of its members, and in other respects to regulate its internal economy. The Law, the Church, and other professions, make their own regulations on such matters as education and admission, aided by the law only so far as is necessary to give them power. The medical profession is as competent as any other to govern itself. All that it asks from the law is, that a body of men, who shall beyond cavil represent all interests in fair proportion, shall be supplied with well defined powers for making and carrying out such regulations as are essential to the well-being of the profession and conducive to the public good. The profession can never consent to be placed under the direction of a body of men, however eminent, who will have at best but an imperfect knowledge of its wants, and whose appointment, in fact, may rest in the hands of some one adviser of the Government.

THE Durham Lunatic Asylum, at Sedgfield, is to be enlarged at an expense of about £2,500.

THE French naval surgeons are, it is said, to be allowed to count as service the time spent in the schools of naval medicine.

AN amateur homœopath has been fined by the Tribunal of Correctional Police in Strasburg, for practising medicine without licence.

TYPHOID fever has been prevailing with great severity in Spain. Several medical practitioners in Madrid have fallen victims to the disease, and forty have died in the province of Valencia alone.

DR. R. THORNE THORNE has been appointed Assistant-Physician to the London Fever Hospital, in the place of Dr. Broadbent, who has succeeded Dr. Buchanan as Physician.

A MEDICAL journal, says the *Wiener Medizinische Wochenschrift*, has been founded in Rome; but is already either defunct or in *articulo mortis*.

THE Duke of Norfolk has consented to accept the office of President of the Sheffield Public Hospital and Dispensary, *vice* the Earl Fitzwilliam, whose term of office (two years) has nearly terminated.

THE Wonford Asylum, near Exeter, erected at a cost of £30,000, for the reception of lunatics of the middle and upper classes, has been formally opened by the Earl of Devon.

DR. JOHN HARLEY writes to us that the statement made in the medical journals, that he was a candidate for the Chair of Physiology in King's College, was incorrect.

THE next house dinner at the Medical Club will take place on Wednesday, July 28th, on which occasion Edwin Saunders, Esq., will take the chair.

AT a quarterly court of governors of the General Lying-in Hospital, held on Wednesday last, it was stated that the hospital would, before August, receive £400, on account, from the money bequeathed to the London charities by Lord Henry Seymour.

THE HEALTH OF THE WIMBLEDON CAMP.

DURING the last few days of the camp at Wimbledon, there was remarked a slight increase in the cases of sickness: these consisted chiefly of diarrhoea, dyspepsia, and general lassitude, and were attended at the Association Hospital by Dr. Lavies, Dr. Pearse, and Mr. Morgan; and at the Victoria Camp by Assistant-Surgeon W. G. Shepherd, M.D., who, as in previous years, erected a hospital-tent, remained in camp during the meeting, and gave his services gratuitously not only to members of his own corps, but to all volunteers in uniform who required his advice. Altogether, the volunteers have every reason to congratulate themselves on the unusually healthy state of the camp of 1869.

THE MANCHESTER GUARDIANS AND DR. LEDWARD.

WE are informed, with reference to the conduct of the Manchester guardians towards Dr. Ledward, as reported in last week's JOURNAL, that there is a widely spread feeling of indignation among the profession in Manchester at the treatment which Dr. Ledward has received from the guardians; and that steps are being taken for that gentleman's vindication by his brethren. We shall notice the proceedings in due course.

ADDENBROOKE'S HOSPITAL.

A VACANCY has occurred in the office of Physician to Addenbrooke's Hospital, Cambridge, by the resignation of Dr. Bond, Regius Professor of Physic in the University, who has been elected Consulting-Physician. We understand that no opposition will be made to the election of Dr. Bradbury, who has acted as Deputy-Physician during the last two years. The election will take place on Monday next, the 26th inst.

ST. ANDREW'S MEDICAL GRADUATES' ASSOCIATION.

THE members of the Association had a very pleasant holiday at St. Alban's on Tuesday last. They visited, under the kind guidance of Dr. Lipscomb, the many places of interest in the neighbourhood—the Lepers' Aisle in St. Stephen's Church, the ruins of Lord Bacon's house at Gorhambury, the Abbey Church, and the ruins of Verulam. The day was beautifully fine, and the excursion was a great success, which will long linger pleasantly in the recollection of all who were present.

CONFERENCE OF MEDICAL OFFICERS OF HEALTH.

OUR readers will observe, from the programme of the annual meeting, that the arrangements for a conference of health officers in the Public Medicine Section are now complete. The whole available time on Thursday, the 29th, will be devoted to this important business. One paper will be read by Mr. Davies of Bristol, entitled "Four Years' Experience as a Health Officer in Bristol"; and another by Dr. Edward Ballard of Islington, on the defects of the existing Sanitary Acts, with practical suggestions for their amendment.

THE DIRECTOR-GENERAL OF THE ARMY MEDICAL DEPARTMENT AT NETLEY.

SIR GALBRAITH LOGAN, Director-General of the Army Medical Department, paid a visit to the Royal Victoria Hospital, Netley, on Thursday, the 15th inst. In the evening, he dined at the officers' mess; and on the following day inspected the hospital, and the work being done at the Army Medical School. The men undergoing a course of training for the Army Hospital Corps were also inspected, and a party of them put through a series of practical exercises showing different modes of transporting men from fields of battle. These exercises included the lifting, placing, and carriage of wounded men on stretchers, on flat ground, across ditches, etc.; various methods of carrying wounded men by one, two, or more bearers, when no regular conveyances happen to be available for use; rapid removal of wounded men by means of wheeled stretchers, the wheeled stretcher employed on the occasion being one invented by a sergeant of the Army Hospital Corps; carrying men with broken limbs in and out of ambulance-waggons; and other similar proceedings,—all the exercises being done with precision by word of command, and according to a defined system. The carts con-

taining the regulation equipments of army hospitals were also packed and unpacked methodically and with great rapidity. In the evening, a concert and ball were given at the officers' quarters; the entertainment being attended by the Director-General and Lady Logan, and a very large party of the neighbouring gentry and their families. The Director-General left again on the 17th for London.

THE CASUALTY DEPARTMENT AT ST. BARTHOLOMEW'S HOSPITAL.

WE understand that serious misunderstandings have occurred between the lay authorities and the house-surgeons and dressers regarding the arrangements which have hitherto been adopted in this department. The number of casualties has of recent years so vastly increased that some new arrangement must be made, other than that now existing by the laws of the hospital, in order to carry out efficiently the work in this branch of the out-patient practice. We trust that the position taken up by the governing body will be reconsidered, and that the whole disagreement will be brought to a speedy and satisfactory termination.

DEATH AFTER VACCINATION.

A FEW days ago, Dr. Lankester held an inquest on a child who was alleged to have died from the introduction of impure matter during vaccination. The child, an infant eleven weeks old, was vaccinated on May 31st. On June 7th, four vesicles had been formed; and from two of these another child was vaccinated. Two days subsequently, erysipelas appeared, from which the child died. In the course of the inquiry, Mr. T. M. Harding stated that he had vaccinated from four to five thousand children without a single death; and that his brother and Dr. Ballard of Islington had each had but one death in several thousand cases. The verdict was, that the child died from erysipelas, caused by vaccination. The death in this case was, as far as can be seen, one of those unfortunate accidents against which it is not possible to provide; but it will, no doubt, be used as an argument by those illogical and fanatical persons who mispend their energies in decrying vaccination.

THE NAVAL MEDICAL SERVICE.

A NOTICE from the Lords of the Admiralty, which appears in our advertising columns this week, announces an important change in the mode of admission of candidates into the medical department of Her Majesty's Navy. Hitherto, candidates have been examined before a board of naval medical officers at Somerset House. Now, however, their Lordships give notice that, in consequence of the large number of applications for appointments as Assistant-Surgeons, and the small number of vacancies, a competitive examination, similar to that established for Assistant-Surgeons in the Army, will take place at Chelsea in the course of August. This change, which is one of the first public acts of the new Director-General, Dr. Armstrong, is one which is calculated to give general satisfaction. The naval medical service is, too, to be congratulated on having so large a supply of candidates as is intimated in the notice.

THE RATING OF HOSPITALS.

AT a recent meeting of the Paddington Vestry, Dr. Gibbon moved that a petition be presented to the House of Commons praying them not to pass the Bill exempting hospitals, infirmaries, and dispensaries, from liability to rating. On principle, he objected to exemptions, as all property ought to pay its share towards the parish funds. In one parish that he knew, there were fourteen of these hospitals and dispensaries; and, if they were exempt, the parish rate-book would show a loss of one-twentieth part of the assessment. If a medical man put up a notice on his house that for the future it would be a "dispensary for skin-diseases", or anything else he liked, and got twenty of his friends to appear on his list of contributors, he could by those means get his house exempted. The large multiplication of these hospitals and dispensaries created pauperism amongst the people. It fostered amongst the population a willingness to be dependent upon charity, in prefer-

ence to relying on their own exertions. Tradesmen availed themselves of the benefits of the hospitals when they were quite rich enough to pay a medical man. After a discussion, the motion was carried by nineteen votes to sixteen.

BLACKBURN INFIRMARY.

THE expenditure having exceeded the income for some years, notwithstanding repeated reductions in the number of the beds, and the deficiency at the present time being something like £1,200, the question has now arisen of closing the infirmary (which has cost from £20,000 to £25,000) altogether, unless some vigorous effort can be made to prevent it. In these circumstances, an extraordinary meeting of the governors was lately held in the Borough Council Chamber, to consider the position of affairs, and in the course of the discussion several suggestions were made, such as an organised collection from mills, workshops, and places of business, a house-to-house visitation, and an "Infirmary Sunday" at all the places of worship. Finally, it was agreed that the Mayor should call a public meeting.

THE HUNTERIAN MUSEUM.

FROM the annual report of the conservators of this magnificent collection, it appears that during the year sixty-seven specimens have been added to the Pathological department. Sir William Fergusson has been the principal contributor. Among the specimens presented by him are, a fibro-cartilaginous tumour from the parotid region; necrosis of the femur; ankylosis of the knee-joint after resection; and sprouting medullary cancer of the foot. Donations have also been received from other members of the Council—notably Mr. Cock, Mr. Hilton, and Mr. Curling—the last named gentleman contributing a specimen of necrosis of the lower jaw from phosphorus poisoning in the manufacture of lucifer matches. Sir Duncan Gibb and Mr. Carr Jackson have also made valuable contributions. In the Osteological collection, a large number of skulls and bones of mammals and birds, prepared in Nepal and Thibet so long ago as 1845, by Mr. Bryan Hodgson, have been assigned to their proper places through the industry of Mr. Flower. Unfortunately, however, many of the labels on them have become lost or indistinct, so that the conservator has had great difficulty in identifying them. An improved method of articulation—originated in the College, and since adopted in many museums at home and abroad—has been carried to great perfection in a skeleton of a fine French bloodhound. By it the general form and proportions are known; but the skeleton can be taken to pieces for the convenience of study. The principal additions to this department have been made by purchase. Among the donors of specimens are Drs. Bennett and John Rae, Messrs. Buckland, Lane, Crawsher, S. E. Solly, Busk, Thomas, Dendy, Sir J. Lubbock, and Sir J. Hudson; also the Zoological Society, the Smithsonian Institution, the Museum of Natural History in Paris, and the University of Louvain. Among the foreign contributors are Senor Maximo Terrero, Professor van Beneden, and His Royal Highness the Crown Prince of Prussia, who is the donor of a very fine skeleton of a German wild boar. In the Physiological collection, also, many valuable additions have been made in great part through the industry of Mr. Flower, the able conservator of the Museum.

SCOTLAND.

THE CHAIR OF SURGERY IN THE UNIVERSITY OF GLASGOW.

IN the event of Mr. Lister being appointed to the Chair of Clinical Surgery at Edinburgh, we understand that, amongst numerous others likely to come forward, Dr. G. Buchanan and Dr. G. H. B. Macleod will be candidates for the Chair of Surgery, thereby rendered vacant in the University of Glasgow. A rumour is current that it is the intention of the Lord-Advocate to appoint a gentleman not connected with the Glasgow University; but we think that the Lord-Advocate, considering the number of eminent surgeons in Glasgow, will at once see the evil effects which such an appointment would be likely to produce on the interests of the University.

IRELAND.

QUEEN'S UNIVERSITY IN IRELAND.

THE Senate, on the 21st inst., made the following appointments to the Examinerships: Medicine—J. Cuming, M.D.; Surgery—E. D. Mapother, M.D.; Midwifery—G. H. Kidd, M.D. The office is tenable for two years.

TRINITY COLLEGE MEDICAL SCHOLARSHIPS.

AT the annual examination for medical scholarships, there were fifty-seven candidates competing for the two vacancies. Mr. Draper was awarded the first scholarship, and Mr. Moriarty the second. Mr. Draper answered in an extremely creditable manner; and Mr. Moriarty had already distinguished himself in the University by obtaining a sizarship in Irish, which implies a scholarly knowledge of the language, as well as perfection in the vernacular.

TRINITY COLLEGE: PROFESSOR OF ZOOLOGY.

THE Board of Trinity College have elected a Professor of Zoology in the room of Dr. Wright, recently appointed Professor of Botany. There were three candidates, and the Board elected Mr. Alexander Macalister to the office. Mr. Macalister has been for some years Demonstrator of Anatomy in the school of the College of Surgeons, where he has proved himself an able and accomplished teacher, and a scientific anatomist of the first order. His paper on the Anatomy of the Whale, which appeared as the result of his labours in conjunction with those of Dr. Carte in the *Philosophical Transactions*, has earned for him a well deserved reputation, and his numerous papers on Transcendental Myology have been translated into almost every European language. He combines with great erudition the humility of a genuine lover of science. We congratulate Trinity College on securing his services, and the College of Surgeons on having sent to the University a man whose labours reflect so much credit on their anatomical school.

ASSISTANT-PHYSICIANS AND ASSISTANT-SURGEONS.

THE following suggestions of Dr. Mapother, in regard to hospital appointments, are worthy of consideration. He proposes that assistant-physicians and assistant-surgeons shall be appointed when vacancies on the staffs of the hospitals occur. The number of physicians and surgeons being thus reduced, those who remain will be recompensed by a great proportion of fees. Again, if additional funds accrue to the hospitals, they can well forego the repayment of the sums they paid in many cases for election. Patient scientific research and the attendance on out-patients (at times when the working classes could attend) are the objects to which these junior officers might confine their labours. He urges that these offices should be only held for seven years, and that having acted in such a capacity in some hospital should be a qualification for election to the higher office.

TRINITY COLLEGE: TRAVELLING PRIZES.

THE travelling prizes in medicine and surgery which, as we have before intimated, have been offered by the Board of Trinity College, have been awarded as follows. In medicine, the prize was carried off by Mr. George Plunket O'Farrell, who in 1866, at his degree examination, obtained the first gold medal in natural science. In surgery, the prize was obtained by Mr. W. Henry Gregg, who was awarded a medical scholarship in 1867, and was for some time resident pupil in Sir P. Dun's Hospital. In medicine, one-fourth of the entire number of marks were given for bedside diagnosis; and in surgery, one-fourth of the marks were given for operations performed by the candidates on the dead subject. In both cases, the practical part of the examination preeminently decided the relative merits of the respective candidates; and we are told that some of the candidates for the medical prize, who had distinguished themselves by answering in masterly style on paper, shrank from the bedside examination. In the surgical department, the operations were superintended by Mr. Butcher.

REPORT ON THE PREVENTABLE DISEASES OF THE INDUSTRIAL CLASSES.

VIII.—THE EFFECT OF GAS ON HEALTH.

Gas used in excess.—Diseases of Shopmen.—Poisoning by Gas-products.—Ventilating Burners.—London Shops and their Sanitary Defects.—Short-lived Publicans.—Clerks.—Dangers of the Stage.—Vitiating effects of Gas and other Illuminating Agents on the Atmosphere.

OF the many causes which contribute to the establishment of feeble health among Indoor Workers, the products of illuminating gas must hold the first place. To the use of an excessive quantity of gas—excessive as regards the size of the room, and its capability of removing the products of the combustion of gas—may we attribute, in no small measure, the large number of cases of consumption. To this cause is due, almost entirely, the great number of deaths from consumption among compositors, the delicate health of shopmen, and of others who are engaged where much gas is used. Conspicuous examples of the unnecessary quantity of gas burnt sometimes for trade purposes are found in the brilliant shops of the poorer but more crowded districts of London. The greater the surrounding poverty, the more glaring are the shops. Many of the gas-jets are not covered, even by glass shades; and in a majority of the shops there is no other provision for the removal of gas-products than the chinks in the window-sashes, and the door, which is sometimes open, sometimes ajar, and occasionally closed altogether. It is known that two common gas-jets will consume as much air as three men will respire. In these brilliant shops with many jets, a very minute quantity of respirable air is left for each inmate. No wonder, then, that many of the shopmen are feeble and ailing; no wonder that many of them “break down” early and die. These shops are unnaturally warm and “close”; they often smell strongly of the goods they contain, because the air within is foul and stagnant, since an inadequate supply of fresh air is admitted, and that not in steady, constant streams, but in fitful gusts. The effect of remaining in them for a short time only is to produce feverishness and temporary prostration: daily presence in them is followed by general debility and wasting, and by a host of minor evils, such as indigestion, headaches, and neuralgia, the greater and the crowning one being consumption.

Owing to the intense competition of trade, every effort is made now-a-days by the small trader to force a rapid sale of his wares; hence the over-lighted tailor’s “emporium”, the draper’s and milliner’s warehouses, the grocer’s shop, the gaudy tavern, and the “divan”, since the

brilliancy which was at first offered as an occasional treat to the British public is now given regularly as a matter of course. Now, had the means for ventilating these alluring shops kept pace with the increase of display; had sufficiently increased care been taken to protect the servers in the shops from the ill effects of the increased quantity of gas used for business purposes, we should now be silent. Unfortunately, however, it is the exception to find a well-ventilated shop; and the rule to find such shops as we have alluded to, totally unfit for a person to spend much time in. Slow poisoning—we can call it nothing else—takes place: a very small quantity of pure air, mixed with a very large quantity of heated air and noxious gases, passing from the gas-flames and from the inmate’s own lungs, is breathed—the quantity of pure air gradually diminishing as the night wears on. The shop-servers are thus rendered as badly off as the workers in an imperfectly ventilated mine, and they suffer from many of the diseases from which the miners die—many of those diseases which long since made it imperative for Government to have all mines in the kingdom officially inspected.

Recently some improvements in the arrangement of the gas-jets have taken place: one, and a valuable one, is that of arranging the jets in bunches, and making the multiple-burner at the same time a ventilator. In a paper on “Artificial Illumination”, read before the Society of Arts in February last, Mr. D. N. Defries carefully describes this useful apparatus.

Many London shops have been built without the slightest regard for sanitary arrangements. Frontage for a large window for the display of goods is the guiding, and, it would seem sometimes, the only consideration influencing the constructor. Many of these windows have no openings above or below them, or at their sides, for the admission of air; for the shop-renter fears that dust will be admitted, and the goods will be injured. The worst shops, however, are those which have been made out of private houses. Many such shops are like boxes: at one end of the box there are a window and a door, the window being permanently closed, the door opened occasionally, so that air passes into and out of the shop irregularly. Of course there are “draughts” from which the pale young men and women behind the counter suffer severely at times; and these draughts are increased or diminished as the register of the stoves or grates are left open or shut. When there is a parlour at the back of the shop, and the door is not kept constantly open, the state of affairs is not improved. In such shops, evidences of the constant, gentle interchange of indoor with outdoor air in sufficient quantities for the requirements of health are rarely met with.

Publicans are, as a class, short-lived men. This is sufficiently shewn by the following extract from Dr. Farr’s *Tables*, in which the deaths of publicans are compared; firstly, with the annual percentage of deaths among all classes of males in England; and, secondly, with the labourers of England, men exposed to hard work, and many to great privations.

Annual Mortality per Cent. of Males, aged 15 Years and upwards, in the undermentioned Occupations, in the Years 1860-61, at different Periods of Age.

Occupations.	15 years of age and upwards.	15-	25-	35-	45-	55-	65-	75-	85 years and upwards.
All males aged 15 years and upwards in England.....	1.816	.721	.913	1.228	1.767	3.110	6.625	14.882	31.702
Labourers, etc.; viz., agricultural labourers, farm servants, farm bailiffs, shepherds, general labourers, railway labourers, navvies, stone, slate, and limestone quarriers, brick-makers, and other workers in stone and clay	1.736	.474	.792	.997	1.398	2.617	5.949	15.961	40.975
Inn and hotel keepers, licensed victuallers and publicans, and beersellers.....	3.078	.799	1.302	1.881	2.810	4.104	7.242	20.335	51.744
Inn and hotel keepers, licensed victuallers and publicans, and beersellers, including wine and spirit merchants...	3.028	.887	1.321	1.912	2.793	4.104	7.446	19.924	51.064

Barmen and barmaids suffer much from following their occupations; and many of these persons are obliged to discontinue their employment, after having followed it for a few years, on account of broken-down health. That the habit of tippling has much to do with the large amount of disease among tavern-keepers and their servants there can be no doubt; but we are certain that by far the larger amount of disease among them is caused by their occupation being carried on in overheated rooms, where the air is rendered highly poisonous through the burning of an excessive quantity of gas, and through insufficient provision for the carrying away of the products of combustion. Even the

habit of drinking owes its origin, in many instances, to this same exhausting cause.

Clerks employed in small, old-fashioned offices, often complain, and with just cause, of the injurious effects of gas on their health. The stooping posture in which the clerk pursues his work already favours the development of chest-disease, if the tendency exist; and when he is at the same time compelled to breathe heated air, in which gas effluvia exist in considerable quantities, diseases, which might otherwise be held in check, are hurried forward, and premature decrepitude takes place. We can recall many cases where gas has ap-

peared to play the most important part in the early development of lung-disease.

Our theatres have been much improved during recent years, as regards the ventilation of the portions occupied by the public; although it will candidly be admitted that perfection has not been arrived at even in some of the newly-constructed; while, in some unfortunate exceptions, a visit to them, even when the theatre is not "filled to overflowing", cannot be made without the penalties of excessive lassitude and headache. The stage has hitherto received little attention as regards its sanitary arrangements; and the actor is nearly as badly off now as when gas was first introduced. It is a serious inconvenience to him in the pursuit of his art. It is the one great cause which makes his professional life other than a healthy one. When on the stage, he can bear the vicissitudes of fortune bravely; he can exhibit, without permanent injury to his constitution, the most violent love, and the most terrible ferocity, but he cannot endure the heat and the fumes of the gas. When he comes to the "front" to declare that he is the most injured man in the universe, or to tell in confidence to the audience some love-secret, the hot air from the foot-lights rushes into his face; when he retires to the "wings", he is still in a place where gas is too plentiful. What with hot air in some parts of the stage, and violent draughts in others, he is not only subjected to much personal inconvenience, but also to no small amount of danger. The editor of the *Quarterly Journal of Science* has brought into notice a new gas-light ventilator, invented by M. Sombra, and well worthy the general attention of all managers of English theatres. It has been successfully adopted in French theatres. It consists of a wide glass pipe, bent in the form of the letter U, one leg, however, being considerably longer than the other, forming, in fact, a syphon. Just inside the shorter leg an argand burner is inverted, and the longer leg of the tube being heated for a short time, so as to rarefy the air in it and cause a downward current in the short end, the argand burner is lighted, and the flame, following the direction of the current, continues to burn upside down. The products of combustion are thus carried away by the long leg into a chimney.

The prostration felt on the day after an evening party is due often less to the excitement of merry-making, than to the bad air of an over-lighted, and consequently over-heated, room.

In pursuing his inquiries on behalf of the Children's Employment Commission, Mr. Lord found that the great heat of the gas was a constant source of complaint; and that in many cases the gas-jets were placed immediately in front of the workers. Bootmakers, cigarmakers, hatters, tailors, dressmakers, and many other workers, are thus compelled to breathe the debilitating fumes as they rise from the gas-burners.

Gas is the most valuable of illuminating agents; and when it is properly managed, and not burnt in excessive quantities, it need not be prejudicial to health. The experiments of Dr. Letheby as to the relative value of illuminating agents, in respect of their heating and vitiating effects on the atmosphere, when burned so as to give the light of twelve standard sperm candles per hour, shew sufficiently the superiority of gas over other agents.

Illuminating agents.	Pounds of water heated 1° Fahr.	Oxygen consumed (cubic feet).	Carbonic acid produced (cub. feet).	Air vitiated (cubic feet).
Cannel gas	1950	3.30	2.01	50.2
Common ditto	2786	5.45	3.21	80.2
Sperm oil	2335	4.75	3.33	83.3
Benzole	2326	4.46	3.54	88.5
Paraffin	3619	6.81	4.50	112.2
Camphine	3251	6.65	4.77	119.2
Sperm ditto	3517	7.57	5.27	131.7
Wax candles	3831	8.41	5.90	149.5
Stearic ditto	3747	8.82	6.25	156.2
Tallow ditto	5054	12.06	8.73	218.3

No men have suffered, and are still suffering, more from the effects of gas than compositors. We shall tell of them in our next paper.

INSTABILITY OF THE SOLUTIONS OF ALKALOIDS.—A solution of 1 gramme of sulphate of quinine, 50 centigrammes of tartaric acid, and 20 grammes of water, was tested, after having been standing in a stoppered bottle for twenty months. It contained 1.05 grammes of the saline constituents, instead of 1.40 grammes, as when first prepared; it lost, therefore, 25 per cent.—*Chemical News*.

ASSOCIATION INTELLIGENCE.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Thirty-seventh Annual Meeting of the British Medical Association will be held in Leeds, on Tuesday, Wednesday, Thursday, and Friday, the 27th, 28th, 29th, and 30th days of July.

President—H. W. ACLAND, M.D., LL.D., F.R.S., Regius Professor of Medicine in the University of Oxford.

President-Elect—CHARLES CHADWICK, M.D., F.R.C.P., Senior Physician to the Leeds Infirmary.

An *Address in Medicine* will be delivered by Sir WILLIAM JENNER, Bart., M.D., F.R.S., Physician in Ordinary to Her Majesty, and Physician to University College Hospital.

An *Address in Surgery* will be delivered by THOMAS NUNNELEY, Esq., F.R.C.S., Surgeon to the Leeds Infirmary.

An *Address in Midwifery* will be delivered by T. E. BEATTY, B.A., M.D., Dublin.

The business of the meeting will be conducted under five sections:

Section A. **MEDICINE.**—*Presidents*, W. T. Gairdner, M.D. *Vice-Presidents*, J. T. Banks, M.D.; and J. D. Heaton, M.D. *Secretaries*, T. Clifford Allbutt, M.D., 38, Park Square, Leeds; H. Charlton Bastian, M.D., F.R.S., 20, Queen Anne Street, London, W.

Section B. **SURGERY.**—*President*, William Hey, Esq., F.R.C.S., *Vice-Presidents*, George Southam, Esq., F.R.C.S.; and W. Stokes, un., M.D. *Secretaries*, W. Fairlie Clarke, Esq., F.R.C.S., 1, Curzon Street, Mayfair, London, W.; and T. R. Jessop, Esq., F.R.C.S., 32, Park Square, Leeds.

Section C. **MIDWIFERY.**—*President*, Arthur Farre, M.D. F.R.S., *Vice-Presidents*, S. Berry, Esq.; and W. O. Priestley, M.D. *Secretaries*, G. H. Kidd, M.D., 17, Merriam Square East, Dublin; and J. Thorburn, M.D., 333, Brighton Place, Oxford Street, Manchester.

Section D. **PHYSIOLOGY.**—*President*, J. Hughes Bennett, M.D., F.R.S. *Vice-Presidents*, Lionel S. Beale, M.B., F.R.S.; and A. T. H. Waters, M.D. *Secretaries*, E. Chapman, Esq., M.A., Frewen Hall, Oxford; H. Power, M.B., 45, Seymour Street, Portman Square, W.

Section E. **PUBLIC MEDICINE.**—*President*, W. Farr, M.D., D.C.L., F.R.S. *Vice-Presidents*, E. D. Mapother, M.D.; and A. P. Stewart, M.D. *Secretaries*, G. H. Philipson, M.D., Saville Row, Newcastle-on-Tyne; and A. Wiltshire, M.D., 8, Richmond Terrace, S.W.

TUESDAY, July 27th.

1 P.M.—MEETING OF COMMITTEE OF COUNCIL—Town Hall.

3 P.M.—MEETING OF GENERAL COUNCIL—Town Hall.

8 P.M.—FIRST GENERAL MEETING—Lecture Room, Philosophical Hall.—The retiring President, Professor ACLAND, M.D., F.R.S., will resign his office.—The new President, Dr. CHADWICK, will deliver his Inaugural Address.—The Council's Report will be read, and discussion taken thereon.—Election of General Secretary.—Election of Auditors.—The Report of the Medical Benevolent Fund will be read.—Any motions of which notice may have been given.

WEDNESDAY, July 28th.

8.30 A.M.—PUBLIC BREAKFAST of the Association—Town Hall.

9.30 A.M.—MEETING OF NEW COUNCIL—Town Hall.—Special business: To elect new President of the Council.

10.30 A.M.—Committee on Registration of Diseases—Town Hall.

11 A.M.—SECOND GENERAL MEETING—Lecture Room, Philosophical Hall.—Appoint Place of Meeting in 1870 and President-elect.

12 A.M.—Address in Medicine, by Sir W. JENNER, Bart., M.D.

2 P.M.—MEETINGS OF SECTIONS—Town Hall.—Adjourn at 5.30.

9 P.M.—President's *Soirée*—Victoria Hall, Town Hall.

THURSDAY, July 29th.

9.30 A.M.—MEETING OF STATE MEDICINE COMMITTEE—Town Hall.

10 A.M.—THIRD GENERAL MEETING—Town Hall.—Reports of Committees—Dr. E. Waters will present a Report from the Representation Committee.—Captain Galton's paper on Hospital Construction, with discussion.

2 P.M.—Address in Midwifery, by Dr. BEATTY—Lecture Room, Philosophical Hall.

3 P.M.—MEETING OF SECTIONS—Town Hall.—Adjourn at 5.30.

SPECIAL MEETING for Papers and Discussions on the Sanitary Administration of the United Kingdom.

6 P.M.—PUBLIC DINNER of the Association—Victoria Hall, Town Hall.

FRIDAY, July 30th.

10 A.M.—FOURTH GENERAL MEETING.—Address in Surgery, by

THOMAS NUNNELEY, Esq., F.R.C.S.—Lecture Room, Philosophical Hall.

11 A.M.—MEETINGS OF SECTIONS—Town Hall.

3.30 P.M.—CONCLUDING GENERAL MEETING—Town Hall.

Reception Room.—A room will be opened in the Philosophical Hall, Park Row, as a reception room, on Tuesday, July 27th, at 10 A.M., and on the following days at 8 A.M., for the issue of tickets to members, and for supplying lists and prices of lodgings, and other information.

Members and others who require information with respect to the meeting are requested to make application in this room.

Gentlemen are requested to proceed direct to this room immediately on their arrival—to enter their names and addresses, and to obtain the tickets necessary to secure admission to all the proceedings.

Letters, parcels, etc., may be left in this room, in the care of the clerks.

Arrangements will be made for the receipt and postage of letters in this room.

The General Post-office and the several Telegraph Offices are in Park Row, close to the reception room.

Editor's and Secretary's Room.—A room for the use of the Secretary and the Editor will be provided in the Town Hall.

Gentlemen wishing to communicate with these officials, are requested to make application in this room.

Hotels.—The following are the principal Hotels in the town: those at the head of the list being the most commodious. The Queen's, attached to the Wellington Station; The Great Northern Railway Station Hotel, attached to the Central Station; White Horse, Boar Lane; Victoria, Great George's Street, close to the Town Hall; Bull and Mouth, Briggate; Gill's West Riding Hotel, Wellington Street; Andrews' Temperance Boarding House, 20, Park Place; Beecroft's Hotel, Bishopgate Street, close to the Wellington Station; Golden Lion, Briggate.

Gentlemen wishing for accommodation in the above, should communicate *without delay* with the managers of the respective houses.

Lodgings.—Members requiring private lodgings, are requested to apply *at once* to Dr. Eddison, Park Square, Leeds, stating the required number of sitting-rooms and bed-rooms, and *about* the terms expected, when the Local Committee will do their best to secure what may be desired.

Places of Meeting.—All Council, General and Sectional Meetings, will be held in the Town Hall, by the kind permission of the Mayor and Town Council of Leeds.

The General Addresses will be delivered in the Lecture Theatre of the Philosophical Hall.

The Annual Public Breakfast, Public Dinner, and President's *Soirée*, will be held in the Victoria Hall, Town Hall.

A *Soirée* will be given by Dr. Heaton, President of the Leeds Literary and Philosophical Society, in the rooms of that Institution, on Friday evening, the 30th.

The Annual Museum and the Annual Library, together with the Exhibition of Surgical Instruments, will be held in the Leeds School of Medicine, Park Street, close to the Infirmary.

Papers.—Gentlemen desirous of reading papers, cases, or any other communications, are requested to give notice of the same to the General Secretary, at their earliest convenience. All papers must be in the hands of the General Secretary, or of one of the Secretaries of the Sections to which the paper belongs, on or before Saturday, July 24th.

Authors are requested to prepare beforehand short abstracts of their papers for publication. The papers (and abstracts) read in the different Sections are to be handed to the Secretaries of the Sections for publication in the JOURNAL of the Association. If, owing to want of space, any papers read cannot be printed in the JOURNAL, they will be returned on application to the office, 37, Great Queen Street, London, W.C.

No paper shall occupy more than *twenty* minutes in delivery. All subsequent speakers not to exceed *ten* minutes.

Gentlemen intending to visit Leeds during the Meeting are requested to send their names *without delay* to Dr. Eddison, Park Square, Leeds.

Annual Museum: Notice to Exhibitors.—Rooms will be provided at the School of Medicine for the Museum, in which it is intended to exhibit all new objects of interest to the profession, such as: 1. New Instruments and Appliances in Medicine and Surgery. 2. New Drugs and new Preparations. 3. New Books—English and Foreign. 4. Pathological Preparations. 5. Photographs, Drawings, Casts, and Models of Pathological Specimens. 6. Models of New Inventions relating to Public Health, etc. 7. New Preparations of Food. The Museum will be opened on Tuesday Morning the 27th, and will remain open until the Evening of Friday the 30th. All objects intended for exhibi-

tion must be addressed "*Care of Dr. Eddison, the School of Medicine, Leeds:*" and be delivered on or before Monday the 19th, and must be removed from the Museum on Saturday the 31st July, or not later than Monday the 2nd of August. No object can be exhibited unless it is accompanied by a written or printed description, and a short reference for insertion in the Catalogue. Intending Exhibitors are requested to apply to Dr. Eddison for any information they require, and to inform him as soon as possible what they intend to exhibit, and how much space they are likely to need. In case any members prefer bringing preparations with them, they are particularly requested to forward short descriptions beforehand, in order that they may appear in the Catalogue. Adequate space and the necessary fittings for properly exhibiting the objects sent will be provided; but all expenses connected with packing and carriage, and all risk from injury or loss, must be borne by the Exhibitors.

Notices of Motion.—The following notices have been given.

Dr. DAVEY: To alter Law VIII, by substituting the word "twenty" for "ten" members, to be elected members of the Committee of Council.

Mr. GAMGEE: That a Committee be appointed to inquire into the income and expenditure of the British Medical Association, with a view to ascertain if its resources admit of being more efficiently employed, than they now are, for the advancement of science and for the promotion of the material and social interests of the medical profession.

The Rev. Dr. BELL has given the following notices.

1. To move that, if the first general Meeting for business be held in the evening, it be adjourned at ten o'clock, if the business be not concluded by that hour.

2. To call attention to the "Financial Statement" given in the JOURNAL of 17th April: (a) in relation to the items of expenditure and income in the publication of the JOURNAL; (b) the stipends of the officers, especially that of the General Secretary.

3. To ask, in reference to the Meeting of the Committee of Council of 9th June, 1869, second resolution (a) whether the cheque books of the Local Secretaries, as well as of the General Secretary, be included in the audit; (b) in whose name the General Secretary keeps the banking account of subscriptions received by him.

4. To move that the Ten (or Twenty, according to Dr. Davey's notice) elected members of the Committee of Council, be not eligible for re-election, after serving two (or three) years, in greater number than one-half, until they have been non-members for a like period.*

5. To draw attention to the propriety of not electing an Editor of the JOURNAL on the eve of the Annual General Meeting, and making arrangements for alterations in the JOURNAL;† also to the advisability of nominating at the previous General Annual Meeting the Gentlemen who are to read Addresses at the next Annual Meeting.

6. To suggest that the Notices of motion for the General Annual Meeting be sent direct to the Editor instead of through the General Secretary.

Dr. ARTHUR LEARED: To consider the expediency of discontinuing the present system of having anonymous leading articles in the BRITISH MEDICAL JOURNAL.

Papers.—The following Papers have been promised:—

S. Hey, F.R.C.S. On the Beneficial Results of Undesigned and Accidental Hæmorrhage in certain cases.

P. C. Little, F.R.C.S.I. On Railway and other Accidents; with Cases and Observations.

E. Gaylor, L.R.C.P. On the Professional and Commercial Abuses of the Club System.

Lawson Tait, L.R.C.S. On Fungous Tumour of the Dura Mater. On Idio-Muscular Contraction.

J. Braxton Hicks, M.D., F.R.S. On the Use of the Intra-Uterine Douche in Offensive Lochia, as a rule of practice. Cases showing the use of Perchloride of Iron in Flooding.

T. P. Heslop, M.D. How do the Sick Children of the Poor obtain Medical Attendance?

R. Hibbert Taylor, M.D. A case of Poisoning with Extract of Belladonna; with detailed account of *post mortem* appearance.

Wm. Squire, L.R.C.P. On the Temperature-Variations occasioned by Vaccination, and its effects upon the Health of Infants.

T. C. Allbutt, M.A., M.D. On the Propagation of Enteric Fever.

* This is an alteration of one of the Laws of the Association, and therefore cannot be brought forward without giving two months' notice, in accordance with Law 21:—"Any member wishing to propose a new law, or an alteration of an existing law, must send notice to the Secretary at least *two* months previous to the annual meeting, and specify the change proposed. The Secretary shall immediately cause such notice to be published in the JOURNAL, which publication shall be repeated three times at least, and it shall be announced in the Report of the Council."—T. W. W.

† This is already provided for by a resolution of the Committee of Council, passed at their meeting on June 9th. The election of Editor will take place after the Leeds meeting, at a time to be there announced.—T. W. W.

A. S. Myrtle, M.D. On Hydro-Therapeutics—the resources of Harrogate specially considered.

John Birkett, F.R.C.S. On the Causes of Death after Amputations of the Limbs in Hospitals.

C. B. Fox, M.D. Ear-Cough, and its mode of production.

J. M. Fothergill, M.D. On Uræmic Diarrhœa.

J. Russell Reynolds, M.D. On Certain Forms of Paralysis depending on Idea.

J. Russell Reynolds, M.D. On the Treatment of Rheumatic Fever by Perchloride of Iron.

J. B. Sanderson, M.D. On the Practical and Pathological Bearing of Recent Researches as to the Artificial Production of Tubercle.

J. B. Sanderson, M.D. On the Various Methods of Measuring and Recording the Movements of the Chest, for the purposes of Clinical Observation.

C. G. Wheelhouse, F.R.C.S. On the Use of the Probe Dilator in Operations Involving the Posterior Portions of the Urethra.

T. P. Teale, M.A., F.R.C.S. A Demonstration of Rectangular Stumps, by Patients, Photographs, and Casts. [Mr. Teale will be glad to receive contributions of patients, photographs, and casts of rectangular stumps from as many different sources as possible].

H. Blanc, M.D. On Animal Vaccination.

W. S. Playfair, M.D. On the Treatment of Chronic Uterine Catarrh.

C. A. Hemingway, M.R.C.S. On the Reduction of Compound Fracture, with Protrusion of Bone, by the Use of the Lever.

M'Call Anderson, M.D. On some of the more recent Methods of Treating certain Diseases of the Skin.

W. H. Broadbent, M.D. A brief account of a recent Investigation of the Structure of the Cerebral Hemisphere, with remarks.

Edward Ballard, M.D. On the Evils arising from the present mode of taking Medical and Scientific Evidence in our Courts of Justice.

James Cumming, M.D. On some Points in the Pathology of Delirium Tremens.

Richard Rendle, M.R.C.S. On the Use of Protoxide of Nitrogen in General Surgery, and on a New Mode of Producing Rapid Anæsthesia.

Holmes Coote, F.R.C.S. On Hospitalism.

T. Holmes, F.R.C.S. On Hospitalism.

W. F. Teevan, B.A., F.R.C.S. Stricture of the Urethra: its Prevention, Early Detection, and Best Method of Treatment.

Victor de Méric, F.R.C.S. On cases of Syphilitic Affection of the Third Nerve, producing Mydriasis with and without Ptosis.

Edward Lund, F.R.C.S. On the Use of Antiseptic Cere-cloth for Covering Wounds.

W. Stokes, Junr., M.D. On Temporary Deligation of the Abdominal Aorta.

W. Stokes, Junr., M.D. On a New Operation for Hare Lip.

D. Nicolson, M.B. On the Body Weight and Urea in a case of starvation.

G. H. Philipson, M.D. On the Registration of Diseases.

C. Taylor, M.D. Brief Notes (on Cataract Extraction) from Berlin, Wiesbaden, and Utrecht.

Protheroe Smith, M.D. An Aid to Parturition, and to the Treatment of Displacement of the Uterus by a new Mechanical Appliance.

T. R. Jessop, F.R.C.S. Short Notice of a fatal case of Emphysema produced by violent Screaming.

R. T. Land, M.D. A case of Femoral Aneurism successfully treated by Ligature of the External Iliac Artery.

C. H. Moore, F.R.C.S. On certain Causes of Mammary Cancer.

Henry Lee, F.R.C.S. On Albumen in the Urine after Surgical Operations.

T. J. Dyke, F.R.C.S. On the 'Practical Working of the Sanitary Act of 1866, and the Diseases Prevention Act of 1865.

C. H. F. Routh, M.D. On the Treatment of Certain Forms of Uterine Cancer.

J. Wallace, M.D. On Hydrothorax and Empyema; Thoracentesis and Forcible Extraction of the Fluid by Suction; with Cases.

Staff-Surgeon T. B. Moriarty. On the Absence of Typhus and Typhoid Fever, and the distinctive symptoms of Remittent Fever, in Tropical Africa.

G. H. B. Macleod, M.D. On Amputation at the Ankle-joint.

G. H. B. Macleod, M.D. On the Immediate Treatment of Stricture.

G. Southam, F.R.C.S. On some of the Advantages of Tapping in the Treatment of Ovarian Tumours.

C. B. Fox, M.D. Remarks on Clinical Thermometers.

J. Mulvany, M.D., R.N. Oleum Petrolei as a Medicinal Agent.

J. Mulvany, M.D., R.N. On Permanganate of Potassa in Neuralgia and Crude Tubercle.

P. M. Braidwood, M.D. On Animal Vaccination.

James Braithwaite, M.D. On a mode of applying the Uterine

Forceps, productive of less annoyance to the Patient than that usually adopted.

R. Elliot, M.D. Is the Adjustment of the Eye to Vision at various distances effected by Voluntary Changes in the Magnifying Powers of the Eye?

R. Elliot, M.D. Does the finely sensitive Iris, by admitting none but the more central and practically parallel rays to the Fovea Centralis, there to act on the layer of rods and bulbs, and by thus clearing and sharpening Retinal Impressions of Objects at any distance, not amply explain the *modus operandi* of Ocular Adjustment?

W. H. Robertson, M.D. The Nitrogenous Tepid Water of Buxton.

W. P. Bain, M.D. On a Portable Spirometer, with a short demonstration of the different modes of Artificial Respiration.

J. R. Leake, M.R.C.S. On the Treatment of Palpitation with Delirium by Digitalis.

G. Oliver, M.B. The Atmosphere of Towns in its Sanitary Aspect.

A. B. Steele, L.K. & Q.C.P.I. On the Comparative Protective Powers of Animal and Human Vaccine Lymph.

W. Murray, M.D. On a Case of False Anus, treated by a new and successful method.

J. Hughes Bennett, M.D. On experiments to determine the effects of Mercurial Preparations and various Irritants to the origin of the Gall-duct in the Duodenum.

W. Rutherford, M.D. On some Electrical Apparatus for Therapeutical purposes.

J. Hughes Bennett, M.D. On the Histological Argument opposed to the existence of Atmospheric Germs.

Charlton Bastian, M.D. Pathology and Treatment of Chorea.

F. E. Anstie, M.D. On the Principles of so-called Counter-irritation.

J. Wallace, M.D. On the Treatment of Eclampsia or Puerperal Convulsions by Chloroform, manual Dilatation of Os Uteri, and speedy delivery, with Cases.

W. B. Procter, F.R.C.S. On the Infant Mortality of Bradford.

F. Bateman, M.D. Is it proper that Medical Men should be compelled to divulge in Courts of Justice facts of a criminal nature which may have become known to them in answer to strictly professional questions?

J. B. Tuke, M.D. On the Morbid Appearances met with in the Brain of the Insane.

E. Ballard, M.D. The Defects of the Sanitary Acts.

T. Davies, M.R.C.S. Four Years' Experience as a Health Officer in Bristol.

*** No Paper shall exceed *twenty* minutes in the reading, and all subsequent speakers must not exceed *ten* minutes.

All speeches at the general meetings must not exceed *ten* minutes each.

T. WATKIN WILLIAMS, *General Secretary*.

13, Newhall Street, Birmingham, July 22nd, 1869.

YORKSHIRE BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held in the Museum of the Yorkshire Philosophical Society, York, on Thursday, June 17th; W. MATTERSON, M.D., President, in the Chair.

The PRESIDENT delivered an address.

Report of Council.—Dr. PROCTER, the Honorary Secretary, read the report, of which the following is an abstract.

The Council congratulated the members of the Branch on the large accession made to their numbers during the year. The new members admitted amounted to 139 in number, while the loss by death and resignations was nine. The satisfactory result was mainly to be attributed to the exertions and influence of Dr. Chadwick, the President-elect of the General Association, and Mr. Wheelhouse, who, by application to non-members, had caused this great addition; and it was to be hoped that every member, both old and new, would follow this good example, and by pointing out to their brethren the manifold advantages of such an Association, endeavour still further to increase the list. In this place, the Council would point out that one, and not the least, of the Association benefits, was the possession of so valuable an inter-communication as the BRITISH MEDICAL JOURNAL, which, from the very able manner in which it was conducted, coupled with the forcible yet temperate tone in which all topics of medical interest were discussed, well demanded the confidence of the entire profession.

The Council expressed their regret at the loss of Dr. Swaine. To the profession in York he was well known, and highly appreciated as a man of experience and science in his practice; and in private life he was known as an amiable and respected gentleman. In both capacities, his

loss was deeply felt, as well by his medical brethren as by a wide circle of friends.

The Council thanked Dr. Heaton for the very able and zealous manner in which he had discharged the duties of President; and recommended that Mr. W. F. Favell, of Sheffield, be elected President for 1870-1.

It was exceedingly desirable that an accurate list should be kept of all members of the British Medical Association residing in the North and East Ridings who were desirous of joining the Yorkshire Branch. The Council suggested that such gentlemen, especially the new members, should forward their names to the Secretary; and that an annual subscription of two shillings should be paid to the Branch.

During the past year, no events had occurred which called for special attention on the part of the Yorkshire Branch. The Council, therefore, thought it not inopportune to take a brief notice of a few matters of general interest to the Association.

Although all attempts to obtain the direct representation of the profession in the General Council of Medical Education had hitherto been unsuccessful, it was nevertheless incumbent upon every member of the Association to be in earnest, and still further to use every exertion to obtain that which was their undoubted right, especially as the opinion was very general that the Medical Council, as at present constituted, was costly, cumbrous, and incomplete, viewed in the light of either a representative or a governing body. Some claims might be founded on the fact that the expenses of the Medical Council are defrayed by the registration-fees obtained from the medical practitioners of the United Kingdom; and there could exist but little doubt that the presence of non-corporate members would do much to raise the standard of medical education, and give to it that tendency and practical character generally required. The Council drew the attention of the members to a document printed with the JOURNAL on May 1st, 1869, in which the merits and bearings of the question were clearly and briefly set forth; and stated that it behoved the large body interested in the result to assert strongly their claims to be directly represented in the body which controlled and regulated medical education.

The exertions made in the direction of Poor-law medical reform had been considerable; and, although they had not as yet been attended by the results which were sought, agitations and inquiries had been produced which must ultimately terminate in success. The main points at present under agitation were, the permanence of medical appointments; a remuneration adequate for their arduous duties; a supply of drugs at the expense of the authorities; and the appointment of skilled medical officers, with whom to communicate, in the Central Board. That, throughout the country, extensive changes are being made, calculated on the whole to improve the position of the medical officers, was a matter of congratulation; yet there was very much to be effected. At the Oxford meeting of the Association, a Committee was appointed for the purpose of communicating with the Association of the Poor-law Medical Officers, and of ascertaining what were the immediate matters which should be impressed on the legislature. Those which were at present persistently urged, were the permanence of appointments and adequate remuneration.

The subject of hospital management had been agitated for many years, but lately especial attention had been directed to it; and it has now assumed not only a professional, but also a general aspect, on account of the numerous and varied interests and considerations involved. The report referred to the statement of the *Times* as to the number of persons receiving gratuitous advice; and said that, although it was generally believed that this number is overstated, it seemed to show that a very large proportion of the population receive the time and services of physicians and surgeons, which were given gratuitously, and ostensibly for only the needy class. The conclusion was justified, that a very large ratio of hospital and dispensary patients should not participate in the benefit of charitable institutions. The Metropolitan Counties Branch had taken an active part in the consideration of the hospital question. The various subjects involved had been discussed by that Branch, and a Committee had been appointed.

In the endeavour to procure an improved sanitary legislation, the efforts of the British Medical Association had received valuable and efficient assistance from the Social Science Association. They had endeavoured to draw the attention of Government to the confusion, the incompleteness, and the want of order and unanimity, which characterised the existing Sanitary Acts; having as results a great division of responsibility, and being ill adapted to meet those defects and fulfil those requirements for which they were enacted. It was stated with great truth in the JOURNAL, "that the desired alterations of departments and consolidation of sanitary laws, the simplification of authorities and rectification of areas, the appointment and reorganisation of officers of public medicine throughout the country, cannot be efficiently carried out without a tho-

rough inquiry into the actual merits, deficiencies, and contradictions of the present arrangements;" and then was suggested a Royal Commission. No measure could give more universal satisfaction, or be more beneficial to the entire community, than a sanitary reform judiciously conceived and efficiently carried out, after a full inquiry into the defects of existing legislation. It was evident that the various objects involved could only be efficiently carried out by the inquiries of the Royal Commission being directed to various localities, including London, Scotland, and Ireland. It was incumbent upon the British Medical Association to do all that lay in its power to hasten the labours of the Commission in the useful and extensive work for which it was appointed. Representations made to the Home Secretary from the Council, the Branches, and the Parliamentary Committee, must have their due influence and effect.

It was unfortunate that matters considered of more importance by Parliament than the amendment of the Medical Act had caused a suspension of that measure. The recognised titles of duly qualified medical practitioners, and some methods of dealing in a summary manner with those practising without any qualifications, were matters loudly calling for legislative interference. The Council felt justified in bringing a notice of these subjects before the Branch, inasmuch as they demanded the attention of every member of the British Medical Association. By their consideration in the various Branches, opinions were gathered from all parts of the kingdom, and produced results which must materially affect and influence the Council in its deliberations and mode of action.

Dr. SHANN moved, and Mr. NORTH seconded, the adoption of the report, which was carried unanimously.

President.—It was proposed by Dr. HIME, and seconded by Dr. HEATON—"That Mr. W. FAVELL be elected President for 1870-71; and that the next meeting be held at Sheffield."

A vote of thanks, proposed by Dr. WILLIAMS, and seconded by Mr. LAWSON TAIT, was then given to the retiring President, Dr. Heaton.

Council.—On the proposition of the Rev. Dr. BELL, seconded by Dr. NEEDHAM, the following gentlemen were elected to constitute the Council. *York:* B. Dodsworth, Esq.; W. D. Husband, Esq.; H. Keyworth, Esq.; W. Matterson, M.D.; G. Shann, M.D.; C. Williams, M.D. *Leeds:* C. Chadwick, M.D.; J. D. Heaton, M.D.; W. Hey, Esq.; S. Hey, Esq.; T. Nunneley, Esq.; C. G. Wheelhouse, Esq.; T. P. Teale, Esq. *Sheffield:* J. Benson, Esq.; W. Favell, Esq.; J. C. Hall, M.D.; J. Haworth, Esq. *Helmley:* J. Ness, Esq. *Representatives in the General Council:* C. Chadwick, M.D.; J. C. Hall, M.D.; J. D. Heaton, M.D.; W. D. Husband, Esq.; W. Matterson, M.D.; T. Nunneley, Esq.; T. P. Teale, Esq.; and C. G. Wheelhouse, Esq.

Secretary.—On the motion of Mr. S. HEY, seconded by Dr. DODSWORTH, Dr. Procter was re-elected Secretary.

Papers.—The following papers were read:—Mr. S. Hey, on Partial Amputation of the Foot; Mr. Lawson Tait, on Uterine Epilepsy; Dr. Hime, on the Puerperal State.

Dinner.—After the meeting, twenty-six gentlemen dined at the Station Hotel.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ANNUAL MEETING.

THE fifteenth annual meeting of this Branch was held at the Hen and Chickens Hotel, Birmingham, on June 18th; JAMES VOSE SOLOMON, Esq., President, in the Chair. Seventy members and visitors were present.

New Members.—The following were elected: W. H. Dawson, Esq., Great Malvern; F. W. Coates, M.D., Malvern; J. Darwin, Esq., Birmingham; J. L. Earle, M.D., Birmingham; James F. Jackson, Esq., Smethwick.

Vote of Thanks.—It was resolved unanimously—"That the best thanks of this meeting be given to C. A. Newnham, Esq., for the ability and courtesy with which he has filled the office of President of the Branch during the past year."

Report of Council.—Mr. T. H. BARTLEET, Honorary Secretary, read the Report of Council.

"Your Council record with great satisfaction the continued success and increasing influence of the British Medical Association, and of the Birmingham and Midland Counties Branch. During the present year, nearly six hundred new members have been added to the Parent Association; and a new Branch has been formed in Gloucestershire. The Birmingham and Midland Counties Branch has been increased by the addition of thirty-seven new members. Death, removal to a distance, and other causes, have reduced our number by seventeen. At the pre-

sent time, the numerical strength of the Branch is 236, being an increase of twenty upon our number last year, and leaving our Branch the largest in the Association excepting the Metropolitan Counties.* The three members removed by death are, Mr. Butler of Great Bridge, Mr. Troughton of Coventry, and Dr. James Johnstone of Leamington. Dr. Johnstone's name has a special claim to be remembered by this Branch. His father was the first President of the Association, in the year 1832-3; and he himself was President in 1856, when the annual meeting was held in Birmingham. By his death, the Association, and especially this Branch, has lost a warm friend, and our profession a gentleman unsurpassed for his integrity, courtesy, and kindliness.

"During the past year, in addition to the six ordinary monthly meetings, two extra meetings have been held—one by request, for the discussion of the club question; the other by order of the Council of the Branch, for the formation of a Pathological and Clinical Section in connexion with this Branch. The formation of this Section in January last is the great event in our year's history. At the first meeting, Dr. Heslop was elected Chairman; and Dr. Balthazar Foster, and Mr. Vincent Jackson of Wolverhampton, town and country Secretaries respectively. It is not too much to say that the great success of the Section is in no small degree to be attributed to the energy and activity of its officers. At the last meeting of the Section, Dr. Heslop presented to the Branch and the Pathological and Clinical Section a valuable binocular microscope, with Ross's lenses, Bockett lamp, and all the necessary apparatus. This handsome present cannot fail to be highly appreciated by, and eminently useful to, the members of the Branch.

"Your Council has held frequent meetings for the transaction of the business of the Branch. At one of these, the proposed alteration in the number of Poor-law medical officers for this borough was considered; and a resolution was forwarded to the President of the Poor-law Board, to the effect that, in the opinion of your Council, the proposed diminution is contrary to the interests of the poor and the medical profession.

"Your Council has also invited the students of the Queen's College and of the General and Queen's Hospitals to attend the meetings of the Branch. This invitation has been accepted by many of the students, who have shown, by their regular attendance and attentive demeanour, the interest they take in the meetings.

"In accordance with a resolution passed at the last annual meeting, your Council referred the laws of the Branch to a Subcommittee. After careful deliberation and consideration of the laws of every Branch which possessed them, the Subcommittee presented a report to the Council, which was adopted; and the laws, as amended in this report, will be brought before you to-day for your approval."

[The report then contained an account of the work done in the Branch during the past session.]

"The attendance at the meetings has averaged over fifty, being a larger number than in any previous year.

"The BRITISH MEDICAL JOURNAL supports its reputation as a scientific and practical journal of our art, and continues its fearless and untrammelled advocacy of everything that is advantageous to our body.

"The Committee of Council of the Association continues its exertions for obtaining the direct representation of the medical profession in the General Medical Council. Resolutions were passed at one of our meetings in support of this; and your Secretary wrote to all the borough and county members of this and the adjoining counties, to urge upon them the importance of the request. Supported by the unanimous voice of the profession, the exertions of our Association cannot fail of ultimate success, though withstood by a formidable interested opposition.

"In conclusion, your Council would urge upon each member the necessity of individual effort in extending our Association and the Birmingham and Midland Counties Branch. This Branch will not have obtained its proper position until it numbers among its members every honourable practitioner of medicine and surgery in the town and district."

It was resolved—"That the report be received, adopted, and entered on the minutes."

Treasurer's Report.—Mr. T. W. WILLIAMS, Treasurer, read the Treasurer's report, showing a balance in hand of £15. The report was approved.

Vote of Thanks.—It was resolved—"That the thanks of this meeting be given to the Council for their labours during the past year."

Officers and Council.—The following were elected:—*President*—Thomas Underhill, Esq., Great Bridge. *Council: Country Members*—J. Manley, Esq., West Bromwich; G. F. Bodington, M.D., Sutton Coldfield; F. J. Bennett, L.R.C.P.Ed., Droitwich; R. M. Miller, M.D., Wolverhampton; R. A. Busby, Esq., Leamington; William

Smith, Esq., Redditch; W. C. Garman, Esq., Wednesbury; Herbert Morgan, Esq., Lichfield. *Town Members*—C. J. Bracey, Esq.; B. W. Foster, M.D.; J. S. Gamgee, Esq.; George Jones, Esq.; A. Oakes, Esq.; O. Pemberton, Esq.; T. Swain, Esq.; J. F. West, Esq. *Representatives in the General Council*—S. Berry, Esq.; M. H. Clayton, Esq.; A. Baker, Esq.; G. Jones, Esq.; J. V. Solomon, Esq.; A. Fleming, M.D.; J. Russell, M.D.; T. P. Heslop, M.D.; J. Manley, Esq.; C. A. Newnham, Esq.; Thomas Underhill, Esq.; W. Underhill, Esq. *Treasurer*—T. W. Williams, Esq. *Honorary Secretary*—T. H. Bartleet, Esq.

The Laws, as amended by a Subcommittee of the Council, were approved, and ordered to be printed and distributed.

President's Address.—The President, Mr. SOLOMON, delivered an address. He commented on the club system, and said that he thought they might look hopefully to the time as being not far distant when, by the thoroughly efficient manner in which attendance upon such societies was conducted, the title of club-surgeon in large towns would be honourable. Clubs had not yet attained sound views of policy, nor the best and most economic management of their affairs. What with the practice of spending a fixed sum, for the benefit of the landlord, in drinking-money, malingering on the sick-list, the admission of unhealthy lives, or of the loafers of the tap-room, their funds were in some instances far from being in a prosperous condition. The difficulties from the side of the profession, which the Committee had had to encounter, had come chiefly from surgeons whose faces were unknown at the meetings of the Branch—men destitute of *esprit de corps*. How significant was that fact of the value of membership in attendance at the Branch gatherings. A resolution such as Dr. Heslop had initiated could not be even attempted without—as in all revolutions—suffering being entailed upon some of those who took part in it. Inquiry, however, had satisfied the speaker that, with one or two exceptions, no very serious pecuniary loss had been sustained by the surgeons who had given impulse to the movement by standing faithfully to their order. The status and ultimate success of the general practitioner were injured by the tenure for many years of a large number of clubs. The same remark held good in regard to parochial medical appointments. The effect of such lines of practice was to prevent the young practitioner rising in his profession. Perhaps the most serious evil, and the one least easy of correction, was the acquired habit of slurring over cases, so that the mind became in time incapable of exerting that sustained attention and thought which were essential for the elucidation of diseases whose lineaments were not graven on the very surface. The President next referred to some important changes that had been made in the parochial medical staff of Birmingham. At the suggestion of Dr. Seaton, a public vaccinator had been appointed, who was restricted from doing private practice. The medical staff had been reduced from eight to six, and he regretted that the salaries had not been fixed at a proper standard. He had the satisfaction, however, of knowing that this injustice would be removed in the March of 1870, when each district surgeon would, in all probability, be appointed at a salary of £240 per annum—the exact sum which their associate Mr. John Clay, a guardian and the Chairman of the Relief Committee, recommended as being proper and just. On some future occasion, it might be advisable that an effort be made by the Branch to obtain for the parochial medical officers a more extended term of office than one year. The vast amount of gratuitous medical relief, contributed by hospitals and dispensaries to a large percentage of the population, had given rise to much discussion in the newspaper and medical press. A correction of hospital abuse had been sought to be obtained by requiring answers to a long and stringently inquisitive series of questions, printed on the patient's ticket of admission. He regretted to state that his experience at the Eye Hospital, where the plan was fairly and fully tried, was altogether adverse to its utility. Where inquiry into the patient's circumstances is necessary, he advised that it be addressed to his private medical attendant. He was favourable to the existence of a law in all medical charities which would permit of a person who had imposed upon the hospital being prosecuted in the County Courts for all expenses and fees which he had incurred. A proposal had been made, that every hospital patient should pay something for his relief. Such a plan, if it were practicable, would demoralise people well able to employ a private surgeon, would ruin one-half of the profession, and destroy much of the poetry of medical life. Moreover, it was altogether opposed to the sublime model of rightly directed relief painted in the ancient story of the Good Samaritan, and to which at one time their hospital management was made to correspond.

Dinner.—The members and visitors, to the number of fifty, dined together after the meeting; Mr. Solomon, President, in the Chair; and Mr. Thomas Underhill, President-elect, in the Vice-chair. The usual loyal and complimentary toasts were duly honoured.

* To this should be added the Lancashire and Cheshire and the South Eastern Branches, which have been accidentally omitted.

CORRESPONDENCE.

DEBATING COLUMN FOR DISCUSSION OF PAPERS, ETC., PUBLISHED IN THE "JOURNAL".

PERCHLORIDE OF IRON IN POST PARTUM HÆMORRHAGE.

SIR,—In reply to Dr. Barnes' criticism upon my remarks on this subject, allow me to compare my statement, "that there can be no objection to the use of the perchloride as a subsidiary remedy after, or in conjunction with, the well known measures calculated to promote and sustain uterine contraction", with his own declaration: "It is precisely in these desperate cases where the ordinary means fail to cause contraction, that the perchloride comes to the rescue", and to ask wherein lies the practical distinction between the two opinions? Have the observation and experience of Dr. Barnes led him to the conclusion that the intra-uterine injection of perchloride of iron is the most powerful agent for controlling active puerperal hæmorrhage, and therefore, of course, to be adopted in all cases, at once, without wasting time in resorting to less certain and reliable means? I ask this question in no contentious spirit, but with a view to elicit from so eminent an authority an answer, which, if in the affirmative, will, I venture to think, revolutionise the present doctrines on the treatment of flooding; if in the negative, will afford me the satisfaction of knowing that, in principles, there is but little difference between us.

I admit that the proposition, "that contraction of the uterus is the only means of controlling hæmorrhage", was, strictly speaking, too unconditional; but I feel sure Dr. Barnes will agree with me that the cases in which flooding is arrested by coagulation are rare and exceptional, and can scarcely occur during active hæmorrhage, when regurgitation of the stream of blood through the uterine sinus would overcome the resistance of coagula; and, unless I misapprehend his views, his reliance upon the perchloride is in its action in promoting contraction of the uterus, rather than in its effect as a local styptic. Such, indeed, must be the conclusion, if it is to supersede or take precedence of other remedies.

I trust the importance of the subject will justify the prolongation of the discussion, and will induce Dr. Barnes to favour me with a reply in anticipation of his promised essay; for this amongst other reasons, that I have no practical experience of the remedy, but am quite prepared to avail myself of the first opportunity of testing its efficiency, when I understand more definitely the conditions under which its use has proved so successful in Dr. Barnes' practice.

Liverpool, 1869.

I am, etc.,

A. B. STEELE.

RESIDENCE IN ELEVATED REGIONS IN PHTHISIS.

SIR,—In the JOURNAL of June 5th, you wisely indicate that this is too important a subject to be allowed to drop without adequate investigation. Allow me first to correct a statement attributed to me in the account of the debate at the Royal Medical and Chirurgical Society, when Dr. Weber's paper was under discussion. Your reporter states that I am "more in favour of low, warm climates, than of tedious journeys to high parts of Switzerland"; whereas there are, in fact, but few points in the treatment of phthisis upon which I can speak with greater confidence than that high bracing places have, as a rule, a far more favourable influence than hot, low-lying, humid regions. I could name very many instances in which residence in high, bracing, and even bleak and exposed positions, has proved strikingly beneficial, while disease has made rapid progress in sheltered and relaxing places. I believe that it is becoming more and more the practice with those who see much of consumption to recommend the more bracing resorts, to regard heat and humidity as enervating, and therefore injurious, and cold, provided that it does not interfere with out-door life, as invigorating and beneficial.

The air of elevated regions is, irrespective of temperature and humidity, peculiarly enlivening, whether the mountaineer be a "poitrinaire" or not; and the sooner we get rid of the notion that a light atmosphere is likely to favour hæmoptysis and hectic, the better. The selection of climate in phthisis is of far greater moment than that of drugs, and every case requires discrimination and judgment. Good food (including cod-liver oil and iron) and pure air have more influence in the permanent arrest and cure of consumption than any specifics.

The "mare's milk cure", practised in the steppes of Tartary, may owe some of its undeniable success to the elevation of these plateaux. Recent visits to Russia have led me to regard cold as by no means unfavourable, except in very advanced cases; whereas tropical heat is often rapidly destructive.

If an enlarged experience should prove, as is not unlikely, that Dr. Weber's estimate of prolonged residence in high altitudes is based on

true induction and sound observation, sanatoria will spring up in various parts. In South Africa, for instance, we have, in the Drakenberg range behind Natal, many eligible sites; and, as the railway system of Central Russia becomes more complete, it seems not impossible that some of our consumptive patients may advantageously resort even to this unknown region.

I am, etc.,

E. SYMES THOMPSON.

3, Upper George Street, W., June 1869.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

NATURAL SCIENCE SCHOLARSHIP.—Frank Theed Twining, Minor Scholar of Downing College, has been elected to a foundation scholarship of the annual value of £50 with rooms and commons, for proficiency in the natural sciences.

There will be an examination for two Scholarships in Natural Science, of the value of £40 a year each, at Sidney College, in October. Information may be obtained from the tutor, the Rev. J. C. W. Ellis.

Dr. Hooker has been nominated Examiner in Botany for the Natural Sciences Tripos; and Mr. Savory has been nominated Examiner for the degree of Master in Surgery.

MEDICO-PARLIAMENTARY.

HOUSE OF COMMONS.—Tuesday, July 20th.

SURGEON-MAJOR TUFNELL.—In reply to Mr. Kirk, Captain Vivian said that this gentleman had performed the duties of medical officer of the military prison at Dublin since 1846, and was paid as Surgeon-Major upon the medical staff. It was true that Surgeon-Major Tufnell had performed these duties, not for twenty-seven but for twenty-eight years completed service, but until 1860 he was only an assistant-surgeon, having foregone his promotion in order to retain this appointment. In 1860 he was promoted to the rank of surgeon as compensation for the loss of a Regius Professorship which he held in Dublin under a Royal Commission. It was quite true that he was the only medical officer on full pay in charge of a medical prison; and it was also true that he held civil appointments in Dublin, and had an extensive private practice; but there was no reason to suppose that these appointments interfered with the performance of his official duties. He claimed a vested right in his present appointment as compensation for the loss of the Regius Professorship; but his retaining the appointment on full pay could not be said to stop promotion, inasmuch as he was upon a supernumerary list. In 1874, Surgeon-Major Tufnell would have arrived at that period of service which would enable him, if necessary, to be compulsorily retired, but until then it was not likely that he would resign the appointment.

Wednesday, July 21st.

ADULTERATION OF FOOD AND DRINK ACTS' AMENDMENT BILL.—On the motion of Mr. Dixon, the order of the day for the second reading of this Bill was discharged.

THE NEW YORK HOSPITAL is being demolished. The *Medical Record* reminds its readers that in the small operating theatre, Dr. Wright Post, in 1813, made the first repetition, with a favourable result, in America, of Sir Astley Cooper's operation of ligature of the common carotid, for aneurism; it was in the same theatre, in 1817, that the same gentleman tied the first time, with success, the right subclavian artery, for brachial aneurism; it was here, in 1818, that the late Valentine Mott won his reputation as the first ligator of the arteria innominata; it was here, in 1845, that the late Dr. Kearney Rodgers tied for the first time the left subclavian inside of the scaleni muscles for aneurism; it was here, in 1847, that Buck introduced his operation of scarification, as a means of relief in cedematous laryngitis. A new hospital is to be erected; and the governors contemplate building on the pavilion plan. The present hospital was built in the last century, and was opened for the reception of patients in 1791. At that time, the hospital and its grounds were then out of town, there being only a few good-sized buildings in the district: now, it is in Broadway, the most frequented part of New York.

OBITUARY.

HENRY WHITFIELD, ESQ., ASHFORD.

THIS esteemed member of our profession died at Ashford on the 7th instant, at the age of 63. He was descended from a highly respectable family, for a long period resident in Kent. He was the second son of Mr. William Whitfeld, who had an extensive medical practice in Ashford and neighbourhood for upwards of forty years. In 1829, after the completion of his medical studies at the Middlesex Hospital, he joined his father. During the latter part of his professional career he took into partnership Mr. Lewis Paine, Dr. Maund, and Mr. E. W. Thurston, successively, and he was arranging his retirement from practice just previously to his decease. The manner in which he exercised his profession, rather by advice than by the excessive use of drugs, moderated his income; but those who had faith in and acted upon his judicious advice had reason to be grateful. He was a hearty supporter of every institution in his town which had for its end the social wellbeing of mankind, or their material and intellectual advancement. Throughout his professional career he was a reformer of all abuses and follies. In 1845, he published a pamphlet on tight lacing and its consequences. Subsequently, he endeavoured to attract attention to the general laws of health, especially inculcating the importance of ventilation in sleeping apartments and in all inhabited buildings, and pointing out the evils arising from neglecting to take a requisite quantity of sleep. He was also a warm supporter of the temperance movement, and was himself an abstainer from all exciting fluids, though he did not hesitate to recommend their use as medicine in illness. The Ashford Mechanics' Institute owes its origin and continued existence to his strenuous exertions and pecuniary assistance. He took upon himself, with the co-operation of the committee, to provide it with lecturers, undertaking to pay all the expenses, and when the receipts were insufficient for the purpose he always paid the deficiency out of his own purse. He was a most useful member, first of the old body of Town Commissioners, and when that body was abolished, of the Local Board; always advocating progress, whether in drainage or other sanitary matters, or in other improvements for the comfort and convenience of the inhabitants. At the time of the formation of the Ashford Cemetery, he worked energetically and successfully to carry the erection of mortuary chapels, and, as a member of the Burial Board, he was a regular attendant. His great desire (says the *Kentish Express*, from which we quote) to advocate everything for the improvement of the town, or the benefit of its inhabitants, is so well known that it would be superfluous to enumerate more of the advantages which the town and neighbourhood owe to his exertions. His funeral took place of Wednesday evening, and was attended by a general and spontaneous manifestation of respect from the inhabitants of the town and neighbourhood. In the funeral procession, which comprised 300 persons, were, with others, the Chairman and members of the Ashford Local Board; the clerk; Dr. Bowles (Folkestone); Messrs. W. Sheppard (Ashford); F. Pittock (Sellindge); and W. F. Brook (Wye)—representatives of the South Eastern Branch of the British Medical Association, of which Mr. Whitfeld had long been a member; then came a long train of clergymen, dissenting ministers, professional gentlemen, tradesmen, employees of the South Eastern Company, members of the Institutes, the Ashford Fire Brigade, and other local bodies. All the medical gentlemen in the town attended.

MEDICAL NEWS.

CHARING-CROSS HOSPITAL.

THE prizes to the students of the medical school attached to this hospital were distributed on July 12th, in the presence of a large number of ladies and gentlemen. Professor Owen presided. The following prizes were awarded:—*Governors' Clinical Silver Medal*, Mr. Kidd. *Botany*, a silver medal, Mr. Noakes; certificates of honour, Mr. Leigh, Mr. Drake, and Mr. Graham. *Materia Medica and Therapeutics*—silver medal, Mr. Atkinson; certificates of honour, Mr. Leigh and Mr. Noakes. *Midwifery*, silver medal, Mr. Towt; certificate of honour, Mr. Conolly. *Pathology and Morbid Anatomy*—silver medal, Mr. Hyde; certificate of honour, Mr. Conolly. *Forensic Medicine*—silver medal, Mr. Conolly; certificate of honour, Mr. Rix. *Practical Chemistry*—silver medal, Mr. Leigh; certificate of honour, Mr. Noakes. *Senior Anatomy*—silver medal, Mr. Leigh; certificate of honour, Mr. Walker. *Junior Anatomy*—bronze medal, Mr. Routh; certificate of honour, Mr. Taylor. *Chemistry*—silver medal, Mr. Lea; certificates of honour, Mr. Taylor and Mr. Whitlam. *Senior Medicine*—silver

medal, Mr. Gosse; certificate of honour, Mr. Towt. *Junior Medicine*—bronze medal, Mr. Gravelle; certificate of honour, Mr. Leigh. *Senior Physiology*—silver medal, Mr. Noakes; certificates of honour, Mr. Drake and Mr. Burroughs. *Junior Physiology*—bronze medal, Mr. Chittenden. *Surgery*—silver medal, Mr. Hyde; certificates of honour, Mr. Towt and Mr. Kidd. Professor Owen, after distributing the prizes, delivered a short address in which he referred to the probable future of medical science. Taking the present state of ophthalmic surgery as an illustration of the way in which a perfect knowledge of the anatomy of an organ, and a perfect knowledge of its special function, enable the surgeon to predict the course of its diseases and the results of his treatment, as well as to produce effects which the un instructed would almost call miraculous, he held out the hope that a similar knowledge of structure and function, and similar powers thence arising, would in due time be gained with regard to other portions of the frame. He dwelt also upon the value of prizes as incentives to mental effort, the effects of which endured whether the prize was gained or not, and spoke of the good social influence of such gatherings as that over which he had been called upon to preside.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology, at a meeting of the Court of Examiners, on July 13th; and, when eligible, will be admitted to the pass examination:—

Messrs. Francis Seymour, Alfred Matcham, G. J. Chadwick, B. P. Morison, and H. G. Biggs (Students of Guy's Hospital); A. L. A. Forbes, James Morgan, Walter May, R. G. Griffiths, and R. B. Wybrants (of the Dublin School); D. A. Davies, A. W. Harding, and E. D. Wallis (of University College); Wm. Holder and T. St. C. Healey (of the Hull School); J. W. Fordham and T. J. Barnardo (of the London Hospital); Edwin Daudney (of the Charing Cross Hospital); Alexander Burger (of Bonn); H. M. Chute (of Bristol); William Kelly (of Liverpool); G. M. Grant (of St. Mary's Hospital); R. T. Manson (of Newcastle); and C. F. Webb (of King's College).

It is stated that twelve out of the thirty-six candidates failed to acquit themselves to the satisfaction of the Court of Examiners, and were consequently referred to their anatomical and physiological studies for three months.

The following gentlemen passed on July 14th:—

Messrs. W. W. Westcott, C. A. Rayne, A. F. Holden, and F. P. Johnson (of University College); E. C. A. Baines, H. C. Moore, and Thomas Wolverson (of the Birmingham School); L. H. Tosswill, M. J. Dempsey, and J. P. Cartwright (of St. Bartholomew's Hospital); Monkhouse Whitfield and Edward Roberson (of Charing Cross Hospital); F. G. Passmore and James Reed (of Guy's Hospital); Thomas Power (of Dublin); A. B. Norman (of St. George's Hospital); Robert Hoadley (of the Middlesex Hospital); D. D. Wilson (of Glasgow); A. H. Walpole (of Newcastle); and Henry Priestley (of Sheffield).

It is stated that sixteen out of the thirty-six candidates examined failed to acquit themselves to the satisfaction of the Court of Examiners.

The following gentleman passed on July 15th:—

Messrs. Walter Mark Atkinson (of the Charing Cross Hospital); Aylmer Ellis Hayes (of St. Mary's Hospital); John Fisher (of King's College Hospital); and Maurice Thomas West (of St. Bartholomew's Hospital).

It is stated that twelve out of the sixteen candidates failed to acquit themselves to the satisfaction of the Court.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 15th, 1869.

Appleton, Robert Carlisle, Southampton Street, W.C.
Attwater, Arthur William, Kilburn
Kesteven, William Henry, Holloway
Leigh, Herbert Sidney, Bagaley, Northenden
Owen, Robert Humphreys, Carnarvon
Smith, Frederick, Grimsby
Smith, Richard Thomas, Hebden Bridge
Wheatcroft, Samuel Hanson, Sheffield

At the same Court, the following passed the first examination.

Berry, Walter, King's College Hospital
Hosegood, Samuel, Guy's Hospital
Priestley, Henry, Sheffield
Mayo, Alfred Charles, King's College Hospital
Walsham, William Johnson, St. Bartholomew's Hospital
Wayman, C. P. Scott, St. Bartholomew's Hospital

As Assistants in compounding and dispensing medicines.

Beasley, Frederick, Canterbury
Bennett, Henry, Rotherham
Emson, William Nicholls, Dorchester
Sandiland, Robert Burgess, jun., Winslow
Talbot, Thomas Henry, Collumpton

MEDICAL VACANCIES.

THE following vacancies are declared:—

ATHERSTONE UNION, Warwickshire—Medical Officer for the Workhouse and the Atherstone District.
BALLYSHANNON UNION, co. Donegal—Medical Officer for the Ballintra Dispensary District (£60 per annum, and Vaccination Fees): election, 3rd August.

BEDFORD UNION—Medical Officer for the Turvey District.
 BRAMLEY UNION, Yorkshire—Medical Officer for the Wortley District (£30 per annum, and extra fees). Medical Officer for the Armley District (£25 per annum, and extra fees): both elections, 26th.
 CHESTERTON UNION, Cambridgeshire—Medical Officer and Public Vaccinator for District No. 3 (£50 per annum, and extra fees): election, 12th August.
 DORSET COUNTY LUNATIC ASYLUMS, Dorchester—Assistant Medical Officer (£100 per annum, with furnished house, board, etc.): applications, 31st.
 EAST LONDON HOSPITAL—Medical Officer (£100 per annum, with board and lodging): applications before August 4th.
 GENERAL INFIRMARY, Leeds—House-Surgeon.
 GLASGOW ROYAL INFIRMARY—Physician.
 GLASSARY, Argyllshire—Parochial Medical Officer: appointment, 3rd August.
 HAY UNION, Brecknockshire—Medical Officer for the Radnorshire District (£45 per annum, and extra fees, which amounted last year to £37:15): application, 4th August; election, 5th August.
 ISLE OF MAN HOSPITAL AND DISPENSARY—Resident Medical Officer (£75 per annum, with rooms, attendance, cooking, coal, and gas, and an additional £10 per ann. for visiting the House of Industry): applications, 11th Aug.
 KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND—King's Professor of the Institutes of Medicine: applications, 1st October; appointment, 18th October.
 QUEEN CHARLOTTE'S LYING-IN HOSPITAL, Marylebone Road—Physician-Accoucheur: applications, 26th; election, 29th.
 MALE LOCK HOSPITAL, Dean Street, Soho Square—House-Surgeon and Apothecary.
 MILE END OLD TOWN UNION—Medical Officer for the East District.
 MULLINGAR UNION, co. Westmeath—Medical Officer for the Castletown Geoghegan Dispensary District (£90 per annum, and Vaccination and Registration Fees): election, 20th.
 NEW ABBEY, Dumfriesshire—Parochial Medical Officer (£40 per annum, and Government Grant).
 NEWCASTLE-UPON-TYNE INFIRMARY—Physician: appointment, 7th Aug.
 NEWPORT UNION, Salop—Medical Officer for District No. 4 (£35 per annum).
 NORTH STAFFORDSHIRE INFIRMARY, Hartshill—Medical Officer. Dental Surgeon: applications, 5th August; both elections, 24th August.
 NORWICH DISPENSARY—Physician: appointment, 3rd August.
 ROSS DISPENSARY—Dispenser: applications, 22nd; appointment, 23rd.
 ROYAL INFIRMARY SCHOOL OF MEDICINE, Liverpool—Lecturer on Botany and Demonstrator of Anatomy.
 ST. GEORGE'S HOSPITAL—Assistant-Surgeon.
 ST. MARY'S HOSPITAL, Paddington—Aural Surgeon: applications, 31st July.
 UNIVERSITY OF EDINBURGH—Professor of Clinical Surgery; Professor of General Pathology.
 UXBRIDGE UNION—Medical Officer for the Hillingdon District.
 WHITEHAVEN AND WEST CUMBERLAND INFIRMARY—House-Surgeon (£100 per annum, with furnished apartments, fire, gas, and attendance): applications, 30th.
 WOLVERHAMPTON UNION—Vaccination Officer (£40 per annum, and two-pence per case): applications, 27th; appointment, 30th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

HODGES, F. H., Esq., appointed House-Surgeon to the Birmingham and Midland Eye Hospital, *vice* Henry Denne, Esq., resigned.
 *MACALISTER, Alexander, L.K.Q.C.P.I., appointed Professor of Zoology and Director of the Museum in the University of Dublin.
 RENDLE, Richard, Esq., appointed Surgical Registrar to Guy's Hospital.
 *ROBERTS, D. Lloyd, M.D., appointed Physician to St. Mary's Hospital, Manchester, in the room of the late J. Ogden, M.D.
 *TAIT, Lawson, Esq., elected Assistant-Surgeon to the Clayton Hospital, Wakefield.
 *THORNE, R. Thorne, M.B., appointed Assistant-Physician to the London Fever Hospital.

BIRTHS.

BEATSON.—On June 21st, at Nagpore, Central India, the wife of *W. B. Beatson, M.D., Civil Surgeon, of a son.
 DAVIES.—On July 10th, the wife of T. H. W. Davies, Esq., Surgeon, of Gloucester Road, Bristol, of a son.
 HARRISON.—On July 16th, at Lincoln, the wife of *C. Harrison, M.D., of a daughter.
 KNAGGS.—On July 15th, at Upper Craven Place, Highgate Road, the wife of Sydney H. Knaggs, Esq., Surgeon, of a daughter.
 MCKELLAR.—On July 15th, at Berkeley Gardens, Kensington, the wife of E. McKellar, Esq., Surgeon Bengal Army, of a daughter.
 MADDEN.—On July 13th, at Kew, the wife of C. D. Madden, Esq., Surgeon-Major 4th Regiment, of a son.
 RICHARDS.—On July 10th, at Winchester, the wife of F. W. Richards, M.B., of a son.
 SHAW.—On July 17th, at Bedford, the wife of *James Shaw, Esq., late Principal Inspector-General Madras Army, of a son.
 SUTCLIFFE.—On July 16th, at Wandsworth, the wife of Edward Sutcliffe, M.D., of a daughter.
 TONNE.—On July 19th, at Kingsland Crescent, the wife of Alexander Tonne, Esq., Surgeon, of a daughter.
 TURNER.—On July 12th, at Devonshire Street, Islington, the wife of Duncan Turner, Esq., Surgeon, of a daughter.

MARRIAGES.

PORTEOUS, H. W., Esq., Inspector-General of Hospitals, Madras Army (retired), to Henrietta Charlotte, fifth daughter of the late Rev. George WAT, of Tours, at Foxley, Wiltshire, on July 15th.
 REID, Lestock Holland, Esq., to Juliette Margaret, second daughter of Charles D'O. J. Lowden, M.D., of Ryde, on July 14th.

BEQUEST.—Mr. James Sturm, late of Hampstead, has bequeathed (contingently on the discharge of a claim due to his estate) £500 to King's College Hospital.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
 TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.
 WEDNESDAY...St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.
 THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
 FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
 SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

ERRATUM.—In the notice of the new Patent Spring Pessary, in the JOURNAL of July 3rd, the name of the inventor is incorrectly put "Blackler" instead of "Blackbee".

THE want of professional cordiality between Mr. Blackett and Mr. Jepson, as noticed in the Durham papers, is to be regretted. We give no opinion as to the merits or faults of either of these gentlemen, but would suggest that they should refer their differences to the Council of the Northern Branch, in order that a line of conduct may be agreed on, which shall enable them to live in harmony with each other and with their professional neighbours.

MORTALITY AFTER OPERATIONS ON THE URINARY ORGANS.

SIR,—Will you kindly grant me space for a brief reply to Mr. Teevan's remarks upon my paper contained in the JOURNAL of June 19th?

The objects I had in view in publishing that paper were chiefly two: to draw attention to the well attested fact, that the main cause of the great mortality in operations upon the urinary organs is to be found in the passage of the urine over the newly cut surfaces; and to prove that in the continuous drainage-tube we possess a means of keeping the bladder empty, by carrying off the urine as soon as it escapes from the ureters, and so preventing its passage through any artificial opening in the urethra.

Now, whilst I would not be understood as agreeing with Mr. Teevan's views in regard to urinary infiltration, it will be at once apparent that my premises are granted, if I am allowed to assume that the urine is *in any way* responsible for the evils which too frequently follow upon lithotomy and perineal section; and, on reference to my paper, it will be seen that I do not attach more importance to *infiltration* as a means by which the urine produces its mischievous effects, than to other pathological conditions, which, whatever their nature, are in part if not altogether attributable to the irritating influence of the urine. It matters little for my purpose *how* the urine brings about a fatal result, so long as it is granted that the wounds in lithotomy and perineal section, freed from the contact of urine, are not of an exceptionally dangerous character—so long as it is granted that the urine is *in any way* the *fons et origo mali*; and they are few, I think, who are prepared to adopt the notion, which is insinuated at least by Mr. Teevan, that urine is a desirable dressing for a recently made wound.

As to the second and main object of my paper—the proof, viz.: that in the drainage-tube we possess a means of preventing the passage of any urine through the wound; I would observe, in the first place, that, whilst I have related cases—examples of different kinds selected for the purpose of shewing the varied applicability of the principle—which, in my judgment, strongly uphold the view I have advocated, Mr. Teevan contents himself by expressing an adverse opinion, without adducing a single fact in support. In order to test the efficacy of the drainage-tube, I have performed the following experiment. I fastened a No. 10 catheter, with drainage-tube attached, in a healthy bladder, and left it in for fourteen hours; I then withdrew the catheter, and, on the immediate introduction of another, I was unable to obtain even a drop of urine—thus shewing that the bladder had been kept perfectly empty, and utterly disproving Mr. Teevan's assertion that "the point of the catheter must have been two inches above the orifices of the ureters."

I very much regret that I have not as yet been able, from want of time, to make reference to the various sources of information bearing upon this subject, which have been kindly pointed out to me by several gentlemen, since the appearance of my paper in the JOURNAL. With regard, however, to Mr. Teevan's quotation from Dr. Henry Dick's book, it is somewhat singular that I have received a note, bearing date June 18th, 1869, from Dr. Henry Dick himself, in which—whilst there is not one word in it to lead me to suppose the writer entertains views different from my own—that gentleman quotes his own writings, and amongst them the very memoir alluded to by Mr. Teevan, to convince me that he, Dr. H. Dick, was "the first in England who followed such a practice." I am, etc.,

Leeds, July 13th, 1869.

W. R. JESSOP.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. Richards, not later than *Thursday*, twelve o'clock.

FAIR PLAY presents his compliments to the Editor, and asks:

1. Is it just, gentlemanly, or professional, for an M.D., not in needy circumstances, who signed the agreement, with the great majority of the other practitioners of Birmingham, "not to accept club appointments at a less rate than 5s. per head per year," to take a club appointment, since the signing of that agreement, at 4s. per head? [This conduct is not just to the practitioners who signed the agreement.]

2. Is it right that the same practitioner should vaccinate gratis, to the pecuniary loss of the parish medical officer and others? [No; if the practice extend beyond the practitioner's own family.]

3. Is it professional that any medical man should personally ask a woman to allow him to attend her in her approaching confinement, not having known or seen her before? [Certainly not.]

4. Should the competition of trade be introduced into the profession? [It has been already introduced, but it should not be encouraged.]

5. Are not 11s. 6d. and 13s. 6d. novel midwifery fees? and is not 1s. an absurd fee for vaccination, seeing that the lowest fee the parish medical officer gets is 1s. 6d.? [The midwifery fees named are novel to us. The fee for vaccination is absurdly low.]

THE THERAPEUTIC ACTION OF CANTHARIDES.

SIR,—The able remarks of Dr. Mackey, on the curative agency of the Tincture of Cantharides, in the *BRITISH MEDICAL JOURNAL* of June 26th, deserve a most attentive consideration.

For many years, the efficacy of large doses of the tincture in the treatment of genito-urinary diseases, has been known by myself and others. And although we may all be said to derive our information from the source which Dr. Mackey has indicated, yet I feel it incumbent on me to add to the list of his authorities the one to whom I am most indebted, Mr. John Robertson, in whose able *Treatise on Diseases of the Genitary System* (London, 1811), ample justice is done to the claims of Dr. Greenfield; who, it appears, had the misfortune to be "committed to Newgate on the charge of prescribing dangerous remedies for the removal of disease." (Preface, Mr. Robertson's work, p. xxviii.)

Mr. Robertson also quotes Mr. Yonge (*Phil. Trans.*, vol. v, abridgement), and "a profound and useful essay" by Dr. Forsten, published in 1776, on the same subject.

Plymouth, June 1869.

THOMAS LITTLETON.

CHLOROFORM AND CHLORODYNE.

SIR,—A discussion has arisen as to the safety of the very uncertain medicine known commonly under the name of "chlorodyne". Three deaths have been ascribed to its unskilful use (one in America). I very much agree with Mr. Squire of Oxford Street, that it is better to have a somewhat fixed and recognised compound under that name, with some general idea as to what is the best antidote when poisonous symptoms set in, than the present vague notions that these symptoms are those of chloroform poisoning, which they probably are not at all in any degree.

Sackville Street, July 1869.

CHARLES KIDD, M.D.

THE ATKINSON MORLEY CONVALESCENT HOSPITAL.—In some of the newspaper reports of this hospital, the cost has been put at a little over £35,000. It should be a little over £25,000, as in our report.

ANXIETY (Liverpool).—The result of the Arts examination is expected to be communicated to the candidates immediately. We are informed that the delay has been caused by the great number of candidates examined. If you do not obtain sufficient marks for the Fellowship, you may perhaps for the lesser distinction of membership.

We are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The *Wiltshire County Mirror*, July 21st; The *New York Medical Gazette*, July 3rd; The *Parochial Critic*, July 14th; The *Tewkesbury Weekly Record*, July 17th; The *New York Medical Record*, July 1st; The *Scotsman*, July 20th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. Lawson Tait, Wakefield; Dr. Chiene, Edinburgh; Dr. J. Thompson Dickson, London; Mr. Nunneley, Leeds; Dr. J. Hughes Bennett, Edinburgh; Dr. R. D. Powell, London; Mr. Haviland, London; Dr. G. Buchanan, Glasgow; Dr. Waring Curran, Sutton-in-Ashfield; Dr. Rutherford, Edinburgh; F.R.C.S.E.; Dr. Paul, London; Messrs. Letts, Son, and Co., London; Dr. F. C. Webb, London; Dr. Protheroe Smith, London; Dr. Bastian, London; Mr. R. Davy, London; Dr. Shepherd, London.

LETTERS, ETC. (with enclosures) from:—

Mr. Hulke, London; Dr. Heslop, Birmingham; Dr. J. Lockhart Clarke, London; Mr. De la Garde, Exeter; Mr. T. Watkin Williams, Birmingham; Dr. Philipson, Newcastle-upon-Tyne; Mr. T. W. Benfield, Leicester; Mr. C. Steele, Clifton, Bristol; Mr. C. Johnson, Lancaster; Mr. F. Le Gros Clark, London; Dr. C. Kidd, London; Dr. Chadwick, Leeds; Dr. Gervis, London; Dr. J. B. Bradbury, Cambridge; Mr. Berkeley Hill, London; Dr. R. Elliot, Carlisle; Mr. E. Lund, Manchester; Dr. Roberts, Manchester; Dr. Workman, London; Dr. Alfred Walker, London; Mr. W. R. Jessop, Leeds; Dr. Lory Marsh, Nottingham; Dr. T. Dalton, Llandudno; Dr. A. Farre, London; Mr. C. G. Wheelhouse, Leeds; Mr. J. Birchenall, Macclesfield; Dr. Alford, Taunton; Mr. R. Rendle, London; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Mr. Lomax, Stafford; The Registrar of the Medical Society of London; Dr. Lomas, London; The Honorary Secretary of the Berry Defence Fund; A. M. D., Cork; Dr. E. Morris, Spalding; Dr. E. Crisp, London; Dr. Mapother, Dublin.

BOOKS, ETC., RECEIVED.

Diseases and Injuries of the Eye; their Medical and Surgical Treatment. By George Lawson, F.R.C.S. London: 1869.
A Memoir of the late Dr. Joseph Bullar. By Henry Dayman, F.R.C.S. Southampton and London: 1869.

Results of Meteorological Observations, for the week ending Saturday, July 17th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.								Minimum ex- posed on grass.	Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	WIND.										RAIN.	
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell	Amount in inches.				
													N.	N.E.				E.	S.E.	S.	S.W.	W.				N.W.	Calm, etc.		
BATH..... Dr. Barter, F.M.S.	30.203	0.352	69.7	65.3	61.9	76	85.5	49.3	36.2	80.3	54.1	135.7	..	2	5	0.3	..	..	0.7	..	0.3	1	..	4.7	1	1	0.12
BOURNEMOUTH..... Dr. Compton, F.M.S.	30.226	0.340	64.1	59.9	56.4	76	77.2	46.1	31.1	73.3	52.6	148.0	43.0	0.5	2.9	1.7	0.3	0.3	1	0.7	1	0.7	0.3	1	1.2	1	0.10		
DUBLIN..... Dr. J. W. Moore.	30.179	0.290	63.8	58.7	54.4	72	75.2	48.6	26.6	71.4	56.8	..	41.8	3.9	..	..	..	1.4	0.3	..	0.4	2.9	2	..	2.3	0	0
KEW..... Dr. Treutler, F.L.S., etc.	30.221	0.335	68.3	62.0	57.1	67	87.8	49.9	37.9	79.8	56.3	151.4	42.9	2.6	6.1	0.3	1.3	..	0.7	..	1	0.3	2	1	2	1	0.20		
LLANDUDNO..... Drs. Nicol and Dalton.	30.210	0.332	63.7	58.8	54.7	73	82.8	41.6	41.2	75.3	53.1	..	..	4.8	..	0.6	0.3	1	..	..	0.3	4.3	0.3	..	0.8	0	0
MALVERN..... Messrs. W. and J. Burrow.	30.216	0.338	67.2	61.3	56.6	68	87.0	48.3	38.7	79.1	55.7	158.8	45.0	3.4	3.5	..	0.3	..	..	0.6	1	1	3	1	0.5	1	0.10
SCARBOROUGH..... Dr. C. Fox, M.R.C.P., etc.	30.160	0.319	62.5	57.5	53.2	72	78.1	49.7	28.4	73.2	53.9	147.1	44.3	5	5	0.3	0.7	0.7	0.3	..	1	2	1.7	0.3	3.4	0	0		
SIDMOUTH..... Dr. Mackenzie, F.M.S.	30.237	0.300	61.9	58.5	55.6	81	76.0	47.5	28.5	73.4	52.8	..	..	0.5	5.2	..	1	..	..	1	3	..	2	..	0.6	1	0.15
WORTHING..... W. J. Harris, Esq., M.R.C.S.E.	30.206	0.339	63.9	60.4	57.5	80	75.7	50.7	25.0	72.7	56.7	126.0 *	45.5	1.5	3.7	0.3	0.7	1.3	0.7	..	2	0.3	0.7	1	1.4	1	0.06		

* This bulb is raised 4 feet above grass.

REMARKS.—Atmospheric pressure during the week has been high and steady,—more so in both respects than during the week before; pressure has at the same time been very uniform,—the greatest difference being between the two extreme stations of Scarborough and Sidmouth, and amounting to only 0.077 inch. Temperature has also increased considerably, the mean being in no case below 60 deg. The nights as shown by the Minimum Temperature, have been comparatively cool, while the days were marked by great warmth, hence the generally very great range,—extreme as well as diurnal,—of the week. The highest temperature was registered at Kew, the lowest at Llandudno,—the greatest range occurred also at Llandudno. Wind have been very light and with hardly any prevailing direction. The sky has been mostly free from clouds, especially at the southern stations; the amount of ozone has diminished a little. Rain has fallen but scantily at a few stations; its want is generally felt,—little or none having fallen during the last five or six weeks. Generally speaking, the weather has been fine and sunny during the week, the effect being to forward the ripening of the corn considerably. Fogs occurred in and about Dublin on the 16th and 17th, and at Scarborough on the 17th. At Bournemouth, on the 16th, about 11 p.m., a beautiful meteor was seen at the S.E., "as large as the moon three-quarters full." The general health is reported as very good.

The Range of Temperature at Sidmouth last week was erroneously given as 32.3 deg., instead of 22.3 deg.

Kew, W., July 21st, 1869.

W. J. TREUTLER.

HAVRE EXHIBITION, October 1868.—PRIZE MEDAL.

LIEBIG'S EXTRACT OF MEAT (Genuine),

MANUFACTURED ENTIRELY FROM CATTLE OF ENGLISH BREEDS
On the establishments of ROBERT TOOTH, Esq., Sydney. The chemical analysis of Dr. Miller proves that this extract is unequalled in composition. For Beef-tea, Soups, and Gravies, one ounce of Extract is equal to two pounds of best Gravy Beef.

N.B.—Beware of weaker Extracts, inferior in flavour and clearness when dissolved, being offered instead of the "Genuine." Mr. TOOTH's manufacture, shown by the *Lancet* analysis (January 9, 1869) to be the BEST EXTANT, and recommended, IN PREFERENCE TO ALL OTHERS, by the eminent Dr. J. E. DE VRIJ, of the Hague, Dr. FLÜCKIGER, of Berne, and Dr. RICHTER, of Dresden, has now been adopted by the INDIA GOVERNMENT.

Of all Chemists and Italian Warehousemen. Wholesale of Allen and Hanburys, John Bell and Co., Crosse and Blackwell, E. Lazenby and Sons, John Burgess and Son, and the principal Wholesale houses. Dublin: Bewley Hamilton, and Co. W. J. COLEMAN & CO., 13, St. Mary-at-Hill, London, E.C.



JOHN GILLON & CO., LEITH.
Reduction in Price, July 1, 1869.
Essence of Beef, or Meat

JUICE, for instantly making Beef Tea for Invalids. Prepared by JOHN GILLON & CO., Preserved Provision Manufacturers, Leith. This valuable article is strongly recommended by Professor CHRISTISON of Edinburgh, and is largely prescribed by the Medical Profession. It is simply the Juice of the best Ox Beef, and it will, without trouble or loss of time, produce Beef Tea of the finest quality and flavour, such as the stomach will retain under sea-sickness, or when every thing else is rejected. It is more economical than Beef Tea prepared in the family, and, as it will keep good for any length of time, no house should be without it.—For its Medical Properties, see Article by Professor Christison of Edinburgh, in the *Monthly Journal of Medicine*, January 1855.

Essence of Mutton and Essence
of CHICKEN, prepared in exactly the same manner.

WHOLESALE AGENTS.

LONDON—John Bell and Co., 338, Oxford Street, W.; Thomas Keating, 79, St. Paul's Churchyard; Barclay and Sons, Farringdon Street, E.C.; F. Newbery and Sons, 45, St. Paul's Churchyard; Crosse & Blackwell, Soho Square, W.; and Joseph House, 76, Minories, E.

These ESSENCES may be obtained from Drug-gists and Italian Warehousemen in all the principal towns, in canisters of from 4 oz. to 6 lb. each.

RETAIL PRICES.

Essence of Beef	4 oz.	8 oz.	16 oz. tins.
Essence of Mutton	7s. 6d.	13s. 6d.	26s. 6d. per doz.
Essence of Chicken	12s. 6d.	23s. 6d.	46s. 6d. per doz.
Essence of Beef Lozenges	1s. 2d.		per box.

A Reprint of the Article by Professor Christison will be sent to Medical Gentlemen on Application to the Manufacturers or Agents.

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PRESIDENT'S ADDRESS,

DELIVERED AT THE

THIRTY-SEVENTH ANNUAL MEETING OF THE
BRITISH MEDICAL ASSOCIATION,*Held in LEEDS, July 27th, 28th, 29th, and 30th, 1869.*

BY

CHARLES CHADWICK, M.D., F.R.C.P.,

Physician to the Leeds Fever Hospital and General Infirmary.

GENTLEMEN,—I offer you a cordial welcome to this our annual gathering; and I do this more readily, because I give it in the name of the entire profession of this town. In many instances, being of a partial character, the welcome has lost its heartiness, through the easily recognised absence of some of the notabilities of the place giving a degree of coldness to the otherwise cordial reception.

We are fortunately unanimous in our desire to do honour to our brethren, who will be, for a few days, our visitors; and, in honouring them, to recognise the high value and importance of the Association to which we all belong. The exceptions to this remarkable unanimity are so singularly few, and when existing, in nearly every case on sufficient ground, that I feel it an imperative duty to give the fact an emphatic prominence. There has been no party or individual jealousy; and, whether we fail or succeed in the object we have ardently desired, all have frankly co-operated to deserve success. In the name, then, of the unanimous profession of Leeds, I bid you welcome.

I will not waste the precious moments which can be given to this address by speaking of myself. You, all of you, according to the direction of your mental activity, form some estimate of the impress these meetings produce on the advancement of your common and individual interests, and so you may imagine how I regard, at once, the honour and the responsibility of presiding over you, and leading your councils. But few of you, and those only who have been recently similarly circumstanced, can know the anxiety with which we have prepared for this momentous week. The growing interest, and the augmenting reputation and influence of the Association, and the natural desire, on our part, that this reception should not fall behind, or suffer in comparison with, those which have immediately preceded it, will readily occur to you. You will have fresh in your memories the delightful visits recently paid to two of the most celebrated seats of learning of the empire—the quiet and repose so congenial to, and productive of, thoughtful generalisation, and the remarkable addresses there delivered, taking their tone from the *genius loci*—so full of deep reflection and close reasoning, so well appreciated by their attentive auditory. When I remember these, the elicited description of the Latin poet comes to my mind—

“Contiguere omnes, intentique ora tenebant”

—as indicating alike the worth of their matter, and the enlightened estimate with which they were received. Neither will you have forgotten the cordial welcome, the kind and generous hospitality, which everywhere greeted your coming. In the course of events another annual assembly comes round, and you select for its locality a very different scene. Here you find activity and energy—the great and prevailing features of the busy community you visit. The steam-engine is the actual and figurative type of our condition, when fact is, in such rapid succession, pressing upon fact, that thought and generalisation become almost impossible, as in the former instances to which I have referred. So our proceedings here will, in a measure, take their character from the locality; the practical, as distinguished from the theoretical, will characterise the present meeting.

Among the many objects which these meetings contemplate, none is more important than the estimate and record of our

professional advancement; and in no department has a forward movement been, of late years, more distinctly illustrated, than in the construction, arrangement, and working of our hospitals. You are all aware of the fact, that in this town there has recently been completed a new General Hospital; and this, with the recent construction of some others in different parts of the country, constitutes an æra—a marked and distinct step in advance in this important matter. Therefore, in the selection of the subject of my presidential address, I seemed to have no choice. It was forced upon me by the coincidence of the recent opening of the hospital with our meeting here; and the vast moment and general interest in the subject seemed to demand that due and prominent attention should be given to it. As a further warranty of the correctness of my choice, your Council have, very wisely, invited Captain Galton—than whom no one is more competent—to give a fuller and more exact detail of the subject, from his own point of view, than I could have either the power or opportunity to compass. In the discussion which will follow Captain Galton's address on Thursday, the subject, in all its bearings, will find a complete elucidation. But this is not all; in one of the sections, we shall be favoured with a paper by Dr. Crichton Browne of the Wakefield Lunatic Asylum, on hospital furniture, to which very necessary part of the general subject he has paid much attention; and I know we shall obtain much valuable knowledge from him. In consequence of these arrangements, my original design has undergone considerable modification. I propose to offer you a simple demonstration of what we have here accomplished, being, as I believe it to be, in exact accordance with the most improved principles of hospital construction as yet arrived at. I shall here and there permit myself some comment on the more striking and interesting features of the building, and shall embrace certain opportunities of digression when subjects of collateral interest arise. I must, from the very nature of the subject, aim only at plain practical statement; anything like dazzling brilliancy is inconsistent with its description. You must expect little that has not, in one form or another, been said before. There is nothing but what a more ambitious man might have considered trite and common-place; and if, in these digressions, anything should appear out of date, and thus offend more advanced theory, it must be remembered that the practical is what I aim at.

Contrary to a somewhat prevalent (fashionable, I had almost said) opinion, we have erected our Hospital within the precincts of the town. In regard to the site itself, as a suburban one, it could not, under the circumstances, have been more favourable. It has a gentle southerly declension, the exact nature of which will be particularised when I speak of the building itself. So far as regards our prevailing winds, it is situated to the windward of the town—at the gorge of a valley running directly east and west—and, in its elevation, is exposed to a free current of air, blowing directly from the neighbouring moorlands, continuous with the hills whereon we find the most salubrious atmosphere of our district. At times the force of the wind may be somewhat over-energetic; but there is thus secured a purity which few town atmospheres can boast. I do not venture to dispute that, other things being equal, so far as purity is concerned, a country site would have advantages over this. But this is really the only valid argument in favour of a country over a town location, except, perhaps, the cheapness of land; whilst the preference which we have given to the latter, is supported by a multitude of advantages which far outweigh the admitted potency of the other. In arriving at this conclusion, we were mainly influenced by centrality in the district whence the patients are derived, the immediate proximity to a railway station affording facile communication with every part of those large hives of industry which principally supply the Infirmary with inmates.

The convenience of the honorary medical officers, and the opportunities here afforded for professional instruction, were not forgotten. In reference to the former, I think you will unanimously discard the insinuations to be found in writings—deservedly exercising great influence on the public mind, but

where such views should not have been propounded—that the degree of talent brought to bear on hospital treatment is of little moment compared with other requisites, such as country site, perfect ventilation, and efficient nursing. To each of these I would give their due importance, but never by underrating our constant self-denying and invaluable services. Fortunately, so long as these services are rendered gratuitously, the staff of any given hospital will continue to embrace a large proportion of the medical and surgical talent of the town or district in which it is located. Remove the hospital to the country, and the whole plan of arrangement must be changed; honorary hospital attendance must cease; the fully occupied, and therefore—it is fair to presume—most able officers will no longer attend. Adopt the alternative, which has been proposed, and pay them for their services; and, the remuneration being necessarily inadequate, the same result will follow—a lower grade of professional talent will supply the place, to the detriment alike of the public and of the profession. Strongly I deprecate this possibility; much of the honour and influence which we have, is due to the long continued services we have rendered to these institutions, and therefore I dwell upon it with confidence in combating a general resort to country sites. I would adopt, as will afterwards be seen, all the appliances which modern philanthropy has devised, and a wise liberality has given, whereby the difficulties of town hospitals may be lessened.

Much that has already been said applies with equal force to the hindrance of professional instruction. It has been said that, in attendance upon country hospitals, the students would be less distracted by various allurements than in over-crowded cities. The tendency to pleasure or to vice, when given way to, unfortunately overcomes all such obstacles as would thus be afforded, and the temptations of the neighbouring city would be little likely to lose their attraction when only a few miles distant. The party really deserving consideration, the painstaking and diligent student, would have all the difficulties of his education materially augmented.

But we have here a very momentous question to encounter, which, unless answered satisfactorily in the negative, involves a very serious dilemma—Are these palatial hospitals, as they have somewhat derisively been designated, a mistake? are they as detrimental to successful practice as, relying upon authentic statement, would at first sight appear? The objection to them is not new. Brocklesby, the friend of Johnson and Boswell, the successor of Sir John Pringle, clearly entertained the notion that, at least for military purposes, in tents or hastily constructed huts, more satisfactory results could be effected for the sick and wounded, than by the same practice carried on in regular or temporary hospitals. The idea has long been entertained in respect to civil hospitals, and has again been recently revived by a distinguished Fellow-Associate. His name alone gives an importance and authority to any opinions he may adopt, opinions which it would be rash enough for us to disregard, except after the most satisfactory investigation. I do not mean to assert that we are prepared to negative his conclusions, but I do believe that there is sufficient to warrant a suspension of our judgment, and to prevent the public from adopting so extreme an idea, until proved to rest upon incontrovertible data.

Sir James Simpson has arrived at the utter condemnation of large hospitals, relying on the military experience already referred to, and upon the more recent results of hospital treatment during the Crimean war. He also attaches great importance to the difference between the mortality in civil hospitals, particularly as regards amputations, and that from the same operations performed in the houses of patients, however humble or circumscribed, or in those village hospitals which are springing up so abundantly throughout the land. Sir James, writing in the *Scotsman* of Tuesday, January 12th, says: "I have collected the reports of 1,000 and odd limb-amputations in country and provincial practice. Out of the 1,000, the proportion of deaths was nearly 110, or 1 in 9. But, out of 1,000 similar amputations, performed in the large hospitals of Edinburgh, Glasgow, London, etc., the proportion of deaths is generally above 300, or about 1 in 3. For example, Mr. Liston told me that for years

after he was transferred from Edinburgh to the charge of the new surgical hospital at University College, London, his success appeared to himself to be astonishing. Mr. Potter published the statistics of the amputations in University College Hospital for the first five or six years after the hospital was opened. The deaths amounted to 1 in 6 or 7 of those operated upon. In the last returns which I have seen published (1855-57), the deaths had more than doubled, for they had increased to above 1 in 3. In 1752, the first Professor Monro published the results of the first 99 or 100 limb-amputations performed in our own infirmary here. Of the 100, only 8 died, or 1 in 12. The last tables published show a death-rate from the same operations of about 30 in 100, or 1 in 3."

Now, regarding this question as one of much graver moment than as it affects the erection of a single hospital at Leeds, though for us it is a sufficiently momentous consideration, it demands from this Association a very careful and a very candid investigation. We must not allow the operation of local interests, or the bias which may be engendered through personal prejudices, to influence our decision. We must remember that the country looks to us for an impartial verdict, as the consequences of that verdict may be the utter condemnation of all existing hospitals, and the waste of a large amount of money expended recently, and now being expended, in the erection of several noble and carefully designed structures of the so-called palatial class. We will grant that the proportion of deaths after amputation is, to the full, as large as stated by Sir James in such hospitals already contaminated through the protracted operation of agents which we shall afterwards describe. We will adopt his statement of the diminished mortality in cottages and cottage-hospitals as he has given it; we will not, just now, insinuate that there may exist some serious fallacy in the way these statistics have been taken, nor will we at present quote some singular exceptions to these statements which we have met with in our inquiries. We know that the mortality has been very large. Nor will we, even good humouredly, hint that the results of practice, whether private or public, stored up only in the memory of the practitioner, and not reduced to the exactitude of recorded figures, cannot be implicitly relied on, with whatever good faith the aspirations may be made. We will admit that there seems to be made out a very strong case in this amputation test, and that the attempted explanations through a more careful analysis of these cases, as to their primary and secondary character, has failed, so far as this argument is concerned.

We do not believe, however, that the question can be decided in this manner; and we must first inquire whether the improved principles, upon which hospitals are now constructed, may not be the turning point of the whole question. We use, therefore, as an important argument, the admitted superiority of hospital results, during the earlier years of their history, as established by Sir James Simpson. We accept the statement of the late Mr. Liston, which he quotes, without question, believing it to be true; and we regard as historical, Monro's record of the first hundred amputations, performed in the Edinburgh Hospital, with the mortality of one in twelve; and we ask, with considerable confidence, if these results, and better than these, may not be anticipated with the larger cubic space in which the hospital patient now breathes, and the wider superficial area upon which he lies? Will not, likewise, the more perfect ventilation, the non-impregnation of the less absorbent materials employed in the construction of ward-walls and floors, contribute to the same results? And upon this we will venture to assert, that this large mortality, as it does not occur in the earlier years of the hospitals, cannot be an inherent element of hospital practice, and that the happier results, as exhibited in the experience of Mr. Liston, and in the statements of Monro, will no longer be confined to the first few years of the hospitals' history, but will become a continuous and characteristic result of their statistics. To maintain the uncontaminated condition of the new hospitals in perpetuity seems to be the great *desideratum*; and may we not look to the great improvements in surgical science—for I still concern myself with the amputation test—to contribute to this end, as well as those other improvements in construction and man-

agement to which I have already referred? And thus will be brought about a gradual assimilation of hospital results with those obtained in private practice, in whatever grade of life.

I have referred to the improvements in surgical science; and amongst many others to which I might refer, the antiseptic treatment of Mr. Lister of Glasgow occurs to me as the most apposite. I would have it remembered that the large proportion of open suppurating wounds in a surgical ward may be a powerful aid to the contamination of its atmosphere; and thus necessarily the more potent, the older and more deteriorated the ward itself has become. Now the treatment of Mr. Lister, as I understand it, entirely does away with this fertile source of mischief; and he assures me "that some of the most unhealthy wards in the kingdom have become, through its adoption, all that could be desired, being quite free from pyæmia, erysipelas, and hospital gangrene."^{*} Make what allowance you please for enthusiasm as to our own practice, and return upon me the argument I have already used as to the personal record (non-tabulated) of our own practice; still it must be admitted that the absence of these *opprobria* of the surgical wards warrants the expectation of a greatly diminished mortality.

Supporting the same line of argument, I might refer to the Report of Dr. Bristowe and Mr. Holmes on the Hospitals of the United Kingdom; at page 609 of which, I find a reference to the results of practice in the Leeds Old Infirmary, where the mortality is much less than in other hospitals of the same class; and these gentlemen go into an inquiry to explain the startling difference. For my present purpose, it is sufficient to find that, even in so imperfect and contaminated a hospital, so marked a difference could exist. It proves that something more than the hospital, its form, and its condition, has to do with the results obtained within it.

I have also referred to the improved management of wards. The system of using wards in rotation will, if strictly carried out, prove a means powerfully preventive of contamination. By this I mean the plan of having at least one ward always vacant—not only the ward itself, but its furniture likewise. In our old hospital we long ago adopted the theory, but were never able to put it in practice: the same wards, the same beds, and the same furniture, might be in constant occupation, and without an interval, for years. What I contemplate is that, every six or seven years, every ward in its turn shall be left vacant for six or twelve months.

Until we have put these anticipations and agencies to the test of experience, I must not join in the wholesale and premature condemnation of these palatial erections.

I have preferred in the above remarks confining myself to the surgical illustration, simply because it has been so strongly relied upon; but I might have found, in reference to other cases, a stronger support of our present form of hospital: I might have referred to the smaller mortality, the safer and more convenient management of many medical cases, than can be effected in their own homes. Let us simply refer to scarlatina, typhus and typhoid fevers, rheumatism, etc. These do not suffer, but the contrary, from hospital treatment; but time will not allow me further to prosecute the illustration. And if I have thus made out a case for suspension of our condemnation of the present form of hospital, then indeed my arguments will have additional force, from their greater convenience, and their less costly management. In the cottage hospitals, spread over a large extent of surface, which could only be effected at a distance from a town, every species of attendance must be more difficult and expensive; supervision would be impossible; the labours of the resident and honorary staff largely augmented; and hospital instruction almost impracticable. I anticipate for a moment the objection which will shortly be taken to small wards, and which exactly applies to cottage hospitals. They are, in fact, whether in one or two compartments, small wards; if the latter, only the more objectionable. Angles and corners must necessarily preponderate in their internal space, and consequently

stagnant air will be the normal condition of these corners, save by the employment of a forced ventilation, through the agency of strong currents, which, however harmless in other climates, can never with safety be adopted in our own.

Now let us for a moment inquire what are the sources of this hospital deterioration, of which we have heard so much. It is, I think, beyond dispute that, as hospitals have hitherto been constructed and managed, they do, in process of time, undergo contamination. This arises mainly from continuous imperfect ventilation, and the concentration of morbid elements (gaseous and solid)—the latter contained in the vapoury exhalations from the lungs and cutaneous surface of diseased subjects. These have, over and over again, been demonstrated; the solid animal matter being separated from its solvent, the watery vapour, when condensed upon the windows and walls of the ill-ventilated wards. Little attention having been paid to the selection of non-absorbent materials for construction, the results cannot be wondered at. Another fertile source of contamination is the imperfectly constructed floors, and the improper methods employed in cleansing them. On floors of deal, the planks badly jointed, and being constantly soaked with water, there are collected, in process of time, large accumulations of solid animal and vegetable matter, which are deposited in the interstices of the planks. The walls themselves absorbent, carelessly whitewashed, and seldom submitted to efficient scraping, likewise become fertile sources of hospital contamination, and, under favouring circumstances, give off morbid emanations; which, in addition to those which are regularly produced from the injured bodies of the inmates, cannot but prove seriously detrimental to the salubrity of the ward atmosphere.

I might also with propriety include under this head the neglect of the very necessary precaution of throwing out of use in succession one of the wards—allowing it, both as regards furniture, bedding, and the ward itself, to lie fallow (to use an agricultural term) for a lengthened period, and thus securing a very efficient method of renovation.

This and the Herbert Hospital at Woolwich are the first complete hospitals built in England on the pavilion principle. I do not put it forward as an exact and perfect adoption of the pavilion plan; but it so very nearly approaches to it that, for all essential purposes, it may be fairly so denominated. To have made it perfect, however, would have involved us in many difficulties—the increase of our already expensive site, and the sacrifice of much facility of working. The pavilions here are not completely isolated; and this constitutes the difference between it and the true pavilion structure, as originally designed for and seen alone in the splendid hospital at Bordeaux. This plan was first proposed about seventy years ago, by a French commission. The wards are approached by external arcades, and you pass directly into them from the open air, both on the ground and the upper story. The Bordeaux Hospital, besides being the first, is also the most exact specimen of the kind with which I am acquainted; indeed, it was built from the plans recommended by the commission to which I have referred. The Lariboisière at Paris, and the St. Jean at Brussels, so closely approach this, that it might be difficult to draw any marked distinction. In reference to this principle, Mr. Gwilt, in the *Cyclopædia of Architecture*, remarks: "One of the conditions prescribed by their programme was the complete insulation of each apartment, as well as easy communication by covered galleries round the building; and these were required to be of most extended dimensions, that the air around should be unobstructed, and circulating in every part with freedom, thus affording a wholesome promenade for the patients." One of the great defects of the Bordeaux Hospital is the small space between the pavilions, though I have not been able to find an exact measurement. Another defect, to which we shall afterwards advert, is the extreme height of the wards; viz, 30 feet.

The Hospital is arranged on the normal plan of a cloistered quadrangle in the centre, from which the pavilions branch out north and south. The width of the ground only permits three pavilions on each side of the central court; and administrative requirements, other than the special objects of the Infirmary,

^{*} I have pleasure in being able to state that Mr. Lister proposes shortly to publish the results of his antiseptic treatment, as bearing upon the question of hospitalism.

necessitated the use of one of the southern spaces, so that the Hospital really consists of five pavilions. The site slopes twenty-five or thirty feet from north to south of the central axis; *i.e.*, in the direction of the length of the pavilions. This introduces a peculiar and unusual feature, that the most convenient point of entrance is not at the end of the central court, but at the lowest end of the ground, where the central southern pavilion would have been erected, but for the valid reasons already furnished: hence the public entrance is placed in what would, in the usual arrangement, be the flank of the building, and on a level one story lower than that of the ground floor of the pavilions, so that, whilst that floor at the northern end of the site is on the natural ground level, it runs out at the opposite end to a height twenty or more feet above the level of the grand entrance. There is, as usual, a gateway leading into the central court; but this becomes a secondary entrance, all comers to the hospital using that in the centre of the flank just referred to, and proceeding thence, by a bold corridor, to the great staircase, which rises to the flank of the central court, and thence, by the upper cloister, conducts to the pavilion floor. It will be seen that this arrangement gives to one-half of the building an extra ground story of full height.

This is appropriated mainly to the several purposes of administration, including on one side of the central corridor the dispensary department and the extensive provision for the out-patients, to be afterwards particularly noticed; and, on the other, the culinary and domestic offices, with the apartments of the resident medical officers, matron, etc. This arrangement actually isolates these departments for all desirable purposes; yet they are, as for convenient working they should be, brought into practical contiguity through the operation of the hoists which are attached to each pavilion.

The cloister, which surrounds the central court, is repeated on this lower floor, for the purpose of carrying food and other requisites from the kitchen, and administrative departments generally, to the hoists. Through this corridor, also, patients entering by the main door or through the out-patient department, may be conveyed to the lifts, whenever carrying them upstairs would be hurtful. There are also on this floor, and adjoining the central corridor, small wards for the immediate reception of accident cases. Here the seriously injured may remain, at the option of the surgeon, until some important operation has been performed, or until he has sufficiently rallied from the shock of his accident; or, in case of slighter casualties, he may be immediately removed to the wards by means of the nearest hoist.

It may be named, in passing, that the board-rooms and other offices for the use of the governing body are placed near and over the main entrance. Remembering the situation of the out-patient department, the kitchens, etc., it becomes at once apparent that those only who are concerned in the treatment of the sick need go up to the hospital floor, whilst those who have to do with the administration proper, need only visit those parts which are completely severed from the Infirmary. The result of this is that, on reaching the hospital level, the entire space is devoted to the actual uses of the patients, and no culinary or other administrative work is transacted on this floor.

The central space, occupied by the cloistered quadrangle, has been covered over by a light and elegant glass and iron roof, which may form a winter garden. This covered area presents itself as a striking feature of the Institution, and may efficiently subserve its important purposes. The strictest care has been taken to secure its proper ventilation, so that it cannot form a medium for the transmission of contaminated hospital atmosphere from one pavilion to another. This winter garden, though not an original portion of the design, now forms one of its most attractive characteristics; promising, besides its intrinsic beauty, to become, if successfully managed, an important adjuvant in the treatment of the sick. Some have feared that the lofty glass roof would seriously interfere with that due circulation of air around the exterior of the pavilions, which forms a distinctive element of the system. Any one who will inquire into this objection, on visiting the upper part of the Infirmary, will find that

no extra corners or angles have been created; and, bearing in mind the normal currents of air in this elevated position, will be satisfied that no detriment of this kind need be apprehended. My own conviction is that, if any effect be produced by it, the influence is beneficial rather than otherwise, for the objects supposed to be interfered with. At one end of the winter garden is an entrance gateway, before referred to, over which, and on either side, are the dwellings of the superintendent of nurses and her staff. This presents another important feature of the Hospital deserving comment, in which our architect has successfully complied with his instructions; and again illustrates the excellence of the design, in the complete isolation of its different departments. I now refer to the very desirable separation, in all similar institutions, of the nurses from the other domestics of the administrative department. This arrangement, I believe, will materially facilitate the satisfactory working of the Institution.

Our nursing staff at present consists of one lady superintendent, sixteen head nurses, ten probationers, and four scrubbers, with one extra occasionally. Six wards only are as yet opened, containing beds for 180 patients, of which 60 are medical cases and 120 surgical.

At the end of the winter garden, and opposite to the nurse house, is a very handsome chapel, in perfect keeping with the general architectural features of the Hospital, and liberally furnished and decorated by several generous benefactors.

From the northern flank of the central quadrangle branch out three pavilions; and from the southern flank, two. The central space in the last named side is occupied by the grand staircase and central corridor leading from the south entrance. Behind the top of this staircase, and over a portion of the central corridor, is the operating theatre, upon which, both as to its lighting and general arrangement, our surgeons have expended much careful consideration. The pavilions are of two stories, and one ward only occupies the entire length of a pavilion. We have placed our wards one above another—though quite prepared to admit that hospitals of one story possess many advantages. The non-transmission of hospital atmosphere from one story to another is the main advantage realised in these erections. With the perfect ventilation which we have secured, and with our spacious staircases, the objection is reduced to its minimum of force; and various reasons, economical and otherwise, might be adduced in justification of this selection. In fever hospitals, particularly, single stories have still stronger claims for adoption; and I do not hesitate to affirm that in the neighbouring town of Bradford there is now, in course of erection, the most perfectly designed hospital of this class in the country. In the new portion of the Oxford Hospital the same principle is adopted; and I do not doubt that our friends who practise there will find many palpable advantages in a single storied building. It must be remembered, however, that this principle is only applicable in the case of small numbers: the expense both of construction and of maintenance will forbid its adoption in the larger hospitals.

The exact measurements of our wards are as follows:—

	Beds.		Hight.		Length.		Width.		Cubic feet		Area per
			ft. in.		ft.		ft. in.		per bed.		bed (sq. ft.)
Upper South	32	...	19 0	...	122	...	27 6	...	1992	...	104
Lower South	32	...	16 6	...	122	...	27 6	...	1870	...	104
Upper North	28	...	19 0	...	112	...	27 6	...	2555	...	108
Lower North	28	...	16 6	...	112	...	27 6	...	1782	...	108

In our ward construction, another prominent feature of our plan is manifested—large wards are preferred to numerous small ones, mainly on the following grounds. 1. They are more easily ventilated. 2. They are more effectually and more economically administered. First, then, nothing is easier than to ventilate a small ward, either by natural or by artificial means, no regard being had to the strength of current you employ, or, in other words, to the draughts to which the inmates are continually subjected. But, when the comfort and safety of the occupants are studied, in the gradual and almost insensible introduction of fresh air, the angles and higher portions of the apartment are not affected; air stagnates in them, and gradually contaminates

the whole. It becomes, therefore, important that angles and corner spaces should bear as small a proportion as possible to the entire cubic contents of the ward; and this is most readily secured in large wards. In these, when windows are opposite, not too widely separated and capable of being sufficiently opened, the most perfect ventilation may be kept up without any undue disturbance of the atmosphere of the ward by currents or draughts. I should not recommend a wider space between the windows than thirty feet; and even a somewhat smaller measurement may be allowed, as in our own hospital, with advantage. Beyond thirty feet it has been satisfactorily proved that, between opposite windows, natural ventilation will not carry, save under exceptional circumstances; and, if a wider ward be adopted, some artificial method of ventilation must be employed. If, as is desirable, the head of the bed stand a short distance from the wall, and with the ordinary length of bed, ample breadth of central passage is secured to permit other requisite ward furniture to be arranged conveniently. The height of the wards is a more important element than at first sight appears. From sixteen to twenty feet may be mentioned as appropriate to wards of 120 to 130 feet in length, and of a breadth of about 30 feet. This affords an ample floor area for each bed. I cannot help regarding the wards of the Bordeaux Hospital as much in excess in regard to height, being, as before stated, thirty feet high. I should fear difficulties arising from this height in the ventilation of the upper portion of the ward. The most striking instance of excess in this direction that I know, is in the hospital at Ghent. There I found an old church, or monastic hall, converted into a hospital consisting of one large ward. Its dome-like roof, at first sight, makes a strong impression on the visitor, in the belief that each bed must have a very large cubic space; yet, when he finds, in order to compensate for this, the beds crowded together so closely that purity of atmosphere cannot possibly be maintained, the illusion vanishes. This defect is further aggravated by the beds being divided from each other by high wooden partitions, constituting closed boxes, which cannot possibly be ventilated. I dwell particularly on this illustration in order fully to assert the equal importance of area with cubic space, in ward-construction.

In the second place, large wards are more efficiently and economically administered. This question is altogether distinct from the force required to nurse a ward large or small. It will not be disputed that whoever is responsible for the management of a given number of patients, must have constantly under her eye the entire area of her work. This cannot be the case if 28, 30, or 40 patients be distributed in four or six wards; and, allowing for waste of force in simply passing from one room to another, more subordinates will be needed, when the patients are thus placed in several wards. It is pretty well understood that one head-nurse may properly carry out the care and oversight of from thirty to forty patients. And wards of this size, on this account, amongst many others, should be generally preferred; and, though I would not assert that small wards can altogether be dispensed with, their use should, for efficient management, be reduced to a minimum. A light screen, placed around the bed, will, in many instances, secure all the needful quiet and privacy required, and thus answer most of the intentions of a small ward. If these arguments are admitted to have the force which much thought and inquiry have given them in my mind, I need not refer to the difficulties which will embarrass professional teaching in small wards, and other minor objections which might be raised against their general adoption. I am aware, however, that some few cases, such as delirium tremens, and certain cases of diseases of the eye, imperatively demand separation; and no well arranged hospital should be entirely without smaller wards.

The large amount of window-space in this and in all modern structures affords a striking and advantageous contrast with those of earlier construction. The more correct principles now recognised call for a freer admission both of air and of light. Vigour of growth and perfection of structure and function, are in the animal as in the vegetable economy associated with the

presence of light; and though there may be a few cases, elsewhere instanced, which require its exclusion, many more benefit by its abundant admission. Cheerfulness of the patients is a material element in their successful treatment, and this cannot be expected in a dark and gloomy ward. Moreover, the error, if it can be so denominated, is in the right direction. It is very easy to moderate exuberance of light on the few days when, in our gloomy climate, it will be complained of; but we cannot by any contrivance improve its opposite, when due to faulty construction and insufficient window-space. There are eight windows on each side of the southern and seven upon each side of the northern wards, and one large window at the end of each. These are all divided by mullions, and so contrived as to admit of opening and shutting as the need for ventilation demands. The side ones reach from about three feet above the floor to within one or less than one foot from the ceiling. They are opened on the hopper principle, rebated together at the closing points, each set being joined to a weigh-bar by levers and connecting links. There is a toothed segment on the centre of each weigh-bar, which is acted on by a worm-wheel fixed on a vertical rod or tube. This rod and the tubes are arranged on the telescope principle, and are carried on the centre mullion, the moving part being brought down to the sill level, so that each or any one of the tiers of lights can be opened to the required extent, and are held there by the screw. For this ingenious contrivance, which regulates the opening and closing of the windows, we are indebted to the Chairman of the Building Committee, Mr. Kitson, who has kindly favoured me with the above graphic description of its mechanism. I gladly avail myself of this opportunity of saying how much the charity has benefitted from his unwearying attention to its interests during the entire period of the erection, and from the many intelligent suggestions he has afforded in every department. In addition to these freely opening windows, there are ventilators in the ceilings communicating, by transverse trunks, with the open air, on each side of the pavilion, and likewise grates, capable of being closed at will, upon the floors under the beds, for the admission of air to this frequently unventilated region. It will be seen, therefore, that we rely solely upon the open windows and these other means for ventilation. We have not adopted any suction or extractive apparatus, however simple; and the only approach to artificial ventilation will be described in speaking of the ward-stoves. Foul air we get rid of by constant displacement, or dilution, through abundance of fresh air admitted, likewise by the stove chimneys. Ordinarily, likewise, the ceiling apertures should favour its escape; but I have not sufficient faith in these, believing that they are inconstant in their operation, even when aided by patented inventions. At times they admit air, at others they become the medium of its escape—the relative temperature of the outer and inner air, to a great degree, explaining the uncertainty.

So far as our experience has warranted a conclusion, the most perfect condition of ward atmosphere may be maintained with the means already adopted; and others for extraction, as by suction or other processes, for extra admission by various forms of ventilators, or for moderation of force, as by perforated zinc plates, may easily be resorted to when a conviction of their necessity arises.

Standing in the central line of the wards are two detached and open stoves, by which alone the warming of the wards is effected; they have descending flues, which pass into chimney shafts within the walls. They have been carefully constructed in every particular, and, having a large radiating surface, are well calculated to effect their purpose. By the use of hollow fire-bricks, a constant supply of warmed air flows through their perforated jackets into the wards. This is the only approach to artificial ventilation which we have entertained.

The water-closets, sinks, lavatories, and baths, are situated at the terminal extremities of the wards; and their arrangement differs considerably from that of any others that I know. The angles of the ends of the wards are canted off to a form resembling a portion of an octagon, and the projecting wings, for the above-named purposes, spring diagonally from these

canted corners. I regard this design as most felicitous. It establishes, with many other instances which I might adduce from the building itself, the superiority of the Gothic style for erections of this character, admitting, as it allowedly does, great latitude of adaptation. In this particular case, a striking external beauty is utilised for a positive advantage in the internal economy of the institution. In every case, a passage runs between the conveniences contained in these wings and the wards, which is thoroughly ventilated from end to end; and it is found, practically, that the ward atmosphere does not suffer from their contiguity. I have frequently observed that the portion of the wards nearest these conveniences is as free from smell as any other part.

The pavilions are approached from the cloisters of the central court by means of lofty, well-proportioned halls, having the staircase on one side, the ward-nurse's room and scullery on the other. These halls, as I before explained, should not exist in an exact specimen of pavilion hospital. The pavilion should terminate or commence at the door of the ward, approached by an arcade or staircase. Constructed as these halls are, however, there is little chance of hospital atmosphere, generated in the lower ward, contaminating that of the others. The floors are made of well-jointed oak, which, being waxed and dry rubbed, will yield a striking advantage over the deal-washed floors of the old hospital. There we shall, I trust, escape one of the most fertile sources of hospital contamination. The walls are faced with Parian or Keen's so-called non-absorbent cement. Almost universal consent gives preference to this kind of wall-covering, and warrants the superiority claimed for it, on the ground of its slight absorption of malarious matter, and its capabilities for being readily cleaned. My own preference would be for polished tiles, but they cannot be efficiently jointed. The spaces between the pavilions are about seventy-three feet wide, and looking into these are day-rooms and small wards; and more of these latter are found on an upper story adjoining the pavilion staircases. Altogether, the small wards are ten in number.

The drainage has been carefully designed, running entirely outside the building; and no important outlet from the wards or other parts of the Hospital proper crosses under the building itself.

The external features of the Hospital, which may safely be pronounced of an elegant and striking character, are furnished by a free adaptation of mediæval architecture; and, amongst the architect's many and important works, will not least serve to substantiate his claim to the very highest rank in his profession. To say that he has handled his subject with consummate skill, is doing little to explain the difficulties with which he had to contend. The site, previously pronounced by competent authority to be thoroughly unmanageable, he has bent to a very useful and efficient purpose, furnishing a very characteristic feature of the whole. In the form or plan of the building, whose peculiar excellence consists in the separateness of its various parts, he has, with consummate skill in the arrangement and concentration of the particular departments, secured efficient practical contiguity; so that, in the widely separated pavilions, he maintains the needful purity of atmosphere, yet keeps in view, as far as it is possible, and by the means I have already indicated, a large amount of administrative convenience.

I direct your attention to the out-patient department with considerable satisfaction. I cannot but regard this as a very important element in the operations of a charitable institution like our own; and your inspection will, I anticipate, result in a verdict running up very closely to perfection. Irrespectively of the palpable fitness of its different parts to their special uses, I find in its isolation from the rest of the hospital a very striking feature. There can be no contamination of the hospital atmosphere by the large numbers periodically congregated here; nor can the in-patients be, in any sense, disturbed by the noise and bustle necessarily occurring. Irrespectively of the absolute benefit to the community by out-patient work, and the field it affords for the selection of proper cases for clinical treatment and instruction, I attach a higher value, in a scientific point of view, to this part of our labours than is ordinarily given. I

know that it is the fashion to deny its usefulness and to doubt the reality of the results. Notwithstanding the short time that is or can be given to the investigation of the cases treated, a very large measure of success is attained. I do not contend that, in the necessarily short examination of the individual case, a minute diagnosis can be formed; but in the first interview a general diagnosis may be arrived at, sufficiently accurate to direct successful treatment; and this, so far as the patient is concerned, is the great point. I further assert that a large proportion of these cases recover, allowing largely for phthisical and other instances of organic disease, having a necessarily fatal tendency. Of the curable cases, a very large proportion do well, and this is abundantly proved by the avidity with which our large population seek dispensary assistance; and these results are attained under circumstances confessedly most disadvantageous—the patients still dwelling in the same unhealthy locality, still breathing the same contaminated atmosphere, still subsisting on the same unnutritious or ill-cooked food, and still pursuing the same wearying and exhaustive occupation; the only difference being, so far as I can ascertain, the administration of the prescribed medicine. Now with the school of practitioners who, as I believe unfairly, decry drugs, it is the fashion to attribute much, if not all, the patients' recovery to the rest and other altered circumstances of improved hygiene, still not hesitating to call to their aid the somewhat antiquated *vis medicatrix*, or restorative tendencies of the system. But in the instances with which I am at present dealing, it is impossible to assert the operation of these agencies in the production of the result: the sole causes capable of favourably influencing the morbid condition of the sufferer are the drugs which are introduced into his system. I am no apologist for over-drugging, but I deprecate the too prevalent weakness, which is seriously detrimental to scientific progress, of hugging too closely the shores of Scylla to avoid the perilous navigation of Charybdis. About the time when Forbes edited the *British and Foreign Medical Review*, a great mistake was made, from the effects of which we are only now recovering. The apothecaries of the previous portion of the century had, no doubt, been guilty of many errors; and the heroic sacrifice of these offenders was mistaken for a return to the true standard of scientific medicine. Scepticism as to the efficacy of any treatment became more general, and consequently empiricism flourished. Might not the outcry raised against physic at that time be traced to an unworthy deference to the professors of certain fashionable heresies, and a pusillanimous trimming of our sails to meet, explain, or reconcile the novel and very generally prevailing heresies with our own practice? I am old enough to remember the time, and my opinion then formed has been confirmed by the events of our profession's subsequent history.

A careful, and I believe an impartial, estimate of the results of out-patient work which has fallen to my lot has impressed me with a firm belief in the importance of its results; and I rejoice to find that this field of inquiry, not merely for therapeutic investigations, but for the more general cultivation of scientific medicine, is attracting serious attention. One of our most distinguished associates has recently published a most valuable work, derived, I feel I am warranted in saying, mainly from this neglected field of inquiry.* I am satisfied that those who can devote the time to its cultivation (and the remark applies mainly to the juniors of our hospital staff) will reap an abundant harvest. It is really a question of time, which being granted, equal minuteness may be attained as in any other branch of investigation; and, though the circumstances in which the out-patient is placed interfere much with the therapeutic result, it must be admitted that, when success is attained, the argument is greatly strengthened.

Fortunately, the current so long stagnant, or setting in a backward direction, has resumed its normal flow; and it should be one of the duties, and indeed the privilege, of this great Association to guide and moderate the stream in a legitimate

* On Chronic Bronchitis, especially as connected with Gout, Emphysema, and Disease of the Heart. By E. H. Greenhow, M.D. London.

course. Sir Thomas Watson, in his address inaugurating the Clinical Society, struck the true note of this subject when he pointed out the proper direction which medical investigation must now take. "Certainly the greatest gap in the science of medicine is to be found in its final and supreme stage—the stage of therapeutics. We know tolerably well what it is we have to deal with, but we do not know so well, or anything like so well, how to deal with it. We want to know distinctly what is the action of drugs, and of other outward influences, upon the bodily organs and functions; for every one, now-a-days, acknowledges that it is only by conducting and directing the natural forces of the body that we can reasonably hope to govern and guide its diseased actions. To me it has been a life-long wonder how vaguely, how ignorantly, and how rashly, drugs are often prescribed."

Our own Association has already done no mean service in its recently completed inquiry into the action of mercury; and although its negative results have not satisfied those who have a firm reliance on the effects of the mineral in legitimate practice, yet, as an investigation simply, it has very high claims to our approval. It needs, no doubt, as many strongly feel, a supplementary inquiry, consisting of an extensive series of carefully conducted clinical experiments. The canine functions are not sufficiently analogous with the human to secure undoubting trust; and the morbid conditions induced in the experiments are felt by all as a bar to implicit reliance. Still, the investigation stands a high credit to our Association, and particularly to those members who so laboriously conducted it; and, as a step in the right direction, and as a stimulus to others to follow in the track, its importance cannot be overrated. I trust it will be by no means the last therapeutic inquiry which our Association will inaugurate or aid. That a portion of our funds may be legitimately devoted to these purposes, is to me more than clear; and I trust, without abating one atom of our support to those objects which we are already prosecuting (I refer here more particularly to the JOURNAL), we shall not neglect or set aside this duty. Our Treasurer may permit us, in an improved condition of our finances, to devote no mean sum to the aid of those who are willing to give themselves to these the most pressing necessities of the day. Much, no doubt, has likewise been accomplished through the praiseworthy labours of Drs. Anstie and Lawson, in their enlightened attempt to put this line of investigation upon its proper track. Albeit somewhat over-sensitive to avoid the stigma of patronising drugs, so long as their labours are sustained to the level to which they have hitherto risen, they will command the support and gratitude of our profession, and contribute largely to some of those important results which I am confidently anticipating from the present direction of inquiry.

No doubt perfection is attained by elevating therapeutic agents from the class of empirical specifics to that of rational remedies; by this, I mean when the known chemical or physiological effect distinctly or approximately explains the therapeutic result. In explanation of my meaning, I would refer to three drugs whose recent more general employment has rested upon these inquiries, or upon the warm discussions which have arisen in regard to them. Their effects in the removal of symptom or disease may fairly be explained by their known chemical or physiological effects, so far as our physiological or chemical knowledge enables us to trace the action of the remedies. It is sufficient for my purpose if they indicate the line of my argument—that a decided step is being made in a forward direction; and though I would not assert that the explanation is invariably perfect, it does not follow that the therapist is to blame.

The effect of sulphurous acid and the sulphites in directly checking the formation of all matters characterised by the presence of vegetable organisms, thus removing the symptoms, and it may be modifying the morbid condition in which these organisms originate, as seen in pyrosis and the vomiting of sarcinæ, and their much more extensive applicability which has been advocated by Polli, Lawson, and others, form the first illustration I employ.

I next notice the interesting extension of the use of ergot of rye, founded on its action on the gravid uterus, to the treat-

ment of hæmoptysis and other forms of hæmorrhage, for the efficacy of which my own experience affords abundant warranty. "We may regard the effect of ergot of rye on the parturient uterus as exemplifying, on a very large scale, its principal physiological action, which is its power of exciting contraction of involuntary or unstriated muscular fibre. This variety of muscular fibre we have existing in various parts; and, what I believe is especially important to remember, in the middle coats of arteries. It is probable, I think, that the ergot of rye affects the muscular fibre, found in every one of these structures, in a greater or less degree." So speaks Dr. Meadows, in a highly suggestive paper in the *Practitioner*, and he quotes Brown-Séquard's authority for its use, in all cases of affection of the central nervous system, in which it is desirable to diminish the quantity of blood by promoting, I presume, the contractility of these fibres of the vascular coat. To this influence I have attributed its marked effect in a variety of hæmorrhage, from lungs, stomach, bowels, bladder, and urinary passages, in which I have somewhat extensively employed it.

The third illustration I shall give you is the now, through continued controversy, well-known alkaline treatment of acute rheumatism, which, by Fuller, Garrod, and Dickinson, and by hundreds of others who have followed more or less exactly in their wake, is proved to have the strongest claim to our consideration both through the statistics advanced by all, but particularly by the last named of these gentlemen, and also through the scientific explanation which the action admits. In comparison with this plan, and relying upon these, to me, convincing statements, backed by a personal pursuit of the practice for many years, the expectant treatment utterly fails, and the severe blow thus aimed at enlightened medication falls harmless.

That such views will, through these and other agencies, be further established, I entertain the fullest confidence. The method of subcutaneous injection, now universally accepted in reference to some drugs, will find a much wider field of applicability, and, in the greater simplicity of results thus afforded, will tend most effectually to support the opinions I have long entertained. Time will not allow me to prosecute this part of my subject further; but, in reference to this method of medication, I would venture to make one suggestion, which the wreck of many a fair proposal that I have in my experience witnessed, warrants me in urging. Do not let us, by a too enthusiastic and indiscriminating employment of the plan, damage its reputation, before we have made ourselves acquainted with its entire claims to our confidence.

No town hospital will hereafter be considered completely fitted for the discharge of its beneficent functions, unless there be associated with it a convalescent establishment at some distance in a country situation. Hither the recovering patients may be regularly transferred at once to make way for other admissions, and more rapidly to accomplish their own restoration. Convalescent hospitals may be of two kinds. Some are purely and properly so, depending solely for their results on the renovating influences of purer air. The protracted rest for the patient, recently treated in the town hospital, in whom the turn to convalescence has been thoroughly established, but who is not yet qualified to face the duties of his everyday life, constitutes another of the advantages afforded by these establishments. The second class is made up of those institutions where it is proposed to supplement the efforts of the hospital practitioners by the use of mineral and other baths, or by the internal administration of various medicinal waters.

We are fortunately so circumstanced that, within comparatively easy distance, we have the justly celebrated springs of Harrogate and Buxton, both highly curative of many internal and external maladies. At Ilkley, in its pure waters and exquisite mountain air, we possess a second Malvern—in no way inferior to its type, in the renovating results produced upon various forms of ailment. At each of these there are hospitals for the reception of the poor; and at Scarborough and Coatham we have marine infirmaries, perfectly available for our many purposes. These latter institutions, it has been said, might have

rendered unnecessary the establishment of special convalescent hospitals; but the function of the one class will not be interfered with by the existence of the other; abundant claimants will ever appear for all the accommodation which these, in their separate departments, can afford. Of the former class, we have for some time had a temporary hospital open, which will now be transferred to a larger and more extensive establishment recently completed. This has been erected within a short distance of the town, in a very healthy locality, at the sole expense of one of our distinguished fellow-townsmen, and by him dedicated to public use. It is constructed to accommodate one hundred convalescents, and is supplied, so far as I can understand, with every necessary appliance. The honest hospital patient desires as speedy a return as possible to his remunerative toil; and many, no doubt, are tempted, under the pressure of family necessities, too soon to make the effort. Before the sequelæ of disease are thoroughly eradicated, or the consequent debility entirely recovered from, over-exertion favours relapse, or prevents the complete restoration of physical power. It may be that the premature return to the badly ventilated workshop, where our artizan patient endeavours to provide for the wants of those depending upon him for daily sustenance, or to the deteriorated atmosphere of his confined dwelling, in which he vainly seeks the renovation of his exhausted powers, tends to rekindle the scarcely extinguished embers of disease.

To all these evils the Convalescent Hospital or the Watering-place Infirmary affords an efficient and ready remedy; and, when fairly and honestly adopted, it yields to the community, whether giver or receiver, an unmixed good. But we must not shut our eyes to the fact that we have another and very different class of our hospital population to deal with. All charitable institutions are liable to abuse, and none of these so much or so detrimentally, in my opinion, as the convalescent hospital proper. Care must be taken that the malingerer does not establish his residence; and with equal vigilance the incurable must be excluded. These, if allowed facile admission, will completely destroy the usefulness which these very valuable institutions are capable of exercising, and convert into a crying abuse the otherwise beneficent agency of these adjuvant asylums.

Wherever convalescent establishments are erected for their special purposes, they should be constructed on a plan as little resembling the regular hospital as possible. The reasons warranting this are obvious. I cannot, however, endorse the directions of Miss Nightingale that, in convalescent hospitals, the requisites for ventilation, and to a very large extent the abundant space established as necessary in regular hospital construction, should be, or may be, disregarded. I do not assert that the same cubic space and superficial area are equally needful for the convalescent as for the invalid; but a large difference cannot, in my opinion, be safely made. If small wards in hospitals are objectionable on the ground of difficulty of ventilation, and if curtains are likewise undesirable for the same reason, I see no excuse for their adoption in convalescent hospitals; and I am glad to find that, in the new institution to which I have referred, the mistaken views to which I have alluded have been discarded. Houses of this description may be erected which will suggest very little association to the mind of the convalescent with the painful memories of the hospital which he has recently quitted; but, in attaining this most salutary result, we need not thoroughly abandon those principles for which we have contended as essential in the construction of the regular hospital, and which, I believe, cannot be safely disregarded in designing these kindred establishments.

I had originally intended to make some further remarks on the cost of erection of these hospitals. Time, however, forbids me to enter upon it. The strict limit as to the duration of these addresses, which I am commissioned by our executive to enforce, necessitates my careful observance of the rule. I will, therefore, only add that if, by this introductory opening of the subject, I have in any way facilitated its more complete discussion on the day devoted to it, the object I have had in view will have been accomplished.

ADDRESS IN MEDICINE,

BY

SIR WILLIAM JENNER, BART., M.D., F.R.S.,

Physician in Ordinary to Her Majesty the Queen.

GENTLEMEN,—There are special occasions when it is well for a man to review his mental progress—points in his life at which he does well, nay, is bound, to look back over the road he has travelled; to count his gains, the difficulties he has overcome, the advances he has made; and so be cheered in his present labours, and stimulated to new efforts, gathering from the retrospect good hope for the years to come. The same is true of a profession. Its members should from time to time look back to their earlier days, scan the advances their profession has made, compare what it is now with what it was then, and weigh with unprejudiced eye the worth of its reputed progress.

Advances in practical sciences are not mere changes in ideas or in the modes of expression, which may, as in regard of religion, indicate greater enlightenment of mind; but they are advances in knowledge, the addition to the science of new facts, the elimination of supposed facts, the more correct appreciation of the bearing of old facts, and the application of this new knowledge to the advancement of the practical objects of the science.

There are special reasons why the members of our profession—practitioners of medicine—should from time to time sum up the gains medicine has been making as a practical art. For, in the daily practice of our profession, so much is necessarily met to damp our spirits; so many cases in which diagnosis, in the present state of our art, is altogether impossible, or at the best doubtful; so many in which the practical difficulties in the way of diagnosis, though the art be perfect, are insuperable; so many in which, the diagnosis being clear, we know that we are impotent to cure; so many in regard of which our apparently well founded expectations of effecting a cure prove vain, that even the most hopefully minded must now and then be tempted to doubt if medicine be really advancing as a practical art.

Again, the spirits of many have been damped by the idea that modern advances in the science of medicine have led to scepticism in regard of the remedial powers of medicine as an art, and especially as to the remedial power of drugs. "I trust you will not cast doubts on the efficacy of medicines," said a distinguished member of our profession, speaking to me of this address. "They do not believe much in the worth of drugs at this hospital," wrote a reporter to one of the medical journals. Now, for myself, I desire to absolutely repudiate scepticism in regard of medicine. I believe as confidently in the power of physicians to treat disease successfully as I did when clinical clerk to one of the first practical physicians of my youth. Extended knowledge and accumulated experience have only increased my confidence in the remedial powers of our art. Nor do I believe that others, on whom the imputation of scepticism has been cast, are less firm believers than myself in the value of treatment.

Modern research has shown that a large number of acute diseases occurring in previously sound persons have a tendency to terminate in the restoration of health, even though no drug be given. This is fact—knowledge—not scepticism. Again, modern observation has shown that certain acute diseases, formerly supposed of indefinite duration, run a definite course; *i.e.*, end spontaneously at a certain date from their outset, and therefore that conclusions as to the efficacy of drugs to cut short these diseases—conclusions drawn before their definite duration was known—were founded on false premises, and consequently are not trustworthy. All this is surely fact—knowledge—not scepticism.

Again, advances in knowledge have frequently been attended by a more correct appreciation of the mode of action of drugs; and the expression of this has not unfrequently, though most erroneously, been taken as evidence of scepticism. Thus, if I believe that saline aperients do not act as formerly I supposed they did; *viz.*, by increasing the escape of watery matter from the radicles of the portal vein, I am not in the least shaken in my belief that the symptoms which I attribute to over-distension of the portal vein are relieved by their action, or that their action is followed by the disappearance of watery fluid from the peritoneal cavity and from the cellular tissue.

Again, if it should be considered as proved by experiment on dogs that mercurials do not produce increased secretion of bile in man, it would not in the least throw doubt on the established facts in regard of the great flow of a yellow and green-coloured fluid from the bowel

after the administration of a mercurial to man, and the relief to many distressing symptoms which follows. A man's bilious headache, as it is termed, would be none the less certainly cured by a mercurial, even though it should be shown to the satisfaction of the whole profession that mercury does not increase the secreting power of the liver. Our modes of explaining certain facts in curative medicine would be changed, but not the facts themselves. My conviction then is, that although with regard to the virtues of this or of that particular drug, and to the mode of action of this or of that particular class of remedies, there is, no doubt, and always will be, difference of opinion—the evidence that satisfies A being insufficient, from the constitution of his mind, to satisfy B. With regard to the value of drugs in the abstract, with regard to the value of treatment, there is really little difference of opinion among physicians equally well informed as to the present state of medical knowledge, and equally experienced in practice. When I say among men equally well informed, let me illustrate my meaning. I was one of three who met in consultation concerning a case of apoplexy. In the opinion of one of my colleagues and myself, the only treatment to be adopted was as follows: to place the patient in the recumbent position, with head and shoulders raised; to enforce absolute rest; to keep the bowels so far loose as to prevent excitement and straining; to apply cooling substances to the head in the event of any heat of the part occurring; to support the patient with light nutritive food, having regard to his habits. The third gentleman protested against the modern system of doing nothing; he was anxious to bleed, to purge, to blister; and, when opposed, was not sparing of the term sceptic, etc. Now, the difference of opinion in this case was not due to scepticism on the one side, and faith—*i.e.*, faith justified by knowledge—on the other; but to knowledge on the one side, and absence of knowledge on the other.

The case was one of degenerative change—retrograde metamorphosis—of the arteries; one had become so rotten that its wall had given way; its contents had escaped; a clot had formed; and, by its mechanical effects, given rise to the symptoms. The heart shared in the degenerative changes; the bleeding had ceased. To those who understood the real nature of the case, the lesions present, and the mode in which they had been produced—in short, the pathology of the case—belief in the efficacy of so-called active treatment appeared to be not merely unjustifiable faith, foundationless faith, faith without knowledge, but to be faith in opposition to knowledge, which in medicine is the worst form of scepticism, inasmuch as it implies doubt of truth and belief in error—doubt which may prevent the saving of life, and belief which, embodied in practice, may kill.

The present appears to me to be one of those special occasions to which I have referred, when with advantage to ourselves we may look back and survey the progress which medicine has made as a practical art in our own time—I mean during the time a large proportion of those here present have been engaged in the study and practice of their profession. The time allotted to this address will not permit me even to enumerate the advances medicine has made during the past twenty-five years; I shall, therefore, limit myself to pointing out certain great divisions into which some at least of the great practical advances of medicine may be grouped, and to giving as briefly as possible such illustrations of its advances in each of these divisions as seem to me to be sufficient to justify this assertion, *viz.*, that, having regard to the attainment of its practical aims and objects *as an art*, no science has advanced more during the period in question than has the science of medicine. As an art, I say; for while medicine is universally admitted to have advanced as a science, its progress as a practical art is frequently regarded as trifling and often even denied.

As I do not propose to enumerate all the advances of medicine, so neither is it my intention to refer by name to those by whose labours the great advances in medicine have been made. And with regard to all the illustrations I shall give in confirmation of the position I have taken—in fact, to all advances in medicine as a practical science—it must be remembered that it is rarely, very rarely, if ever, that any great discovery, any great step forward has been the direct result of the labours of a single man. All but invariably it has resulted from the successive labours of many men. And again, it must not be overlooked that, in regard of the advances of medicine as a practical art, the silent workers render most efficient aid; the results of their unspoken experience confirming or refuting the published assertions of the few. It is to the experience of the mass of the profession that we look for the final establishment of doctrine and of rules of practice.

In the selection I am about to make in confirmation of the statement that our science in its advance as a practical art stands second to none, I am conscious that I shall pass by some facts which others will think of greater value than those I have chosen as illustration; and that others would prefer to illustrate the truth of the position I have taken

by reference to more general and abstract principles. But I have been guided in my choice, first, by a desire to avoid disputed facts and theories; and, secondly, by a consideration of those things which have aided me the most frequently and effectually at the bedside when asking myself those two great questions which are hourly presenting themselves to the mind of the practitioner—What is the illness of the patient?—What will do him good?

Those points have been to me of the greatest practical service when teaching the student at the bedside. It is clinical teaching that brings most closely home to a physician the importance of every advance in our practical knowledge. By thus limiting myself, I feel that, while this address will more directly attain its object, it will be deficient in novelty and scientific interest; and so as an address, be unworthy of its predecessors. For that I crave your pardon.

Among the really great advances in medicine may be placed the separation of chronic degenerations from diseases. By degenerations I mean—1. Retrograde metamorphosis; passive changes as distinct from living processes, and especially granular disintegration, fatty degeneration and calcification, rotting and petrification; changes which may and do occur in tissues and structures removed from the body, in the bottle of the museum. 2. That change accompanied by thickening and diminution of elasticity which occurs in certain tissues in advancing life. The general diffusion of these degenerations is the characteristic of advancing age. It is, in fact, old age; so much so that, if a means of preventing these changes should be discovered, that means would be the long sought elixir of life. Rotting petrification, and the special change in nutrition to which I have referred, although they occur as—so to say—natural changes in advancing life, may occur in the structures of the young, if those structures be damaged by active disease.

As illustration of the clinical importance of these advances in our knowledge, I may refer to the modifications in our opinions and in our practice that have resulted from the application of this general knowledge to the changes that occur in special organs. Thus, our clinical knowledge, in regard of heart-disease, experienced advance with every step in our recognition of these degenerative changes. First, we became acquainted with the fatty metamorphosis of its muscular tissue, *i.e.*, the real conversion by interchange of chemical elementary constituents of the sarcous element of the muscle into olein, etc.—not atrophy proper, any more than is the revolution of a drop of water into hydrogen and oxygen atrophy of the water, but a real decomposition—a decomposition proper to advancing age. Then we learned the relation between this decomposition, rotting or fatty metamorphosis, and impediment to the flow of blood, to the textures of the heart; and we saw that the impediment in many cases was caused by calcification or petrification of the coats of the arteries. Subsequently we learned that whatever pathological conditions interfered with the nutrition of the muscular tissue, favoured, to the same degree, this retrograde metamorphosis, rearrangement of chemical constituents, decomposition or rotting, which we call fatty degeneration. So we saw that, mechanically induced congestion of the heart was followed first by increase in muscular tissue and power, and then by such damage to the nutrition of the old and of the newly formed muscular tissue, as to be followed by rotting—*i.e.*, granular disintegration and fatty degeneration; and thus we learned why the hypertrophied heart so often fails after a time to afford its proper physical signs, and to be followed by its consequences.

Again, learning that degeneration of the special structures and tissues occurred simultaneously in particular individuals at about the same time of life, we came to the knowledge of fatty heart and rotten vessels being commonly concomitants; and our general stock of knowledge reached the level of his whose statement, when I heard it made at an early meeting of the Pathological Society, was received with shouts of laughter—*viz.*, that fatty heart is often a preservative lesion. It is so. For the life of an aged person is in greater danger if the walls of his arteries are decayed while his heart retains its full power, than it is if the muscular tissue of the heart is suffering decay in proportion to the loss of resisting power of the arterial walls.

Continuing the illustration from the heart—these advances in pathologico-anatomical knowledge have enabled us clinically to distinguish valvular lesions consequent on endocarditis from those degenerative changes proper to advancing age, and to attach their true significance to those secondary changes which occur in the valves of the heart of the young, the structure of which is damaged by acute inflammation.

We have attained to this practical conclusion; *viz.*, that, regarded from a clinical point of view, structural changes in the valves of the heart are referrible to one of three classes: Imperfection in development; acute endocarditis; degenerative changes. And yet further advance of clinical knowledge has shown that non-fatal acute endocarditis is almost limited to acute rheumatism; and that degenerative changes,

sufficient in degree to interfere with function, do not occur in the valves of the heart till middle life, and rarely till advancing middle life.

The importance of these facts in enabling us to estimate the clinical value of special valvular murmurs is evident. The influence the acquisition of this knowledge has exerted on practice is well illustrated by reference to a paper in the sixth volume of the *Transactions* of this Society. In having regard to their clinical significance, the active inflammatory nature of these degenerative lesions of the valves of the heart is regarded as indisputable, and special treatment, in accordance with that opinion, is advocated. Again, the knowledge we have gained of these degenerative changes has enabled us to appreciate at their real worth—to attach to them their true pathological significance, and, by so doing, to influence diagnosis, prognosis, and treatment—those changes in cerebral textures which follow on degeneration of the coats of the arteries and capillaries; to appreciate clinically the importance and signs of those changes in the coats of the larger arteries which, circumscribed and considerable, by the diminution of elasticity and contractility they necessitate, lead to local dilatations—*i.e.*, aneurisms; and to comprehend why aneurisms of the arteries of the trunk and extremity do not occur spontaneously in childhood or youth, why they are so often the concomitants of early, though advancing, age, and so rarely commence in old age.

A second great advance in medicine has resulted from the knowledge—that elevation of the temperature of the body generally is the only evidence of the existence of pyrexia—of fever in the abstract; that if there be no elevation of temperature, there is no fever; and that the only mode of practically determining the existence of elevation of temperature, and of estimating its degree, is by the use of the thermometer. Although great elevation of temperature may be determined by the hand of the observer, yet there may be very decided elevation of temperature without the hand detecting it. And, certainly, the hand of the ordinary observer gives no correct idea of the degree of elevation. The indexed thermometer ranks in importance with the stethoscope.

I will illustrate the value to us as practitioners of this advance in our knowledge in regard to diagnosis, by reference to its value in the diagnosis of three common diseases.

There is a form of typhoid fever with which we are all familiar, that has been termed latent typhoid fever—a form in which the patient is, from the commencement to the termination of the disease, able to walk about, and even to follow his ordinary occupations. This is a form of the disease in which the patient not very infrequently dies from perforation of his bowel, or from intestinal hæmorrhage, even though, as is usual, the evidence of bowel-irritation has been trifling. The diagnosis of this practically important variety of typhoid fever is often all but impossible without the use of the thermometer; with its aid, it is comparatively, and it may be absolutely, easy. The thermometer, in this case, enables the practitioner not only to satisfy himself, but also to satisfy the patient and his friends that he is really ill—that he is the subject of fever, and not merely out of sorts, poorly. Accuracy in our diagnosis, in this class of cases, is all important; for by it we are led to avoid the treatment which some of the symptoms may seem to demand—treatment which, perchance, might lead, as it often has led, to a fatal result; while, by the ocular demonstration of the existence of the fever which we can give to the patient, we can induce him to take those hygienic precautions so important for his safe passage through the ailment. How often have we all known, in times past, a drastic purge administered by the physician to remove the disordered secretions, and injudicious diet taken by the patient to remove the weakness, lead to death.

A second illustration of the value of the thermometer as an aid in diagnosis is afforded by cases of acute deposit of tubercle. This is a disease, the diagnosis of which before the use of the thermometer was often impossible. Now, by a consideration of the continuous elevation of temperature—the degree of elevation and the alternations in the degree of elevation—the diagnosis can be made with comparative facility.

A third illustration is afforded by the aid the thermometer gives in the differential diagnosis of pneumonia and tubercular pneumonia.

So much in illustration of its value to diagnosis; but the thermometer also affords more valuable aid in prognosis: for example, in typhus fever, typhoid fever, pneumonia, and acute rheumatism; and it gives valuable aid in determining the propriety of the treatment pursued in special cases.

A third great advance in our practical knowledge has resulted from the appreciation of the influences of various mechanical consequences of primary diseases.

I may illustrate our advances in this kind of knowledge by the following. When speaking of the distinction which modern clinical medicine draws between inflammatory and degenerative changes in the valves of the heart, I might have referred to the fact that both have a

common effect, *viz.*, roughening of the margin of the valves. By this roughened surface fibrine is mechanically separated from the circulating blood—whipped out of it; and to the presence of this fibrine on the valve the greater part of the *post mortem* visible abnormality is due. Formerly all this fibrine mechanically whipped on to the valve was supposed to be directly exuded as result of endocarditis. Again, portions of this fibrine are frequently detached mechanically, *i.e.*, carried away by the current and arrested here and there in the substance of organs or in the larger vessels leading to or to parts of organs. The rheumatic nephritis figured in Rayer's great work is now known to be capillary embolism; while many cases of paralysis which were not long since altogether in explication are now matters of every day knowledge to the student, and their relation to embolism, to the washing of portion of fibrine from the valves of the heart, and its arrest in one of the arteries of the brain, is matter of demonstration. Late observations have even rendered it probable that, in a certain proportion of cases at least, that remarkable combination of symptoms to which we give the name aphasia is due to this variety of embolism.

Another illustration of our advance in practical knowledge in this direction, *i.e.*, of the mechanical origin and consequences of special diseased state, is afforded by a consideration of a cause of death after tracheotomy in diphtheria. The patient, after the opening of the trachea, frequently, as is well known, suffers from disseminated lobular pneumonia; while the trachea may be opened in other conditions without any such result. The lobular pneumonia under the conditions referred to is due to inhalation into the capillary bronchi and air-cells of disintegrated diphtheritic exudation from the larynx, and the mechanical difficulty to its expulsion resulting from the opening into the trachea; and thus mechanically are established numerous centres of diseased action. This knowledge modifies practice most materially, and tends much to the saving of life.

Another class of diseases, in the practical acquaintance with which we have made great progress during the past few years, is that due to fluid blood-poisons; pyæmia, septicæmia, ichorrhæmia, and the allied conditions. In illustration, I may refer to three common diseases, respecting which our advance in knowledge in this direction has a marked influence, not only in enabling us to give an explanation of common secondary affections, but also in regulating treatment.

It is now part of our daily clinical knowledge, that a very large proportion of the fatal cases of typhoid fever are fatal, not from the severity of the original disease—not from the direct secondary consequences of the original disease—but from the effects of absorption of decayed matter from the ulcerated surfaces of the intestine, and the blood-condition—septicæmia—resulting. From this follow secondary pneumonia, nephritis, hepatitis, etc. The practical conclusion is, that one great point in treatment is to prevent this absorption by the use of remedies calculated to destroy the foetid intestinal contents.

Again, in determining a fatal result in scarlatina, septicæmia often plays a most important part. Absorption from the ulcerated surface of the throat leads to great enlargement of the lymphatic glands about the angle of the jaw, and then to general infection. The same is true in regard of diphtheria. The practical conclusion here is, that one object in treatment is to destroy the absorbing surface (often quite practicable in scarlet fever), and to destroy foetid matters by the use of antiseptics to the pharynx.

Among our advances in the same direction—that is, of the effects of the fluid blood-poisons, and their consequences—should perhaps be classed those great strides forward in practical knowledge which have followed on our study of Bright's disease, its relation to local inflammations, to cerebral hæmorrhage, and to hypertrophy of the left ventricle of the heart. This last addition to our knowledge has advanced cardiac pathology, not only by its direct addition to our stock of knowledge, but also by bringing under general laws some of the apparently most exceptional cases of hypertrophy of the heart.

Another decided advance of modern practical medicine has followed from the greater accuracy and minuteness with which the signs and symptoms of special cases of special diseases have been observed and described, the care with which collections of such cases have been analysed, and the greater precision with which special diseases have in consequence been defined.

Advances of knowledge which have followed are manifested—

1. By the more correct appreciation, in regard of well known diseases, of the relation between objective signs and the lesions found after death. Thus we have attained to a degree of accuracy in the diagnosis of diseases of the heart, lung, brain, spinal cord, etc., which a few years ago would have been regarded as impossible.

2. By the separation of diseases previously confounded as one. *E.g.*, Bright's disease has been proved to include several distinct renal diseases, each requiring its special treatment, and all entitled to the com-

mon name of Bright's disease only because they have as common consequences lesions resulting from the retention in the blood of urinary elements. To two of these special diseases of the kidney I may refer in illustration; viz., the gouty and the syphilitic kidney. Again, in recent time we have attained solid grounds for distinguishing pulmonary collapse from pneumonia, gout from rheumatism; and also for separating relapsing, typhus, and typhoid fevers. The advance in our knowledge in regard of the diagnostic symptoms of the last named of these diseases, conjoined to our *now* knowledge of the symptoms of general acute tuberculation, and of the origin of the febrile disturbances generally of childhood, has enabled us to separate into its proper constituents the most dissimilar pathological conditions, grouped, in times lately past, under the head infantile remittent fever; and to discard the very name, unless we use it to the public as a cloak for diagnostic ignorance.

3. By the discovery of the existence of diseases formerly unknown. Need I mention Addison's disease, leukaemia, locomotor ataxy, trichinosis, cerebro-spinal meningitis, and albuminoid disease of the various organs? The accurate definition of a new disease is not only a gain in itself, but it enables us to define much more clearly allied diseases. Thus the knowledge of the parasitic nature of a considerable number of the diseases of the skin, not only established the existence of several well-defined genera on a firm basis, but enabled other genera to be more easily and clearly defined—*e.g.*, the precise characters by which tinea tonsurans can be defined, makes tinea decalvans, eczema, and herpes circinnatus, more easily and clearly definable.

The more accurate definition of special diseases has led to a more accurate knowledge of the cause of special diseases—their natural history, if I may say so—a knowledge the importance of which cannot be over estimated. Acute sthenic pneumonia has been shown to have a course almost as definite as the acute specific diseases, and to have an almost certainly favourable termination in youth. The auscultatory signs of tubercular pneumonia are not to be distinguished from those of ordinary pneumonia; but the former as rarely spares the young as the latter kills them. The diagnosis between these two affections may be made absolutely by their course. The knowledge of the duration and course of diphtheria, the period at which the larynx is likely to become involved, albuminuria to occur, and the nervous phenomena to supervene, has given us great advantages in its treatment.

I may illustrate the folly of attempting to estimate the value of special treatment of a disease, before the natural history of that disease is known, by the following facts: In 1817-19, an epidemic of fever prevailed in Edinburgh. This epidemic met with a singularly able historian in Dr. Welche. His object was not to write a history of the epidemic, but to prove the great value of blood-letting in fever. Dr. Welche shows that the mortality from fever in Edinburgh, before the employment of venesection, was very great, the percentage of fatal cases very considerable; and he proves indisputably that, after the introduction of free blood-letting, the mortality was comparatively, nay, absolutely, trifling. So frequently did the fever cease after the blood-letting, so quickly did the cessation of the fever follow on the venesection, that to the man who employed the lancet boldly in the treatment of fever, Dr. Welche thought it might be said, "O homo! jugulasti febrem." Now the investigations of the physicians of the past twenty-five years have proved that the disease which Dr. Welche supposed he had killed by blood-letting, was a disease which runs a short and definite course, ends spontaneously on or about the date at which he thought he killed it by blood-letting, and terminates almost always in health under all treatment and without treatment. It is wonderful to observe how few died, though, in the hope of killing the fever, 120 to 130 ounces of blood were taken from the arm in a few days in several cases.

Another great advance in practical medicine is the recognition of the frequent relation of local lesions to chronic constitutional states. No practitioner would now think of treating a local disease till the diagnosis of the constitutional state had been made. For example, in bronchitis in a child, both the prognosis and the treatment will be greatly modified by the fact that the little one is the subject of tuberculosis, of strumosis, of rickets, or of constitutional syphilis. In Bright's disease, both prognosis and treatment will be modified by the fact of the patient being the subject of constitutional gout, of tuberculosis, or of syphilis.

So in regard of intracranial diseases—I may instance meningitis, tumour, disease of arteries, interfering with nutrition as local diseases, for the successful treatment of which it is now admitted that a knowledge of the constitutional state is in every case essential. Surely this is a great stride in practical medicine.

The increased accuracy of late attained in the definition of special diseases, and of their course, has been greatly assisted by the use of special instruments for the detection of physical changes previously imperfectly recognisable. Without the microscope, the existence of

leukaemia could not have been established; to its aid is due the knowledge of the parasitic characters of tinea tonsurans, tinea favosa, chloasma, and thrush; it has yielded indisputable evidence of progressing destruction of lung-tissue; to it we are indebted for the separation of hydatid cysts from the various forms of simple cysts with which they were so long confounded, as well as for a knowledge of the real nature of the former. The diagnosis, prognosis, and treatment of Bright's disease are all aided by the information the microscope conveys.

The thermometer, to the clinical physician, affords, as we have already seen, information of the highest practical value, whether regard be had to diagnosis, to prognosis, or to treatment.

The laryngoscope has enabled us to appreciate changes in the larynx which, without its aid, could not have been suspected; and to determine with certainty the presence of other lesions which without it could only have been suspected—*e.g.*, growths within the larynx, paralysis of one or both vocal cords, small ulcers on the cords; and in two of these affections to detect the disease with certainty is to be able, with equal certainty, to cure the patient.

The ophthalmoscope has afforded valuable definite information in aid of the diagnosis of some of the most obscure diseases of the brain and its membranes.

The sphygmograph has accomplished something for medicine as a science and an art, and promises much more.

The balance is an instrument of great importance, as determining the progress—that is, the advance or otherwise—of certain important diseases; and so the value of the treatment being pursued; *e.g.*, diabetes and phthisis.

Another great gain to modern medicine has resulted from the diffusion of more correct ideas as to the meaning of the word cure, and of the distinction to be drawn between curing the disease and curing the patient.

The meanings of the word cure are best illustrated by reference to some special diseases. We cure scabies. It is to be observed, however, that when we cure scabies we do not cure the visible symptoms of the disease; but we destroy the agent the presence of which calls forth the visible symptoms. That agent being destroyed, nature cures the inflammation, vesication, pustulation, etc. We do what the surgeon does when he removes a thorn. He does not cure the inflammation excited by the thorn, but he removes that which keeps up the inflammation, and then Nature cures the inflammation.

Ague is, again, a disease of another kind, which we remove, that is, cure, by the use of certain drugs. The ague fit, once established, is not curable—*i.e.*, it runs its course; and then we prevent the recurrence of the ague fit. We cure or remove the condition which leads to the recurrence of the fit, over the symptoms and duration of which we exercise no control. We cure the disease.

Epilepsy is another disease which we cure. Each fit, like the attack of ague, once begun, runs its course uncontrolled. Epilepsy is sometimes occasioned by a special exciting cause, an irritant present at some one point—the thorn, so to say. For example, a man suffered from epilepsy. He passed joints of tapeworm; the worm was removed, and the fits did not recur. Years afterwards, the epilepsy recurred; and he said, "Oh, I must have another tapeworm." A dose of male-fern did remove another tapeworm; and again the fits ceased. Now, we may say the epilepsy was cured by the removal of the tapeworm; but it is to be noted that, although the excitant of the attacks was removed, the disease of the nervous system was untouched, as was shown by the recurrence of the manifestation of the disease as soon as the special irritant was again applied. Again, we cure epilepsy, we say, when, by the administration of drugs, we so modify the nervous system that, on the application of the irritants which previously induced a fit, no attack follows.

We cure patients suffering from the acute specific diseases. An acute specific fever is analogous not to ague generally, but to a single fit of ague; and as we have no drug that controls the duration of the fit, so we have no drug that controls the course or duration of the acute specific fevers. We have no drug to cut short the fever—no drug that exercises, so far as is known, any influence on the specific disease. But, notwithstanding this, there is probably no class of diseases in which we more frequently cure the patient; that is, by our knowledge of the course of these diseases, of the dangers which threaten the life of the patient at each stage; and by the judicious employment of remedies, under which are to be included air, food, stimulants, and drugs, commonly so-called—directly, positively, prevent the patient from dying. The treatment is not expectant; it is positive, and even often anticipatory. We do not stand by and let the disease run its course unmodified. We interfere at every stage, to prevent, control, or counteract the consequences of the disease. We restrain diarrhoea; we check hæmorrhage; we prevent septicæmia; and regulate, by giving or withholding stimu-

lants and food, the powers of the patient. We cure, but how we know not, a patient suffering from local nerve-pain; we cut short the pain by the administration of drugs, concerning the mode of action of which we know nothing. We cure the most distressing sufferings of constitutional syphilis by the administration of drugs, concerning the *modus operandi* of which we are really ignorant. The distinction between curing the disease and curing the patient is real.

Though the science of medicine had attained to such degree of perfection that the diagnosis of special diseases was perfect, and the prognosis in individual cases invariably correct, the public would have little practical interest in its spread. Its practitioners would be engaged in solving puzzles, and in little more. So far as concerns the non-professional public, the aims and objects of medicine ought to be—

To prevent disease;

To cure disease;

To prolong life; and

To alleviate physical suffering.

But then it is manifest that the definition of special diseases must precede all attempts to determine their several causes and their modes of cure. Every advance, therefore, in the correct definition of special diseases, and in the diagnosis of special diseases, is a step in the direction of an advance of preventive and of curative medicine.

In illustration of the advances made in preventive medicine, I will adduce the firm establishment of the fact that drinking water is one of the greatest agents in the spread of two of the most fatal acute diseases of the present time; viz., cholera and typhoid fever. In the ten years ending 1866, 21,848 persons died from cholera in England and Wales; and 192,562 from fever. From the Registrar-General's returns, it is not possible to say precisely how many of the 192,562 persons died from typhoid fever; but, seeing that typhoid fever is the endemic fever of our country, and that typhus prevails as an epidemic only, and that in limited localities and for a short time, we shall be within the limits of high probability when we say that 150,000 persons died of typhoid fever during the ten years in question, and that in no one year of the ten did less than 10,000 persons die of that disease. Now, with reference to cholera, the special facts collected by Dr. Snow proved that one of the great agents in the diffusion of cholera was drinking water; that every virulent local outbreak in a limited district of the disease was clearly coincident with pollution of the drinking water supplied to that district; and that persons living at a distance, if by accident they drank of the polluted water, suffered as certainly as if they dwelt in the district specially affected. The conclusion which follows from the facts collected by Dr. Snow is that, the conditions existing, be they atmospheric or other, which determine the epidemic disposition to cholera, the presence of minute portions of cholera excreta in the water supplied to a district for drinking purposes, will be followed by an outbreak of cholera in that district. Careful investigations into the circumstances attending local virulent outbursts of cholera during the last epidemic, have proved the truth of that conclusion. I will refer to two such special investigations in confirmation, viz., Mr. Radcliffe's admirable researches into the relation between the water-supply and the spread of cholera in London; and to Dr. Bellot's most conclusive observations on impure water as a cause of cholera in Holland. Dr. Snow's investigations traced special individual cases and local outbreaks to one exciting cause. Mr. Radcliffe's researches bear especially on the influence of the polluted water in determining excess of mortality in a large district of a great city. Dr. Bellot's facts show that those towns and those parts of a town in Holland in which there was the greatest facility for the contamination of the water-supply by cholera dejections were those which suffered by far the most severely.

The spread of typhoid fever by contamination of the drinking-water supply is, if possible, less disputable than is the spread of cholera by the same means. Every new investigation has added new proofs to the strong presumptive evidence afforded by Dr. Flint's cases. Solitary cases, outbreaks confined to single houses, to small villages, and to parts of large towns—cases isolated, it seems, from all sources of fallacy—and epidemics affecting the inhabitants of large though limited localities, have all united to support by their testimony the truth of the opinion that the admixture of a trace of fecal matter, but especially of the bowel-excreta of typhoid fever with the water supplied for drinking purposes, is the most efficient cause of the spread of the disease; and that the diffusion of the disease in any given locality is limited or otherwise just in proportion as the dwellers in that locality derive their supply of drinking water from polluted or from unpolluted sources. The proof seems complete, that a large proportion of those who drink water containing a minute quantity of the intestinal excreta from a person suffering from cholera will suffer cholera; and that a large proportion of those who drink water containing a minute quantity of the intestinal excreta from a person suffering from typhoid fever will suffer typhoid

fever. These diseases occur like small-pox, scarlet fever, and measles, as epidemics, owing to causes of which we know little or nothing; but, when epidemic,—unlike small-pox, scarlet fever, and measles,—a local outbreak of cholera and of typhoid fever will be determined by the impurity of the drinking water. Had the water supplied to the east of London been as free from organic impurity as was that supplied to the west of London, the death-rate from cholera at the east would have been a little larger only than was the death-rate at the west of London. Had the drainage and water-supply of Winterton, Terling and Guildford, been what modern medicine has shown for health purposes they should have been, these places would not have suffered the terrible outbreaks of typhoid fever of which the medical officer of the Privy Council gives such full details in the tenth volume of his inexpressibly valuable reports. The persons who died at these places from typhoid fever, and a large proportion of those who died at the east of London from cholera, were as certainly killed by the water they drank, and killed without need, as if the water supplied to them had been contaminated with arsenic.

And I am sure we all agree with the most distinguished medical officer of the Privy Council, that "the distribution of fouled water by the Guildford Board, is as proper a case for judge and jury on action for damages by any of the five hundred people who had typhoid fever in that town, as any case in which a railway collision brings some score of passengers into harm; and the fact that these water-purveyors gave typhoid fever to their customers, would be brought home to their consciences, and be suggested as a warning to other water-purveyors, in a far more conclusive and effective manner by such legal proceedings than it can be by any departmental statistics and remonstrances."

Another advance in preventive medicine, second only in importance (even if it be second) to those just mentioned, has resulted from the knowledge, lately acquired, of the influence of dampness of soil in the production of phthisis. Dr. Bowditch's and Dr. Buchanan's independent researches have placed beyond question the relation between dampness of soil and phthisis, and have proved that drying of the soil by proper drainage of any given locality is followed by remarkable diminution in that locality of the death-rate from phthisis. By improved drainage, causing dryness of the soil, in Rugby, the phthisis mortality has fallen 43; in Salisbury, 49; and in Ely, 47 per cent.

Thus, by the advances of modern medicine, the public have gained certain knowledge of the means of preventing, to a very great extent, the spread of two of the most fatal of acute diseases, and of preventing the occurrence, in a large number of cases, of the most fatal of chronic ailments.

The advances of curative medicine have been as decided as those of preventive medicine. Not only have sounder views of the rational treatment of special diseases, based on advances of pathological knowledge, been established, but new drugs, of great practical worth, have been introduced into our pharmacopœia, and old drugs have been found to possess virtues heretofore unsuspected. How wonderful is the influence of bromide of potassium over diseases, for the treatment of which we were but a few years since almost impotent! A dull, heavy-looking lad suffered, for seven years, from epileptic attacks, steadily increased from the first in severity and frequency, till many occurred in the twenty-four hours. For a year he was treated by a physician, on general principles, with little benefit. The case was in all particulars most unpromising; yet, from the time the boy took the first dose of bromide of potassium to the present, nearly three years, he has not had a single fit.

Is this a solitary case? Certainly not. We could all match it. But it illustrates well the power of a new drug over a class of cases which, not long ago, were regarded by practical men as almost as much beyond the curative influence of drugs as is a case of cancer of the breast. To one other of the powers of this drug I must advert; viz., its influence on the sexual organs,—a power which enables us to exercise a real curative influence over a class of most distressing affections for which, by drugs at least, we could formerly do nothing.

Other illustrations of the strides made in drug-therapeutics, are afforded by the influence of cod-liver oil on the cachexia of tubercular disease and of rickets; of iron on the cachexia of the aged; of digitalis as a cardiac tonic; of ipecacuanha in the cure of dysentery; of sulphites and sulphurous acid, and of carbolic acid, in the treatment of vegetable parasites; and of Faradisation and the continuous current in some morbid states of the nervous system.

The progress of pathological knowledge has been followed by an equal advance in the rational treatment of disease. Means were formerly sought to strangle a fever, to cut short a pneumonia. Increase of knowledge has taught us that these diseases always terminate within a limited period, but are never cut short; while collections of facts have proved what, in the present state of pathological and physiological

knowledge, might have been predicated; viz., that a larger proportion of these diseases terminate in health under restorative treatment than under depleting remedies. The propriety of the substitution of food and moderate quantities of stimulants, as routine practice, for the lancet, rests on the firm basis of results; and this firm basis is established without regard to the answer that may be given by science to the question, Is alcohol food or heart-stimulant, or a nerve-power supporter?

But, while admitting this general conclusion, the profession as a whole have not forgotten that there is no one treatment applicable to all cases of disease bearing the same name. They have not failed to see that the practitioner is distinguished from the routinist by his ability to discern when, with advantage to the patient, he may deviate from rules of practice generally applicable. No tables, however carefully compiled, however ably analysed, can teach a man how to treat the case of fever, or the case of pneumonia, now under his care.

A good illustration of the help yielded to us in the rational treatment of a special disease, from advances in our pathological knowledge in regard of that disease, is afforded by chronic pulmonary vesicular emphysema.

The diminution of the elasticity of the lung can, in many cases, be retarded; the exciting and determining causes of over-distension of the air-vesicles can be shunned; the causes of temporary impediments to the flow of blood through the pulmonary capillaries can be avoided; congestion of the heart, liver, kidneys, etc., can in this way be lessened, and, by direct remedies, still further diminished or removed. And thus sufferings are alleviated,—serious secondary lesions of structure in organs, the integrity of which is essential to life, in a great measure prevented, and life itself indefinitely prolonged.

The benefit derived from opening the trachea in croup, is another illustration of the value of rational treatment in the prolongation of life.

With reference to the power of our art to alleviate suffering, how great is the difference between the medicine of to-day and that of our youth! Who that has suffered from a painful local affection can think of the alleviation to his sufferings which followed on the subcutaneous injection of an anodyne, without gratitude? Who is there that has had to submit to the knife of the surgeon, whose heart does not overflow with gratitude to those who introduced and perfected local and general anæsthesia? The electric telegraph, the second greatest marvel of our time, was a thing which, in a rough way, scientific men had long thought possible; but to be cut for stone, and know nothing of the agony; to have a leg removed, and smilingly ask, when the operation is over, "When are you going to begin?" to have a toe-nail torn away, and look on and laugh when that most painful operation is proceeding,—these are marvels of which none dreamed. No extravagance of fiction equals this reality. The discovery of the value of the subcutaneous injection of anodynes, of local anæsthesia by ice and ether-spray, and of general anæsthesia by ether, chloroform, and nitrous oxide, are advances in alleviative medicine worthy to rank with the advances in preventive, curative, and prolongative medicine to which I have referred.

Keeping in view, then, those practical aims and objects for which medicine is esteemed by the public—viz., its power to prevent disease, to cure disease, to prolong life, to alleviate suffering—I feel that I have said enough amply to prove the truth of my assertion that the progress of medicine as an art has during the past twenty-five years* been second to that of no other science. And the present advanced state of medical education; the perfection of the means of physical research; the many new centres of knowledge being established in our colonial empire and in America; the widely diffused acquaintance of the profession with modern languages; the rapidity with which knowledge spreads; the confirmation, correction, or refutation which follows so quickly on the publication of novelties; the great ability; the absence of prejudice; the untiring energy; and the truthfulness exhibited by the younger workers in the field of our science,—render me hopeful that the next quarter of a century will be distinguished by far greater progress than has the last, great though that be. And I can even now in mind realise the day when most of us, our faculties numbed by age, shall take but listless interest in the then present—or be, as is perhaps to be hoped, where suffering has no place,—and when another, as full of sympathy for physical suffering, as anxious to relieve it, as we are now, shall stand in this place and tell how, twenty-five years before, one stood here and with exulting voice spoke of the advances of medicine in the preceding quarter of a century; but only to add that the sum of those boasted advances was but as nothing, compared to the strides the profession had made as a practical art since that far-away day.

* Too narrow a limit must not be given to the twenty-five years, as the writer intended rather to fix a time within which the illustrations given had become part of the stock knowledge of the profession, than fix with accuracy dates when each fact was published by its discoverer.

ON THE DETECTION AND TREATMENT OF FOREIGN BODIES IN THE BLADDER:

WITH REMARKS ON THE USE OF THE ENDOSCOPE.*

By EDWARD LUND, F.R.C.S.

THE endoscope, as we now use it, is an instrument of modern improvement. In its present form, it is the invention of Dr. Cruise of Dublin; but, long before he succeeded in bringing it to perfection, many other observers, and especially the late Mr. Avery, had attempted the same thing by very similar arrangements. To be able to view, with exactitude and precision, the interior cavities of the body, must be in some cases of great importance; yet the very limited range of vision thus obtainable will ever keep this instrument as one to be employed more as an aid to other methods of diagnosis, than for constant use. There are many little details of management in Dr. Cruise's endoscope which need not here be referred to; but among these I may especially mention the fact, as he has stated it, that we can obtain a greater illuminating power from the flame of a lamp when its thin edge is placed towards the mirror, than by using its broad surface; and also that no fluid is so useful for combustion, and gives so good a light, as pure petroleum, in which about ten grains of camphor have been dissolved in each fluidounce.

There is one source of difficulty in using this instrument which may cause much annoyance. It is that, in order to see an object with the endoscope, in the bladder filled with urine or water which has been injected into it, it is necessary that the window of the endoscope-tube should be brought into very near contact with the body to be examined; indeed, the tube should first be used as a sound or searcher to find the foreign substance; and then, having got some clue to its exact position in the bladder, we may hope to have it properly illuminated. If this is not done, the water by which the window of the tube is surrounded absorbs the light so completely that, to use Dr. Cruise's own words in a letter to me on this subject, "you can see nothing but darkness until the window of the speculum touches some object, such as the mucous membrane, a stone, or the like." This property of water to absorb the rays of light is well known to opticians; for it is said that, during the operation of diving in deep water, at a certain distance below the surface, all the light from above is cut off, and darkness prevails; and this same condition may exist in diving about in the bladder with the endoscope-tube, seeking to discover some foreign body, when, if it happen to be of a dark colour, we may imagine that we are really viewing it, while all the time the black colour produced is the result of the light being shed out into the mass of water through the window of the speculum-tube.

T. W. H., aged 17 years, was admitted into the Manchester Royal Infirmary, under my care, on August 28th, 1868. He was an intelligent, well-educated boy, of rather reserved taciturn disposition; and all I could ascertain in reference to the case was that, about four days previously in the evening, while in a dark room, he had passed a piece of India-rubber tubing, such as is used for infants' feeding-bottles, along his urethra; the penis becoming suddenly erected, the tubing slipped into the bladder, and he could not recover it. He did not have any pain; and it was not until two days afterwards, when he could not pass urine, and was suffering great distress from the distension of the bladder, that a surgeon was sent for, and he confessed to him what he had done. A catheter was used. It could not be passed quite into the bladder, for it seemed as if the urethra was blocked up by some foreign body; but, on withdrawing the instrument, the urine flowed off, with occasional interruptions, until the bladder was emptied; and after this he had no further difficulty in the passage of the urine. The boy stated that the piece of tubing was about six inches in length, and of the diameter of a common writing-quill.

On August 29th, I examined him with the endoscope while lying on his back in bed. I did not give him chloroform, and he bore the examination very well. I could see a dark mass in the bladder on his left side, with a sharp outline or edge; while all the other parts of the interior, where the mucous membrane could be seen, were of a pinkish salmon colour. This I thought must be the foreign body which I sought for, coiled up in some way so as not to give the outline or exact form of a tube; yet this was very doubtful. The urine was clear, acid, free from mucus or other deposit. The patient did not suffer any pain, except a vague general feeling of weight or uneasiness in the region of the bladder just above the pubes, neither relieved nor increased by pressure.

* Being the substance of a paper read before the Medical Section of the Manchester Royal Institution on April 7th, 1869.

On September 5th, the urine contained a little mucus; and on the 11th this had become mucous-purulent, with a very slight trace of albumen. On the 19th, I again used the endoscope; but I could not, after the most careful search, discover the dark black mass which I had before seen; and from this I concluded that there had been some error in my previous observation, and what I had thought to be a foreign body must have been only the darkness of the un-illuminated bladder. He now complained, for the first time, of pain along the penis and in the glans after micturition, and also a sensation as if something solid were about to enter the urethra with the flow of urine; but none of these symptoms were constantly present.

On the 28th, I made another examination; and now I was convinced that I could see the tube in the bladder, as, in the window of the endoscope, one-half the space was dark, with a sharp edge, the rest being of the colour of the mucous membrane; and in this I was confirmed by the testimony of Mr. Fennell, our house-surgeon, who recognised the same appearance. But, on attempting to move the instrument about to catch another view, the foreign body slipped out of reach, and I could not refix it in position, even after much perseverance; so that I was compelled to be content with this single observation. Acting chiefly, therefore, on information thus obtained, on October 2nd the patient was placed under chloroform, and lateral lithotomy was performed in the usual way. I found a foreign body in the bladder; felt the end of the tube; drew it down by means of a blunt hook with which I had provided myself; and extracted it with a small pair of nasal polypus forceps. The external wound was rather small; there was no hæmorrhage; and he did well. From this date, the boy made a good recovery, and left the hospital on November 9th, 1868, thirty-eight days from the date of operation.

The chief interest surrounding this case, from the first, was connected with the fact that, it was not absolutely certain the patient had really passed the piece of tubing into the bladder. It was thought to be quite probable that, although he had made the attempt to do so, the tube might have fallen out of the urethra as soon as he felt any pain from its introduction, instead of having entered the bladder—much in the same way that cases have occurred in which persons have declared a pin had been passed into the ear and there remained, when in truth as soon as ever the pin had touched the deeper and more sensitive parts of the meatus, it had fallen from the grasp and dropped on to the floor, leaving behind a very persistent impression of its continued actual presence in the ear. Again, it was thought to be very improbable that so pliable and soft a material as India-rubber-tubing of such a size and length could have been passed into the bladder in the manner described; and it is difficult to understand how this could have been done unless we call to mind how other substances have been introduced along the urethra, and into the bladder in a way almost involuntary. Some have declared that the transit of such bodies along the canal of the urethra is due to a sort of vermicular movement in its submucous muscular fibres; and it is not very long since a discussion took place in one of the journals between the present Sir Henry Thompson and Mr. Christopher Heath on this very question, the one arguing that the contractions of the urethra were so arranged as to facilitate the passage of fluid and solid matters towards the bladder; and the other, with equal force, contending that their action would have a precisely opposite result, and lead to the expulsion externally of anything lying in the urethra. Now I think that the turgid state of the penis, which is apt to result where the point of a foreign body touches the deeper parts of the canal of the urethra, causing a partial or complete erection of the organ; its increased length and subsequent retraction to its former size as the turgescence subsides, together with the narrowness of the urethra, which would embrace the foreign body most firmly, are rather to be regarded as the true factors in these movements. A solid body of elongated or cylindrical form, such as a tube, or a small pencil, piece of tobacco-pipe, or the like, would be held more tightly by the orifice of the urethra than by any other part of the passage; and once propelled beyond this spot, the tendency will be rather for it to advance towards the bladder as the penis returns to its flaccid state, than for it to re-appear externally. The use of vulcanised India-rubber catheters proves how easily such flexible tubes can accommodate themselves to the curves of the urethra if urged onwards with a due amount of force.

Then as to the difficulty which I experienced in being quite sure that I had seen the tube in the bladder when I last used the endoscope, and also as to the difficulty of fixing it for further observation, or recognising it by the sense of touch in the operation of sounding the bladder in the usual way—it was noticed that the tubing, after it had been extracted, had a fixed curve impressed upon it, which was the segment of a circle of at least four inches in diameter, so that, as it lay passively at the bottom of the bladder, spread out towards the sides of the cavity, the

beak of the revolving sound or the endoscope tube, as it chanced to touch it, could only do so for a moment, for the elasticity of the India-rubber would soon cause it to slip away again to its old position. This, no doubt, was the reason why, in all examinations, this foreign body was so rarely brought within the range of the endoscope. Lastly, it was suggested, by those who were present, even just before the operation, that it would be more prudent to wait until the substance, if really in the bladder, had become covered with phosphatic deposit from the urine, so that it could be detected by a sound, than to run the risk of attempting a dangerous and perhaps fruitless operation, when the constitutional and local distress were so slight. The only reply which could be made to this line of argument was, that I firmly believed what I had seen with the endoscope on my last exploration was really the foreign body in question, and that it was in the bladder; and moreover, that, in my experience, the rapidity with which any substance so placed would become covered with phosphates would depend greatly upon its exact physical characters. If it were of a porous nature—for example, a piece of soft wood—each time the bladder emptied itself, a certain quantity of old or stale urine would remain behind in the recesses of the porous body, this being in effect outside the body, or rather held away from contact with the living tissues of the bladder, would readily undergo putrefaction, act as a ferment to the new urine as it trickled down from the kidneys, rendering it alkaline, with all the consequences of further deposit, and thus the foreign body would be very rapidly encased in a calcareous crust. Not so, however, if it were a piece of India-rubber, ivory, sealing-wax, or such like body, for then its *non-porous* nature would *not* allow it to absorb and retain any moisture; there would be no urine left in the bladder to suffer chemical change, and the substance so placed could only lead to the production of an alkaline urine, by exciting, through its mere presence in the bladder, inflammation in its mucous membrane. In this case I was, therefore, of opinion that we might have had to wait an indefinite period before the India-rubber would have retained upon its surface a sufficient deposit to give to the sound the ring of a calculus; and although I could not be certain that the foreign body which I saw in the bladder was really an India-rubber tube, such as the patient declared had been introduced, or at least, I could not alone, on such evidence as this, have ventured to cut the boy as if for lithotomy; yet, the information thus obtained by the use of the endoscope was, in this particular instance, a valuable aid to diagnosis, and a guide to treatment.

There is yet another subject, akin to this, to which I am anxious to direct attention; and it can be stated in a very few words. I have observed, upon more than one occasion, in sounding the female bladder in cases of suspected calculus, that if we use a female catheter, or a hollow female sound, nearly straight or only slightly curved; if the bladder contain much fluid, either urine, or water which we may have injected; if with this there be present, as is so constantly the case, much vesical irritability, so that the bladder is ready to expel its contents with great force on the slightest stimulus: and if by chance, in moving the hollow sound or catheter, so as to explore the bladder, we allow a small quantity of fluid to pass out at the end of the instrument, stopping it suddenly with the finger to check its further escape, each time this is repeated, a sense of concussion is at once experienced, often accompanied by an audible note, very similar, indeed, if not impossible to distinguish from that caused by an ordinary calculus, or the presence and contact of some hard and solid body within the bladder. I do not think any one, who has not felt this peculiar concussion, can have any idea how very much it resembles the click and ring of a vesical calculus. It will be observed, however, that two conditions are necessary for its production. The sound, or instrument, which we employ, must be hollow, so as to allow the urine to pass through it with more or less force, according to the contracting power of the bladder; and the noise is only observable at the exact moment when the current, thus flowing with a certain velocity, is arrested by the contact of the finger with the orifice of the instrument, or when the instrument, the fluid still flowing through it, is suddenly driven onward into the bladder. It is clearly, therefore, a phenomenon which may be compared, on an extremely minute scale, to that which is well known to happen in our high pressure water-pipes, so often as a badly constructed tap is suddenly closed while the water is flowing rapidly; a concussion is produced, with a loud noise or bang, with great danger of bursting any weak part of the pipes, and the idea is suggested to the mind that we have really been dealing with a solid rather than a fluid, among the particles of which the concussion has occurred, whereas we know it is only caused by the sudden stoppage and rebound of the wave of water. We see it also in the water-hammer toy. In the case of the water-pipes, the artisan will tell you that it is because "there is air in the pipes", which is indeed just contrary to the facts, for it is the elasticity of the

air which prevents this occurring each time we shake up water in a phial, while in the partial vacuum of the water-hammer, the beautifully elastic cushion of the air has been purposely removed.

The conclusion to be drawn from these observations is, that it is not safe to explore the interior of the bladder in the female with a catheter or hollow sound, while there is any chance of the fluid escaping and being suddenly stopped during the operation. This rule does not apply to the case of the male bladder, on account of a male catheter being generally so much curved as to prevent the urine flowing through it at any great velocity. If, however, in examining the bladder for stone, we always use a solid sound, there can be no such error; or if, which is in effect the same, we keep the plug in the hollow one while it is moved about in the bladder, these concussions will not occur, and a possible fault of diagnosis will be avoided.

ON LOCOMOTOR ATAXY.*

By J. LOCKHART CLARKE, M.D., F.R.S., etc.

CASE I.—R. L., aged 35, and a very intelligent man, carrying on the business of a shoemaker at Richmond, was sent to me by a practitioner of that town. About seven years back he began to feel what he called rheumatic pains, caused, as he supposed, "by working in a draughty shop." These pains were first experienced in his feet and legs; seldom in his thighs. They come on suddenly and violently, like electric shocks, but may be absent for several days together. As in most other instances, there are two kinds of pains—the one gnawing or "rheumatic", the other lancinating. Sometimes they begin in the knee-caps, sometimes at the back of the knee-joints, and always shoot upwards from below. He has scarcely ever experienced any pain in either of the *upper* extremities. For the last five or six months he has had numbness all over his feet, reaching above the ankles. For the last twelve months or more he has felt, as he says, "great weakness in his legs", so that he could not walk properly, but swayed about like a drunken man. He feels exceedingly nervous and stiff when he first starts, but walks better as he proceeds. His movements are somewhat jerking or spasmodic, and he feels exhausted after walking a short distance. He has no hold of the ground upon which he walks, but nevertheless it feels hard. When he stoops to pick up an object, his feet seem to slip from under him. He can walk without looking at his feet, and generally walks without doing so. He can stand, also, with his feet close together, although unsteadily, when his eyes are open; but, when he shuts his eyes, he reels, and would fall if not supported.

His upper extremities are as strong as they ever were, and he has perfect use of his hands in working at his trade; but, nevertheless, the ends of all his fingers, except the thumbs, have been feeling a little numb for some weeks. For the last eighteen months or more, he has felt occasional gnawing pains round the chest and waist, with numbness and constriction, and has occasional pains in the loins. He has never suffered from piles, as many of these patients do, but he has frequently incontinence of urine; and, on the other hand, has frequently a difficulty in passing it, although the desire be urgent. He married a year ago, and has one child. There is no loss of sexual desire or power. His habits are temperate, and he smokes moderately. His father died of phthisis, but he knows nothing about the death of his mother.

The ocular affections of this patient, which are very striking and interesting, came on *subsequently* to the pains and the muscular incoordination. When looking straight at me, there is slight internal strabismus of both eyes—very slight in the left, and rather more in the right eye; but in this position he can see me only as a dim figure, or rather only part of me dimly; but if he turns his head half round to the right, he sees me perfectly, and then there is no squint. When he turns his head half round to the left, he can scarcely see me, the right eye being turned, but only partially turned, outwards, while the left eye turns fully inward, so that there is a very considerable squint. In the same position in front of me, when the *left* eye is covered, he can see me with the right eye *pretty distinctly*; when the right eye is covered, he can see me *perfectly* with the *left*; but with both eyes, while looking in the same direction, I appear double. He almost always sees double when moving about indoors or outdoors; but never sees double when he reads. Sometimes the side of a house, or a wall, does not seem to be one-third of its proper distance. His sight is very good, for he reads the smallest print with facility. Both pupils are contracted to the size of large pins' heads. His smell, taste, and hearing, are perfect.

CASE II.—The second case was a man named Hurst, 45 years of age, and by trade a draper. He was married, and had two children. Four

years ago, he had a heavy fall on his back, from which he felt no immediate effects. About five months after, however, he began to complain of weakness in his legs, but his manner of walking was not then altered. The weakness gradually increased, until he was wholly unable to walk, or even stand. After a time, however, he got much better, and regained the power of walking. He never had any pains either in his arms or legs, and was never affected with strabismus or amblyopia. When I first saw him, although he had regained the use of his legs, he was unable to walk without the support of a person's arm or of two sticks. His legs were rather numb, but he could feel that he was walking on hard ground. He had some weakness of the arms, and slight numbness of the finger-ends. His hands always felt numb when he awoke in the morning; but the movements of his hands and fingers were not much affected, and he could button his clothes without much difficulty. He complained of a heavy pain at the back of his neck, and extending round the back of his head. There was total loss of sexual power and desire from the commencement of his illness. He had frequent incontinence of urine, and sometimes of feces. In walking, the movements of his legs had the peculiar prancing and spasmodic or jerking character that belongs to the advanced stages of locomotor ataxy. The patient died rather suddenly of inflammation of the lungs.

Post Mortem Examination.—On opening the head, some fluid was found on the surface of the brain: the arachnoid was thick and opaque in certain parts, with effusion of lymph beneath it. Some of the superficial veins were very full of blood. There was some atrophy of nearly all the convolutions, and the grey substance was of a slate-colour. With these exceptions, all parts of the brain-substance presented their usual appearance.

There was a large quantity of fluid in the thorax pressing on the lungs, which, in some places, contained tubercles of different sizes, and had evidently been recently inflamed. There were extensive adhesions of the pleura. The heart was rather large, with a considerable quantity of fat on its surface. The ventricular walls were thin, but not otherwise unhealthy. The tricuspid valves were atheromatous, but not sufficiently so to impede their proper action. The semilunar valves were healthy. The liver was rather uneven on its surface, and somewhat nutmeggy. The kidneys were healthy. The pia mater and arachnoid membranes of the spinal cord were thickened and adherent to each other; the former was much congested. The posterior columns, through the whole length of the cord, had undergone, to a considerable extent, the grey degeneration and disintegration peculiar to locomotor ataxy. But, besides this alteration of the posterior columns, the grey substance was in every region more or less softened and damaged by disintegration, but particularly in the lower dorsal and lumbar regions, about the centre of each lateral half and around the

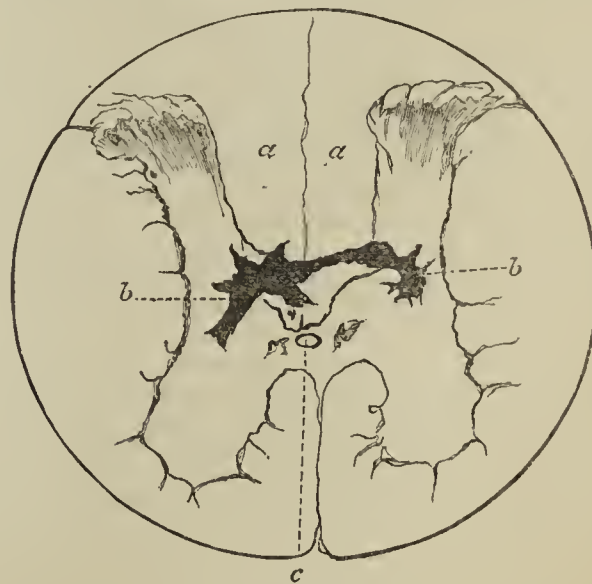


Fig. 1.

canal. Fig. 1 represents a transverse section of the upper part of the lumbar enlargement. The posterior columns, from *a a* backward to the surface, had lost a large proportion of their nerve-fibres, and were much more transparent than the rest. In the centre of the section was a large, irregular, and transparent area of granular disintegration, represented black in the figure. It extended from the middle of each lateral half of the grey substance (*b, b*), between the anterior and posterior cornua, across the deep strata of the posterior columns. Other small and irregular patches were scattered around the central canal *c*.

This case is one of exceeding interest; for the symptoms are such as might easily lead to a doubtful or erroneous diagnosis, while the real

* Continued from page 4 of number for July 3rd.

nature of the malady is clearly revealed by the *post mortem* appearances. The patient was twice admitted into the infirmary of one of the metropolitan poorhouses for supposed incomplete hemiplegia. Once he was admitted into Lambeth Workhouse for paraplegia, and subsequently into the London Hospital for locomotor ataxy, under Dr. Hughlings Jackson. The heavy fall on the back, followed soon after by rapidly increasing weakness of the legs, without at first any remarkable incoordination of movement, would suggest the probability of paraplegia rather than locomotor ataxy. In the latter disease, although weakness of the legs is commonly experienced from the first, it does not proceed rapidly to such an extent as in the present case, and is always accompanied by increasing incoordination of movement before the patient is deprived of the power of standing or walking. Moreover, there was an entire absence from the limbs of those peculiar pains which, with very few exceptions, are amongst the earliest symptoms of locomotor ataxy. There was an absence, also, of the ocular disturbance which so frequently precede and accompany the pains. On the other hand, there were evidently many of the characteristic symptoms of this disorder, as numbness in the hands and feet, the impaired muscular coordination of the fingers, the peculiar jerking or spasmodic action of the legs in progression, and the occasional incontinence of urine. The sum of the symptoms, when properly weighed and considered, would lead to the inference that the case was one of partial paralysis combined with locomotor ataxy; and the correctness of this diagnosis is confirmed by the lesions which were found in the cord; for not only were the posterior columns, and many of the posterior nerve-roots, affected by that peculiar degeneration which belongs to locomotor ataxy, but the grey substance, particularly in the lumbar region, was extensively damaged by softening, and by those areas of granular and fluid disintegration which I commonly find in spinal paralysis, and which I hope to have the pleasure of showing you. There is one point, however, which does not appear to be so satisfactorily explained; viz., the total absence of the pains which are almost always experienced in locomotor ataxy. It may be that the extensive disintegrations of the grey substance of the cord interrupted the transmission to the sensorium, of the irritations arising from the disintegrating central ends of the posterior nerve-roots.

[To be continued.]

ABSCESS OF THE BRAIN, WITH ANOMALOUS SYMPTOMS.

By C. W. THORP, L.K.Q.C.P.I., Todmorden.

THE patient was W. I. B., aged 29, by occupation a general manager of several large cotton-mills, of red hair, sallow complexion, tall and slight figure. He was married, and had one child, aged six months. He was an active man, both in mind and in body. He spent a year in Egypt, whence he returned in July 1865, invalided from the effects of liver-derangement. He also suffered from ophthalmia whilst there. During the time I knew him (about three years), he enjoyed generally very good health, except once, when I attended him for an attack of jaundice. He had also occasional slight hepatic disturbances. He had never received any injury of the head; nor had he suffered earache, nor had any discharge from the ear or the nose. For about a fortnight before his fatal illness, he complained of headache and other dyspeptic symptoms, which were considered bilious; and occasionally, for some time previously, suffered from headache and indigestion, but attended to his business regularly up to March 10th, 1869, when he sent for me, having suffered acutely from his head during the previous night. His tongue was furred; pulse 68; skin hot. He felt sickness of the stomach. I ordered an emetic, a pediluvium of mustard and hot water at bedtime, and cold water to be applied to the forehead.

March 11th. He was slightly better. An aperient was given.

March 12th. He had a bad night. He complained of a constant throbbing pain, greatly increased on moving the head, feeling as if some one was beating him with a hammer. He was given five-minim doses of liquor opii sedativus with bicarbonate of soda, with slight relief.

March 13th. He was not any better. The character of the pain remained the same. He vomited some tea taken at breakfast-time. I ordered sinapisms to the back of the neck and calves of the legs, and half a grain of calomel every hour.

March 14th. There was not the slightest improvement. The pulse was full, never having varied more than eight beats in the minute since the 11th. The tongue was coated with brown fur. He had great pain, referred specially to the right side of the head, chiefly to the temple, but

extending to behind the ear of that side. This, taken with the peculiar throbbing sensation, made me now think that an abscess had formed within the cranium. He had slight difficulty in passing urine. There had been no action of the bowels since the 12th. The calomel was continued. He had had a good deal of sleep at intervals during the last two days. I ordered eight leeches to the temples, a blister to the nape of the neck, a cold lotion to the forehead after the leeches had ceased to bleed, and half a grain of podophylline at bed time.

March 15th, 6 A.M. There was no cessation of the pain, which was still of the same character. He had been very restless during the night; had hardly any sleep. He had frequent desire to pass urine, though unable to do so. The pulse was as before; the tongue furred. The head was shaved, and ice applied. Colocynth and rhubarb pill, with blue pill, were given during the night. He had slight desire to go to stool, but was unable to effect it, through faintness. Weak brandy and water was ordered.—1.30 P.M. About twenty ounces of healthy urine were drawn off with the catheter; it deposited lithic acid after standing.—6 P.M. Urine was passed naturally again. Beef-tea had been his chief diet for the last two days. He also had port wine to-day.

March 16th, 8.30 A.M. He had been slightly delirious when coming out of short sleeps during the night. The pupils had not been affected at any time; or, if anything, slightly contracted. The conjunctivæ were congested. Numbness of the left side came on during the early morning. There was slight muscular paralysis, more of sensation. He passed urine frequently at night, voluntarily; the bowels were not moved.—9.25 A.M. Mr. Turner of Manchester saw him with me. He was quite conscious, and talked naturally. A grain of calomel was ordered to be taken every four hours. A great quantity of feculent matter came away after an enema of salt and warm water. The blister at the back of the neck was dressed with strong mercurial ointment. Another blister was applied to the left side of the head, so as to allow ice to be applied to the other. This blister was obliged to be removed after two hours, from the irritation which it produced, though it had blistered in that time.—7 P.M. The pain was much worse, particularly in the right eye, which was surrounded with a purplish red halo. He had restless jactitation.—10 P.M. Pain was now referred to the left eye.

March 17th, 12.30 A.M. Ice was the only thing that gave any relief. He became more quiet, and seemed to sleep occasionally.—5 A.M. He was more restless. Urine was passed frequently in small quantities, voluntarily, during the night. Beef-tea and port wine had been given at regular intervals.—9.45 A.M. The pain was more of an aching character. Mr. Turner again saw him. There was a good deal of difficulty in fixing his attention. Ice was applied occasionally, and the same treatment continued.—1 P.M. He asked to see his baby, whom he kissed, and ordered to be taken away again. He said he felt better; but he gradually became more unconscious until 4 P.M., when stertorous breathing set in, with the other symptoms of effusion; and increased with remarkable rapidity until he died, at 6.45 P.M.

POST MORTEM EXAMINATION, twenty hours after death.—On removing the calvarium, I found the dura mater deeply congested; and a quantity of dark grumous blood burst from the orifice of each divided vein. A large quantity of serum was contained beneath the arachnoid. The hemispheres of the brain were perfectly healthy: in fact, all the parts were so, except the right optic thalamus, which gave the sense of fluctuation to the touch; and, on being punctured, gave exit to about two ounces of pus. That which at first flowed was laudable, but what followed was of a greenish colour, with a very foetid odour. Nothing was left of that optic thalamus but what was converted into the abscess; and its sac, which was about a quarter of an inch in thickness. The ventricles all contained a quantity of serous fluid; but the bones of the head were perfectly healthy, both externally and internally.

This case is remarkable from the absence of any urgent symptoms prior to the week before death, and the unimpairment of the mental faculties almost to the last, as well as the absence of any great amount of paralysis.

QUEKETT MICROSCOPICAL CLUB.—The fourth annual general meeting of this club was held on July 23rd, at University College. The report showed that 142 members had been elected since the last annual meeting. Mr. P. Le Neve Foster was elected president in the room of Mr. Durham, who has filled the office during two years.

TESTIMONIAL TO MR. F. T. ROBERTS.—The students of the Liverpool School of Medicine have presented Mr. F. T. Roberts, Demonstrator of Anatomy and Lecturer on Botany in the School, with a microscope and an illuminated address, on the occasion of his leaving Liverpool in consequence of having been appointed Demonstrator of Anatomy in University College, London.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, JULY 31ST, 1869.

THE LEEDS MEETING.

THERE are, possibly, two classes of men in the Association who deserve to be pitied. The first class consists of those whom the duty or the necessity of attending to their professional engagements prevents from being present at such meetings as those of Dublin, Oxford, and Leeds. The second—which we would prefer to believe a hypothetical class altogether—is formed of those members who are indifferent to the moral advance, the social pleasure, the intellectual improvement, which flow from attendance on the annual gatherings of the Association.

The Leeds meeting fairly takes its place on the same level with those held in Dublin and Oxford. It may be that the town in which the meeting is held does not possess all those historical or classical attractions which marked its predecessors; it may be not possible to impart that additional interest to the meetings of the Association which may arise from their being held in the ancient halls of learning. But there has been in operation at Leeds to the fullest extent that without which no meeting of our great Association can be successful, but with which no meeting can be a failure—the will, the determination, of the profession in Leeds as a body, to make the visit one of comfort, of pleasure, and of improvement to the Association; and, on the part of individual members, to make the occasion one for the exercise of unbounded hospitality towards their visitors. It must, too, be a matter of interest to an Association, interested in all that concerns the health of the people, to meet in one of the great hives of industry, and to note the influence which manufacturing pursuits exercise on the population placed under their influence.

The preparations made for the meeting of the Association have been, as has already been intimated, of the most complete kind. For this, the warmest thanks are due specially to the President, and to the officers and members of the local committee—viz., the secretaries, Dr. Clifford Allbutt, Dr. J. Eddison, Mr. Wheelhouse, Mr. Seaton, and Mr. J. A. Nunneley; and the treasurer, Dr. Heaton. These gentlemen have spared no pains to make the visit one of pleasure and instruction. Circumstances have for some time thrown us into special communication with Mr. Wheelhouse; and we can, therefore, without in any way underrating the labours of his colleagues, say that his labours at least have been unwearied—and, we are happy to add, most successful. Outside the profession, also, everything has been done to receive the Association with honour. The Mayor and Corporation have liberally granted the use of the Town Hall—one of the modern architectural ornaments of Leeds—to the Association, for the holding of Council and sectional meetings, and for the President's *soirée* and the public dinner; while the Philosophical Hall has been placed at our disposal for a reception room, and for the holding of the

general meetings. Among other matters shewing a kindly feeling towards the Association, are the dinner given by the Mayor, and the invitations extended to members to visit the asylum at Wakefield under the able management of Dr. Crichton Browne, the new hotel at Scarborough, and the famed watering-place, Harrogate. Yorkshire hospitality has been very much more than a mere name on this occasion.

Our readers will have an opportunity of perusing, in this week's JOURNAL, the cordial farewell words of Dr. Acland, and the excellent Addresses of the President and Sir W. Jenner. At the time when we write, much expecting interest is excited by the promised paper of Captain Galton on Hospital Construction. This topic, to which attention has been called by the magnificent Infirmary lately opened at Leeds, and fully described in the President's address, will, it is expected, cause a lively discussion—especially as it is believed, with very good reason, that Sir James Simpson will take part in the proceedings.

Of Sir William Jenner's sound practical address we will say this only to the members of the Association—Read it, and study it well.

A well supplied and well arranged museum and library, after the design first started last year by Mr. Jonathan Hutchinson, have been opened. An account of these will be found elsewhere.

In the executive department, the chief fact to be noticed is the retirement of Dr. Sibson, at the expiration of his three years of office, from the office of President of the Council; and the election of Mr. Husband of York—an old and well tried member—as his successor. We are confident that, approved as has been the rule of Dr. Sibson, the interests of the Association will not suffer in the able hands of Mr. Husband.

One circumstance has thrown some gloom over what promised to be a meeting without drawback to its success. In the course of the meeting on Tuesday evening, the President announced that he was obliged to leave in consequence of a call more urgent than a professional one; and that he feared that he might not be able to return. The imminent threatening of a severe domestic calamity, at the very time when the President of the Association was entering on his duties, must be our excuse for making public allusion to such a matter. But we are sure that our esteemed President, Dr. Chadwick, will receive—as we know he already possesses on the part of the visitors to Leeds and his professional friends in that town—the respectful sympathy of the Association in his trouble.

THE Social Science Association will meet at Bristol in the week from September 29th to October 6th.

DR. R. THORNE THORNE has been appointed Demonstrator of Microscopical Anatomy to St. Bartholomew's Hospital.

DR. STEPHENSON, of Mile End, has lately died of fever caught in the performance of his duties as a district medical officer.

THE *Poor Law Chronicle* says that it is understood that Dr. Brady intends to bring in, next year, a Bill to provide superannuation allowances for the Poor-law medical officers of England and Wales.

THE Marquis of Westminster has forwarded a further donation of £1,000 to the funds of the British Home for Incurables at Clapham Rise.

A NEW wing of the Hospital for Women in Soho Square was opened on the 22d instant by her Royal Highness the Princess Mary Adelaide of Teck. It is intended for the reception of patients who would pay a weekly sum towards the funds of the hospital.

THE Lords of the Privy Council have appointed Dr. Greenhow as visitor on their behalf of the examinations of the Pharmaceutical Society, held in London under the Pharmacy Act, 1868.

THE *New York Medical Journal* says that Dr. Magni of Bologna has been called to Lima, in Peru, to operate on a merchant for cataract; and that, in addition to the travelling expenses of himself and his assistants, he is to be paid a fee of about £4,000.

THE Faculty of the Kentucky School of Medicine has passed a series of resolutions in which it states that it accepts the decisions of the American Medical Association as representing the sentiment and desire of the great body of American physicians; and that, in accordance with the wish of the Association, the charge for each official course of collegiate lectures will henceforth be 120 dollars.

THE LONDON COLLEGE OF PHYSICIANS.

THE London College of Physicians have, under their Charter, power to grant a Licence in *Surgery* as well as in *Medicine*. They have lately brought the fact of their power under the notice of the Poor-law Board; and have, as we are informed, satisfied that Board that their claim to this privilege is well founded. The Licence of this College will consequently be for the future recognised by the Poor-law Board as a qualification entitling the possessor to practise both *Surgery* and *Medicine*; or, in other words, the holders of the Licence of the London College of Physicians are now qualified to take the appointment of Poor-law medical officers without holding any other surgical qualification.

AN UNGENEROUS OBSERVATION.

LORD REDESDALE, the Chairman of Committees in the House of Lords, in reporting the Irish Medical Officers' Superannuation Bill to the House on Thursday week, made a most unnecessary and most ungenerous remark. He designated the Bill as "the most monstrous job he had ever witnessed"; and said that, as medical officers could come and go when they pleased, and could carry on private practice, they were not entitled to a superannuation allowance. This was well answered by the Earl of Longford, who reminded their lordships that the Bill was only an act of justice to a deserving body of men, who frequently did good service for a mere starvation allowance. We can scarcely think that the unworthy feeling towards hard-working and ill-paid members of our profession, manifested by Lord Redesdale, finds another representative in the House. Lord Longford, however, deserves thanks for not allowing the attack made by the Chairman of Committees to remain unanswered.

MEDICAL BENEVOLENT FUND.

AT the monthly meeting, held on Tuesday last, grants were made to twelve applicants, at a cost of £100. A letter was read from Dr. Hare, the Treasurer, expressing his increasing sense of the usefulness of the charity, both as to its objects and its mode of administration, and enclosing a donation of £100. A cordial vote of thanks was passed for the same. A donation of twenty guineas was also reported from Dr. C. Brodie Sewell; also £7 collected at the annual dinner of the Bath and Bristol Branch of the British Medical Association, at the instance of Mr. Crossman.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE directors held their quarterly court on Wednesday, July 14th; Dr. Burrows, President, in the chair. At the meeting, the large sum of £1,427 : 10 was voted for the half-yearly grants, being £177 in excess of the sum distributed last half-year. Fresh applications were made from seven widows and twenty-six children, to whom the sum of £236 : 10 was given. There are at present fifty-seven widows and forty-nine children receiving relief—an increase of five widows and twenty-six children during the half-year. One widow has died; another is no longer eligible; and three children, having attained the age of fifteen, have ceased to be eligible for relief. The directors avail themselves of

this opportunity to urge the wealthier members of the profession to assist them by their contributions, without which the funds of the Society will not suffice to meet the continually increasing demands for relief.

ST. BARTHOLOMEW'S HOSPITAL.

WE are happy to say that the misunderstanding between the lay authorities on the one hand, and the house-surgeons and dressers on the other, at St. Bartholomew's Hospital, has come to an end. The demands of these latter (which, it would appear, were backed by the moral support of the surgeons) were, we believe, satisfied only just in time to prevent their assuming an attitude of protest that would have seriously interfered with the working of the surgery department, and affected the credit of the hospital. We venture to think that it would be wiser for the future not to allow a difference capable of ready solution to assume so serious an aspect; and we fear that a few more such instances of neglect and needless opposition would be sufficient to settle in the minds of the students, and even of the staff, the conviction that their feelings will be taken into consideration only when their expression is accompanied by strong measures.

DEATH OF DR. CHARLES D. MEIGS.

DR. C. D. MEIGS, one of the most distinguished of American physicians, died suddenly on June 22nd, at his residence in Pennsylvania. He was Professor of Obstetrics in the Jefferson Medical College from 1840 to 1860, and was connected for some years with the obstetrical department of the Pennsylvania Hospital.

AN UNIVERSAL PHARMACOPŒIA.

AT the International Pharmaceutical Congress to be held in Vienna in September, one of the topics for discussion will be the formation of an universal *Pharmacopœia*; the object being to put an end to the inconveniences which sometimes arise from compounding prescriptions in a foreign country with medicines prepared according to a *Pharmacopœia* different from that in use in the country of the physician by whom the prescription was written. The suggestion is excellent.

PROFESSOR VON GRAEFE.

WE regret to learn that the illustrious ophthalmologist, Professor von Graefe, who has recently returned to Berlin after a journey to Italy for the improvement of his health, has lost all the benefit which he had derived from the change of climate; and that he will probably be obliged to abandon his professional labours in order to again resort to a warmer region than that of Prussia.

AN ACTION FOR FALSE NEWS.

IN one of the numbers of the *Wiener Medizinische Wochenschrift*, Professor Braun related a case, which had occurred in his hospital practice, where a patient died twenty-three hours after ovariotomy, and a piece of sponge was found, at the autopsy, in the abdomen. Another periodical—the *Wiener Medizinische Zeitung*—in noticing the case, erroneously stated it to have been one of Dr. Billroth, who has instituted an action for the publication of false news against Dr. Kraus, the editor of the *Zeitung*. Dr. Billroth, it is said, perseveres with the action, in spite of Dr. Kraus having offered to make ample amends in the most public manner. In doing this, he is acting, we must say, vindictively. That he should expect reparation to be made when his professional reputation is liable to be injured, is no more than right; but, in such a case as has occurred, the public correction of the error unfortunately made, by the periodical which made it, ought to be enough.

LUNACY IN ENGLAND AND WALES.

THE report of the Commissioners in Lunacy, just issued, shows a total increase in the number of insane persons in England and Wales on January 1st, 1869, as compared with January 1st, 1868, of 2,177. The number of private patients appears, during that interval, to have in-

creased, in county and borough asylums by 6; in registered hospitals by 70; in metropolitan licensed houses by 107; in naval and military hospitals by 27; and in private charge as single patients by 50. On the other hand, the patients in provincial licensed houses have decreased by 138, the result being a net increase of 122 in the class of private patients. The number of the pauper class has been increased by 2,020, distributed thus: County and borough asylums, 1,181; registered hospitals and licensed houses, 184; workhouses, 497; out-door paupers, 158. There appears, besides, an increase during the year of 35 in the total number of criminal patients in the Broadmoor Asylum.

THE CONTAGIOUS DISEASES ACT.

THE report of the select committee appointed to inquire into the working of the Contagious Diseases Act, 1866, and to consider whether, and how far and under what conditions, it may be expedient to extend its operations, has been published. The question whether it would or would not be advisable to extend the operation of the Act to the whole population is one (the committee say) which involves considerations of such magnitude, both social and economic, and would necessitate an inquiry so lengthened and so elaborate, that they have thought they should best perform their duty by not entering on so large a field at so late a period of the present session. The committee have confined their investigation, for the present—1. To the operation of the Act in those districts to which it has been already applied; 2. To the alterations which may be necessary to secure more satisfactory results; 3. To its further extension for military and naval purposes to districts not now included within its schedules. Although the Act has only been in operation two years and a half, and at some stations only seven months, strong testimony is borne to the benefits, both in a moral and sanitary point of view, which have already resulted from it.

SCOTLAND.

TESTIMONIAL TO MR. SYME.

AT a preliminary meeting of a few former pupils of Mr. Syme, held at the house of Dr. Murchison, on Saturday, July 24th, it was resolved to call a general meeting in London in October, for the purpose of inaugurating a testimonial to Mr. Syme on the occasion of his relinquishing the Chair of Clinical Surgery in the University of Edinburgh. It is proposed that this testimonial shall have a twofold object; viz.: 1. To place a marble bust of Mr. Syme in the hall of the new Royal Infirmary; and 2. To found a Fellowship in Surgery in the Edinburgh University, to be called "The Syme Surgical Fellowship". Gentlemen desirous of serving on the Syme Testimonial Committee are requested to forward their names to Dr. Murchison. We apprehend that there will be no great difficulty in raising the sum of £2,500 required for the above objects among the many former pupils of Mr. Syme, who have profited so much from his admirable clinical instructions.

ROYAL LUNATIC ASYLUM, ABERDEEN.

WE have received the sixty-eighth annual report of this excellent institution, which shows results of a very gratifying kind. The number of patients in the house on January 1st, 1868, was 398. During the year, 132 additional were admitted. The total number was, therefore, 530, being exactly the same number as for the preceding year. The highest number resident in the house at one time was 420, and the lowest 392; the average daily number for the year being 410, an increase of 19 over that of last year. Of the patients, 65 were discharged recovered; 15 died; and 38 persons were removed for various reasons; some on probation, and some for transference to other parts of the country; a large proportion of them being in a materially improved condition, bodily and mentally. At the end of 1868, 412 patients remained in the

establishment, of whom a majority of 24 were females. One hundred and eleven were private patients, and 301 were paid for by the various parishes of Aberdeenshire. No more than 35 of the community presented a curable form of the disorder, the great bulk of the inmates being the incurable accumulation of a large number of years. Seven of these were paralytic; thirty were epileptic; and most in various stages of dementia or mental decline. Three-fourths were capable of being engaged in exercise, amusement, or some more or less useful employment; and about half of them attended at the house chapel on Sunday, and a considerable proportion on the daily services throughout the week. In relation to the development of the disease in connection with certain causes or conditions, the leading groups as to number and defined character were, in order of numerical importance, the following. 1. The Insanity of Congenital Deficiency; 2. The Insanity of Intemperance; 3. Epileptic Insanity; 4. Paralytic Insanity; 5. Senile Insanity; 6. Puerperal Insanity; 7. Climacteric Insanity; 8. Traumatic Insanity (including Injuries of Head and Sunstroke). The number of deaths during the year was 15, or but 3.6 per cent. The average age was 56, and the average duration of residence, ranging from nearly twenty-two years to only four days, was six and a half years. The recoveries, although rather fewer than in 1867, were in number above the high average of the asylum, being upwards of 49 per cent., in relation to the admissions of the year. We congratulate the medical officers, Dr. Macrobin and Dr. Jamieson, on the continued success of this institution under their hands.

IRELAND.

THE SUPERANNUATION BILL.

THIS measure has now passed; a retrospective clause, enabling those who resigned within the last three years to be superannuated, having been added in the House of Lords.

ROYAL COLLEGE OF SURGEONS.

AT the quarterly examination for the diploma, thirty-two candidates appeared, and four were rejected for deficiency in operative surgery—three operations, at least, being given to each candidate. The written and *viva voce* examinations are proceeding.

THE DUBLIN HOSPITALS.

Dr. MAPOTHER's paper, and the speeches thereon by Sir D. Corrigan, Rev. Dr. Haughton, Mr. Shaw, Mr. McDonnell, Q.C., and others, have been published by Messrs. Fannin as a sixpenny pamphlet, a correspondence between Mr. Wharton and Dr. Mapother being added.

QUEEN'S UNIVERSITY.

IN addition to the examiners whose election we announced last week, Dr. Maxwell Simpson, F.R.S., has been appointed to examine in *Materia Medica*; and Professor Hodges, the government toxicologist, in *Medical Jurisprudence*. Both these subjects have been heretofore examined in by one examiner.

PURIFICATION OF THE LIFFEY.

THE corporation has declined to adopt Mr. Bazalgette's plan for intercepting sewers, preferring to call on the Government to select the mode for freeing the river from sewage. Meanwhile, much good follows from sweeping the exposed shores, and flushing them with solution of carbolic acid and carbolate of lime. Mr. A. Jacob's charcoal ventilating sewer-outlets are under the consideration of the corporation. The city has never been more free from fever or diarrhoea than at present.

KING AND QUEEN'S COLLEGE OF PHYSICIANS, IRELAND.—On July 7th, Mr. A. B. Steele of Liverpool, and Mr. Joseph Godden of Birkenhead, were admitted Licentiates of the College by examination.

THIRTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in LEEDS, July 27th, 28th, 29th, and 30th, 1869.

THE thirty-seventh annual meeting of the British Medical Association commenced on Tuesday last.

The Committee of Council met at 1 P.M., and the General Council at 3 P.M.

The first general meeting was held in the Theatre of the Philosophical Institution, several hundred members being present. The Chair was first taken by the retiring President, Dr. ACLAND, F.R.S., who addressed the members to the following effect.

GENTLEMEN, MEMBERS OF THE BRITISH MEDICAL ASSOCIATION,—The period for which you were pleased to appoint me your President has now come to a close. It remains for me only most gratefully to resign into the hands of that most esteemed gentleman, Dr. Chadwick, the presidency of this Association. I only trust you will permit me to say a few words in expressing a hope that nothing on my part in the year that has gone has checked your high and useful aspirations; and that as the meeting at Oxford did not fail in the great objects, both social and scientific, of the Association, so the meeting in Leeds will far outstrip in its results that and all other previous gatherings of this institution. I believe—I do not know it—but I believe some of our brethren from the other side of the Atlantic are present. I have, at all events, a pleasing letter, informing me that that would be the fact, from Professor Gross, and wishing you all success at Leeds, and that letter I shall place in the hands of the President-elect in a few minutes. Before, however, I retire, I feel that I owe it as a matter of respect and duty to you, to allude to one or two circumstances in the previous year which, although not affecting directly medical science, still affect medical administration in this country; and these are the appointment of a commission to consider the laws which affect the public health, and the promise of the Government to reconsider very fully the provisions of our Medical Act; and, bearing in mind the deep interest which the Association has taken in both these questions, and considering that I was for the time your President, I thought it my duty to do the best I could under the circumstances of the case, and I do not think you will hereafter have reason to consider that this present year has been unfruitful of means likely to be useful to us as taking part in the social administration of the country. I am not aware that anything of special moment has occurred during the year of my office. I do not know that any great change has taken place which should be recorded in the course of our medical literature which would have turned our thoughts into any greatly new channels, or given to us any new special powers for observation, and I don't think, in the present state of knowledge, it is necessary. It is not in every epoch that great discoveries like those of Bell, or Swan, or Barry, or great gifts like those of chloroform or quinine, are vouchsafed to mankind, or that any exceeding great steps are taken in modern hospital administration. But it may be said that every year—now such is the state of our knowledge—that every year, in its large and honest as well as reckless criticism, some errors are exposed, some fallacies are detected, and some principles are reinvestigated; and thus, by this process of mingled construction and repair, that the whole edifice of pathological knowledge is silently under our hands, building up like the first temple of Palestine—

"No workman's steel or ponderous hatchet rings,
But like some tall palm the noiseless fabric springs."

(Applause.) Therefore, gentlemen, it is not the duty of a retiring President to chronicle in detail that which he leaves for the higher and fuller elucidation of his successor. Associations such as ours do great good, or may do great harm, in the direction of the progress of knowledge. They may advance it by concentrating our powers and attention on objects of utility, and in the pure search after truth; they may retard it if they diverge away to more evanescent topics. May this never be the case with an association whose brotherhood is in the wide world—whose sympathies are those of our common nature—who have a common language and a common literature, and a common bond of union, wherever culture and civilisation are known—and who know no other brotherhood but the common material welfare of the human race. (Applause.) And now it remains for me only, after thanking you with a deep sense of gratitude for the honour which you bestowed upon me most unworthily more than two years ago, in appointing me to succeed our eminent colleague, Professor Stokes—(hear, hear)—it remains for me

only to resign the chair to our common friend Dr. Chadwick. And in doing so we cannot but remember that we are strangers come from all parts of the kingdom, and I have no doubt from other countries besides. Some of us may have come from places redolent with abstract questions and ancient controversies, and as many in this age are wont to think of by-gone prejudices, but as I would rather say of a place not willing to throw aside the light which has heretofore lighted the world. But be these opinions what they may—and I shall be pardoned for holding my own—we come to one of the great world centres of industry and activity—one of those centres which some persons think to be too much given over to material progress and commercial enterprise. I will detain you only to enter my protest against any such opinion, and to say that in centres of mental activity and material progress, such as that in the midst of which we are now situated, I, as a stranger, can at once appeal to this hall as evidence of the interest, of the world acknowledged interest, of this hall as a centre of scientific progress and instruction. I can farther, before I sit down, appeal to that æsthetic taste residing in this place, and carried out in the selection of the mediæval architect Scott to decorate for them the new, well-considered, hygienic hospital—(applause)—and thereby to set an example of appreciation of culture in works of manifest utility, which I believe has not yet been followed, and will not soon be imitated in other towns of the country. And if I turn to another question, which I, as a stranger, may refer to before Dr. Chadwick, if I wanted in Great Britain an instance of advanced philanthropy on the part of a merchant prince, I should send a stranger to examine the small village, in your neighbourhood, of Saltaire. (Applause.) Therefore, I resign with the utmost anticipations of increased success on the part of the Association, and of greater lustre than it was in my power in a smaller place to impart to it, I resign the chair in confidence and in hope of your esteemed, and I believe here I may say your beloved, friend, Dr. Chadwick—in whom I feel assured we shall find a respected and worthy successor to the names of Smith, of Hey, and of Teale. Thanking you for your kindness, I now resign to Dr. Chadwick the future conduct of the chair. (Applause).

Dr. CHADWICK, the new President, then took the chair, and delivered an interesting address, which is published at page 107.

Dr. BEATTY proposed—"That the cordial thanks of the Association be given to Dr. Acland; and that he be elected a permanent Vice-President."

Dr. T. SMITH (Cheltenham) seconded the motion.—Mr. W. HEY supported the motion, which was carried with loud applause, and acknowledged by Dr. Acland.

The Secretary then read the Report of Council, of which the following is a copy.

"The Council look forward with pleasure to the assembling, at Leeds, of the thirty-seventh annual meeting of the Association, under the Presidency of Dr. Chadwick.

"The great meetings of Dublin and Oxford, presided over respectively by Dr. Stokes and Dr. Acland, taken together, form an important epoch in the history of the Association.

"The Council feel that the transition from these seats of learning to Leeds, the great centre of one of the largest fields of industry in England, will lead to results not less important to the vital growth of the Association. That meeting, to which so many are looking forward with interest, will bring the Association again into contact with the most active forms of human life; and present to them, on the spot, the effects upon health of a large assemblage of men, engaged in manual pursuits requiring both skill and exhausting labour.

"The Council have taken advantage of the opportunity afforded by the erection and recent occupation of the new Infirmary at Leeds, to bring before the Association, at its annual meeting, the question of Hospital Construction, which will be introduced, more especially in its medical aspects, by the future President, Dr. Chadwick, in his opening address. Captain Douglas Galton, C.B., on the invitation of the President-elect and Council, has undertaken to give an address, with a view to a subsequent discussion, on the proper construction of hospitals. Captain Galton is peculiarly fitted to occupy this position, for he was a member of the Barrack and Hospital Improvement Committee; and to him the country is indebted for the plans of the Herbert Hospital, which has served as a model for many similar institutions of more recent erection.

"The Council are able again to report a considerable increase in the number of members of the Association. In the year 1868 there were 3,702 members, of whom 73 have died and 104 resigned, and 39 have been removed for non-payment of subscriptions. At the present time the number of members amounts to 4,095.

"The Treasurer's statement, audited by Mr. Church, of Bath, and Dr. E. L. Fox, of Clifton, which has been published in the JOURNAL, is appended to this Report.

"*Hastings Prize*.—Your Council regret to have to report that there are no competitors for the Hastings Prize this year.

"The Committee of Council have held their usual quarterly meetings, and one additional. It will be the duty of the new Council to elect a successor to Dr. Sibson, whose Presidency of the Council expires at this meeting.

"The Committee appointed at the last annual meeting for the purpose of promoting the direct representation of the profession in the Medical Council, have issued an address to members of the Legislature and the general public, which has appeared in the *JOURNAL*, and been circulated among the several Branches of the Association, along with the form of petition to the House of Commons. On the 12th of July, a deputation, accompanied by a large number of members of Parliament, and consisting of many members of the Association from various parts of the kingdom, was received by the Earl de Grey and Ripon, the Lord-President of the Council, with whom was associated the Right Hon. William Edward Forster, Vice-President of the Privy Council. The views of the Association with regard to this important question, and the advantages that may be looked for from its adoption, were explained and illustrated by the Chairman of the Committee, Dr. Edward Waters, by the President of the Council, Dr. Sibson, and by the President-elect, Dr. Chadwick. The Deputation was courteously received, and the arguments put forward in favour of the direct representation of the profession in the Medical Council were listened to by the Lord-President and the Vice-President with marked attention, and the assurance was given by his Lordship that the statements submitted to them should receive every consideration. Your Council have viewed with satisfaction the adoption by the Medical Council of the principle of direct representation of the profession in that Council, by the following resolution passed at their last session: 'That the Council are of opinion that, if the Legislature should think proper to invest the Council with extended powers and fresh duties, by which the profession at large would be brought more under the direct influence of the Council, then, in that case, the profession at large should have a more direct influence in the appointment of members of the Council.'

"Your Council are disposed to believe that this interview will not be without its fruits, and they trust that the Medical Council will be remodelled so as to embrace within itself members sent by the profession, as well as those elected by the Corporations and Universities and those nominated by the Crown.

"The Council look forward with confidence to the speedy attainment of a high standard of preliminary education; of one Examining Board for the admission of members into the medical profession in each part of the kingdom and of thoroughly practical and clinical examinations.

"These examinations can be properly conducted only under the eye of a body composed of medical men, who are familiar with every want of the medical profession.

"There is reason to surmise that a serious proposal is about to be made to do away with the present Medical Council, and to substitute for it a Government Council, constituted mainly of men who are not members of the medical profession; and a Government Board of Examiners.

"The Council affirm with confidence that members of our great profession will never permit medical education to be withdrawn from their own supervision, and given over to a body of men exclusively appointed by the Government. Medicine, like the Law and the Church, will ever retain the direction of its own education, and the control of its own education, and the control of its own examinations.

"The Committee on the Direct Representation of the Profession in the Medical Council, will present a full report of their proceedings. Reports also will be presented by the Committee on State Medicine, the Committee for Registration of Diseases, and by the Parliamentary Committee, which will doubtless obtain the careful consideration of the Association.

"The Council have to regret the resignation of the very able editor of the *JOURNAL*. Arrangements have been made for carrying on the business of the *JOURNAL* until the appointment of his successor, which it will be the duty of the new Committee of Council to decide on at their first meeting.

"The Sectional Meetings have become an integral and well-organised part of the General Meetings, the scientific character of which they have unquestionably raised. The various Sections draw men together who are interested in a common pursuit; give an impulse to enquiries into the many imperfectly explored fields of medical knowledge; and tend to advance medical science. The Council are persuaded that the members will distribute themselves freely among the different sections, and convey there to each other that precious knowledge acquired at the

bedside, which so many observant and able men carry about with them untold, for want of the opportunity of mutual cultivation.

"The Branches are in a flourishing condition; and have been active in discussing scientific subjects, as well as matters connected with the general welfare of the profession.

"During the past year, a new Branch has been established for that portion of Gloucestershire not included in the Bath and Bristol Branch.

"The Council desire to offer to the Secretaries and the various Officers of the branches their warm thanks, since to them is due very much of the success of the Association.

"Your Council cannot allow their President to retire from the office which he has filled for the last three years, without expressing their sense of the invaluable services which he has rendered to the Association by a rare devotion of time, zeal, and ability.

"Your Council recommend for election as Honorary Members, Captain Galton, R.E., C.B., and C. E. Brown-Séquard, M.D., F.R.S."

Dr. RUMSEY moved the adoption of the Report; which was seconded by T. T. GRIFFITH, Esq., of Wrexham.

Dr. DAVEY thought the payment of £802 to contributors too high. Many men thought themselves illused by their papers not being inserted. He did not see why the particulars should not be announced.

Dr. JOSEPH SEATON wished to ask the Treasurer if he had the means of knowing to whom the payments to contributors had been made?

Dr. FALCONER said that the practice has been that the Editor has had the control of a certain sum, and that the names of contributors have never been made public. Arrangements are now in process by which henceforth no payment can be made to a contributor except through a cheque paid by the Treasurer. He believed that in future so large a sum would not be paid to the contributors; but the Association would have the benefit of the temporary expenditure which has been made.

Dr. LINGEN (Hereford) thought that the Editor of the *JOURNAL* was placed in a very delicate position by this large expenditure.

Dr. STEWART would remark on the repetition of an old chronic complaint. If an Editor is appointed, he must be trusted thoroughly. The interests of the Association demanded the large expenditure; but that it would be continued, is another question. So far from the Editor getting a large salary from the *JOURNAL*, he believed he was rather out of pocket. He thought that the Association would not require the names of the contributors to be made public.

Dr. G. WEBSTER thought that Dr. Davey and Dr. Seaton did not wish the names of the contributors to be made public; but Dr. Davey was quite right in calling attention to the large expenditure for contributors.

Mr. NUNNELEY sympathised with what had been said as to the large expenditure. While it was necessary that the names of contributors should be kept in confidence, the sum of £800 without any account of it was a large one. He thought that the members would be satisfied with the pledge given by the Treasurer and Council as to the future reduction of expenditure.

The motion for the adoption of the Report was then carried.

Dr. FALCONER moved that Captain Galton, R.E., and Dr. Brown-Séquard be elected honorary members of the Association.—Mr. WHEELHOUSE seconded the motion, which was carried by acclamation.

Mr. HUSBAND proposed the re-election of Mr. Watkin Williams as General Secretary.—This was seconded by Dr. FALCONER.—The Rev. Dr. BELL asked whether the Secretary was to be reappointed without any regard to the amount of his salary.—Dr. FALCONER said that the Committee of Council had resolved to fix the salary at £300; and that this proposal had been accepted by Mr. Williams.—After some further remarks from Dr. Bell, Dr. G. Webster, Mr. Clayton, Dr. Gibbon, and Mr. Nunneley, the motion for the election of Mr. Williams as Secretary was carried.

Mr. CLAYTON moved the re-election of Mr. Church and Dr. E. Long Fox as Auditors.—Mr. NUNNELEY seconded the motion, which was carried.

Mr. WATKIN WILLIAMS read the Report of the Medical Benevolent Fund.—Dr. HARE moved that the report be received and adopted. The members knew too little of the Fund, which was an integral part of the Association. It was worked without canvassing and without expense to the candidates, and the relief was immediate; the expenses also were very small.—Mr. BARTLEET seconded the motion.—Mr. NUNNELEY said that last week nearly £500 had been distributed among necessitous members of the profession by the West Riding Association. The motion was then carried.

Dr. DAVEY moved the resolution of which he had given notice; viz., to alter Law 8, so that twenty members of Committee of Council should be elected annually instead of ten. Dr. SEATON seconded the motion.

Dr. RICHARDSON moved as an amendment that a committee be ap-

pointed to revise the laws referring to the appointment and duties of the Committee of Council.—Dr. GIBBON seconded the amendment.

Mr. HUSBAND thought there could not be a better representative body than at present existed. The Committee of Council would not be improved by the addition of members. He thought that Dr. Richardson's motion ought not to have been made without due notice.—Dr. STEWART thought that the Committee of Council was essentially representative.—Dr. HESLOP could not comprehend why there should be a numerical ratio between the Committee of Council and the members. He thought a small board better than a large one. The Secretaries formed the very quintessence of representation, for they accurately represented the branches to which they belonged. He was not prepared to give an opinion as to Dr. Richardson's amendment; but he objected to taking up the time of the Association meetings with fundamental questions.—Sir W. JENNER asked Dr. Richardson to withdraw his resolution, which no one could consider at this period of the evening.—The amendment was then put to the vote, and lost. Dr. Davey's motion was then put, and also lost.

Other business having been disposed of, the meeting adjourned.

In the course of the evening, the President stated that he had received a message which would oblige him to leave Leeds at once; and he feared that he would not be able again to attend the meetings. The chair was taken the remainder of the evening by Dr. Sibson, President of Council.

On Wednesday morning, a meeting of the new Council was held. Mr. Husband, of York, was elected President in the room of Dr. Sibson, whose term of office had expired. The following gentlemen were elected members of Committee of Council: Mr. Clayton, Dr. Embleton, Dr. Heslop, Mr. Nunneley, Dr. Sibson, Mr. Heckstall Smith, Mr. Southam, Dr. A. T. H. Waters, Mr. Wheelhouse, and Dr. Wilkinson.

* At the general meeting, it was decided that the next Annual Meeting be held at Newcastle-on-Tyne; and that Dr. E. Charlton be President-elect. Sir William Jenner delivered an address in Medicine, which is published at page 114. The Sections met in the afternoon; and in the evening a *soirée* was held in the Town Hall.

REPORTS OF SOCIETIES.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, JUNE 4TH, 1869.

J. R. LANE, Esq., President, in the Chair.

THE following officers were elected for the ensuing session:—*President*—J. R. Lane, Esq. *Vice-Presidents*—F. E. Anstie, M.D.; C. Hunter, Esq.; T. Holmes, Esq.; J. Rouse, Esq. *Council*—Edgcumbe Venning, Esq.; G. G. Hewitt, M.D.; J. Colebrooke, Esq.; J. C. Webb, M.D.; G. Pollock, Esq.; C. St. John, Esq.; Hugh Mackintosh, M.D.; Staff-Surgeon A. G. Elkington; F. Hatchard, Esq.; F. Egan, L.K.Q.C.P.; T. Godrich, Esq.; W. Martyn, M.D. *Treasurer*—M. Baines, M.D. *Librarian*—A. Godwin, M.D. *Secretaries*—W. Milner, Esq.; A. Tyfe, M.D. *Auditors*—R. B. Painter, M.D.; R. T. Daniell, M.B.

Excision of the Clavicle. By JAMES LANE, Esq.—Henry Holloway, aged 52, an Irish labourer, was admitted into St. Mary's Hospital on March 29th, with a tumour occupying the inner three-fourths of the left clavicle. It was solid and firm, giving the idea of a fibrous or enchondromatous mass growing in or from the bone itself. It was of about the size and form of a large lemon. There was no pain in it. It had been growing six months, he said; and that he was swinging from one of his hands, when he felt something give way, which compelled him to cease working at that time. He complained of headache, and was drowsy and stupid; and his face and neck were congested. His health was bad; therefore he was kept with good diet, etc., for a fortnight, when the author removed the tumour together with the clavicle. This was sawn through about an inch from its acromial end, and disarticulated at the sterno-clavicular joint. The author then related minutely the whole steps of the operation; the result being the successful removal of the tumour with the clavicle, as above mentioned. When the tumour had been removed, the deep cervical fascia was seen to be uninjured; and consequently neither the subclavian nor carotid vessels were directly exposed to view. The attachment of the fascia had not been interfered with; but, close to the median line, the division of the fibres of the sterno-hyoid muscle rendered it impossible to preserve this membrane intact; and consequently, at this point, the loose areolar tissue between the sternum and the trachea, communicating with that of the anterior mediastinum, was unavoidably opened into—a circumstance which probably contributed materially to the unfavourable termination of the case. The patient went on well for the first two or three days, and then, without any definite symptom, gradually became

weaker, and died on the seventh day of operation. Diffuse suppuration was found in the mediastinum; and effusion of lymph on the right pleura, but none on the left. Small masses like medullary cancer were found in the right lung, also on the pleura; and a mass in the posterior lobes of the brain, also in the middle lobe, were found, evidently of a malignant nature. The tumour presented the same malignant aspect.

Dr. WAY exhibited a Fœtus of two months, which had been apparently decapitated within the uterus. The author found the fœtus in the clots—the result of a miscarriage—without the head, this being found afterwards, apart from it.

ASSOCIATION INTELLIGENCE.

SOUTH WESTERN BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at the Royal Cornwall Hotel, Truro, on June 22nd, C. BARHAM, M.D., President, in the Chair.

President's Address.—Dr. BARHAM delivered an address, of which the following is an abstract. He said that he could wish for the command of a larger balance of energy and leisure for the service of the Branch; for he had felt that, neither in numbers nor in work, was it worthy of the faculty in the two western counties. The central body, now consisting of nearly 4,000 members, and embracing the three kingdoms, was the strongest medical fraternity ever formed by voluntary union; and to belong to it was distinctly the readiest way for each individual to acquire his proper influence in the general polity of the profession; whilst the yearly subscription of a guinea was certainly a very easy price for a weekly journal second to none in quality. The Branch had been numerically small; and its work, if compared with what was done elsewhere, had been hardly proportionate even to its number of members. There seemed to be no valid reason why Exeter and Plymouth should not, in some measure, emulate Bath and Bristol, or Birmingham; even if it were beyond hope that a smaller section from Truro and the neighbouring towns should muster, as they do in Kent, twice or three times in the year, for medical discussion. An effort ought surely to be made to double the strength of the Branch. This effected, the rest would follow. Dr. Barham then gave a retrospect of the chief phases of medical doctrine and practice which had come under his notice, since he entered on his profession, about fifty years ago. He passed in brief review the doctrines of Cullen, Hamilton, Abernethy, Laennec, Broussais, and Tommasini, etc.; and noticed the changes in medical opinion which had in late years taken place. The impression left by the earlier years of his medical life was that a sthenic type of disease was more prevalent than at a later period; and it would appear not unlikely that a less active morbid phase must have been ushered in by the great epidemics of cholera and influenza, of which diphtheria is a later example; but such change was quite inadequate to account for the change in treatment; and the fact that our abandoned lancet was picked up by the continental schools, and relied on as all important when we regarded it as worse than useless, was quite sufficient to settle the question. Neither was it all unusual to meet with doctors in this country who followed the old method with full confidence. He believed that there was a mischievous amount of bloodshed and other lowering measures in his earlier days. But he also suspected that the current practice erred on the other side, and that venesection might now and then save a life, and in many cases of congestion, and not a few of inflammation, would be a speedier and more effectual remedy than those now in vogue. Of the opposite system of free stimulation, his own experience did not incline him to a very favourable opinion. He expressed a confident opinion that in every aspect there had been a great advance in medicine and in medical men since the date of his first connection with the profession. As part of the preliminary training for the medical profession, and indeed for every other, no one could go further than he in the advocacy of instruction in physics and natural history. But it did not follow that the Greek and Latin classics were to be cast aside. The medical was one of the learned professions; its nomenclature, and that of its allied sciences, was all derived from the tongues of Greece and Rome, and in them was enshrined a most valuable medical literature; whilst an acquaintance with them was the readiest way to a sound and fundamental knowledge of modern languages. Translations, however serviceable for the conveyance of mere knowledge, were quite inadequate, because delusive representations of the creations of genius. The fault of the past had not been the teaching of Latin and Greek, but their unsound and exclusive teaching; and we might now be confident that we are on the eve of a better day; thanks to men like Dr. Acland. The old system of apprenticeship had been well nigh discarded—no one desired its re-

storation; but opinion had tended too much in the direction of schools, hospitals, and lectures, to the exclusion of the relation of tutor and private pupil. He was convinced nothing could be substituted, with advantage, for the direct influence of the individual mind, authority, and teaching of an able and conscientious practitioner, on a lad placed under his immediate control; besides that, nowhere else, as in the surgery, could be gained familiarity with the "common things" of practice. The best thanks of the meeting were given to the President for his address.

Place of Meeting in 1870, etc.—Torquay was appointed the place of meeting for 1870. W. Pollard, Esq. (Torquay), was elected President-elect for the ensuing year; and the following were appointed new members of the Branch Council, viz.: C. R. Hall, M.D.; J. U. Huxley, M.D.; C. B. Nankivell, M.D.; James Pollard, Esq.; and Baruch Toogood, Esq., all of Torquay.

Representatives in the General Council.—The following were elected. J. Whipple, M.D., Plymouth; C. Barham, M.D., Truro; P. C. De la Garde, Esq., Exeter; J. Thompson, M.D., Bideford; and H. S. Hounsell, M.D., Torquay.

Dinner.—The members subsequently dined together at the Royal Hotel.

NORTHERN BRANCH: ANNUAL MEETING.

THE fifth annual meeting of this Branch was held in the Library of the Newcastle-upon-Tyne Infirmary, on Tuesday, June 28th; DENNIS EMBLETON, M.D., F.R.C.P., in the chair. There were also present twenty-seven members and seven visitors. The retiring President, John Jobson, Esq., F.R.C.S., was prevented from being present.

The PRESIDENT said his first duty was to thank them for the honour which they had done him, an honour which was a distinguished one, and also one which he hoped he duly appreciated. As long as his term of office lasted, he should be happy to promote, to the best of his ability, the interests of the Association and of the profession. He then proceeded to deliver his address. He referred at the outset to the rise of the study of medicine, and to its progress since. Glancing at the theories which were held by its professors in different ages, he compared the practice of the past with that of the present age. He believed that the present system was founded on rational experience and common sense; and, having spoken on the great light thrown upon many subjects connected with the profession during the past years, expressed his approval of the system of registration of diseases introduced by the Association, which has been carried out by Dr. Philipson in Newcastle. With reference to the representation of the profession in the General Medical Council, he thought "that the greatest improvement would be to place the election of the members of the Council representing the Universities and Corporations in the hands of the members, licentiates, or graduates, of those bodies respectively"; and gave it as his opinion "that an entirely new Medical Act, to consolidate, amend, and supersede the Act of 1858 and its amendments, should be obtained." He also considered that they should acknowledge, in some fitting manner, the benefits which the profession had received from the labours of those great men who had advanced their knowledge. Among such, he named the late Dr. Marshall Hall, whose discoveries in anatomy and physiology formed an epoch in the advance of the art of teaching. He would not attempt to pass an encomium on the deeds of such a man, but merely mention that a movement, originating last winter with Dr. Richard Gillis of Newcastle, had been set on foot, and had been encouraged by the subscriptions of many distinguished members of the profession in Great Britain and on the Continent, and that thus an opportunity had been afforded for every one to contribute his mite to the establishment of the "Marshall Hall Scholarship," in honour of the memory of that great physiologist and physician.

Mr. GEORGE SHAW proposed—"That the best thanks of the meeting be given to their worthy President for his able and learned address."

The proposition was seconded by Dr. DE MEY, and carried by acclamation.

Vote of Thanks.—Dr. CHARLTON proposed—"That the warmest thanks of the meeting be awarded to John Jobson, Esq., the Council of Management, and the other officers, for their services during the past year." This was seconded by Dr. CHARLES GIBSON, and carried by acclamation.

Officers for 1869-70.—On the motion of Dr. EASTWOOD, seconded by H. G. HARDY, Esq., it was unanimously resolved—"That the next annual meeting be held in Sunderland; that George Welford, Esq., be President-elect; Dr. Philipson Honorary Secretary and Treasurer; Dr. Charlton, J. B. Fife, Esq., Leonard Armstrong, Esq., and Dr. W. H. Dixon, the Council of Management."

New Members.—The Secretary announced that, since the last annual meeting, fifty-one gentlemen had been elected members of this Branch.

Treasurer's Report.—Dr. Philipson read the Treasurer's statement, which showed that the balance in hand, at the commencement of 1868, was 7s. 11d., and the amount received in annual subscriptions was £12:16:6—total, £13:4:5. The expenses during the year amounted to £11:3:1, leaving on December 31st, 1868, a balance of £2:1:4.

Representatives of the General Council.—On the motion of H. G. HARDY, seconded by Dr. BURNUP, the following members were elected to represent the Branch in the General Council of the Association: E. Charlton, M.D.; D. Embleton, M.D.; G. Y. Heath, M.B.; C. Gibson, M.D.; John Jobson, Esq.; George Welford, Esq.; H. W. Watson, M.D.; and G. H. Philipson, M.D., *ex officio*.

Specimens, etc.—Mr. THOMAS ANNANDALE, of Edinburgh, described the Operation for Cleft Palate, as performed by himself, and exhibited the instruments used in the operation. Mr. Annandale also showed an apparatus for the treatment of Club Foot.—The President thanked Mr. Annandale for his kindness in attending the meeting, and for the very lucid description he had given.

Dr. ELLIS exhibited the Microscope used by the late Dr. Marshall Hall in making his important and valuable physiological investigations on the reflex nervous system. The instrument was made by Dollond of London, and the date was about 1830.

Dr. PHILIPSON exhibited some Loose Bodies from an Inflamed Ganglion, for which he was indebted to R. T. Lightfoot, Esq.

Papers.—Dr. EMBLETON read a paper on Pain in the Shoulder in Liver Diseases.

Dr. C. GIBSON read a paper on Procidencia Uteri, and exhibited an instrument which he had for many years employed in the treatment of this disease. The instrument was somewhat of the shape and construction of a double hernia truss.

On the motion of Dr. NATHAN, a hearty vote of thanks was accorded to Drs. Embleton and Gibson.

Dinner.—The members and their friends afterwards dined together at the Queen's Head Hotel, the President in the chair, supported by the Mayor of Newcastle (James Morrison, Esq.); the Sheriff (G. W. Hodge, Esq.); the Under Sheriff (R. G. Green, Esq.); and the Vicar of Newcastle (Rev. C. Moody, M.A.)

SOUTH MIDLAND BRANCH: ANNUAL MEETING.

THE thirteenth annual meeting of this Branch was held at the General Infirmary, Northampton, on Tuesday, June 29th, at 1.30 P.M.; W. NEWMAN, M.D., Stamford, President, in the chair. Twenty-six members and visitors were present, who, previously to the meeting, were entertained at a luncheon by Dr. Francis.

The Report of the Branch was read by Dr. Bryan. The Committee congratulated the members on the continued success of the Branch, and on that of the Parent Association; the numbers of the latter having risen to four thousand. The number of members in the Branch was about the same as last year. Thirteen had either left, resigned, been erased, or died, the deaths including those of two of the oldest and most esteemed associates (Mr. Cox of Welford, and Mr. Leete of Thrapston, also Dr. Hacon of Bedford). Ten new members had joined, and more were expected. The funds were flourishing. Dr. Bryan took the opportunity of observing, that it much facilitated the treasurer's duties, if gentlemen would kindly send their subscriptions the first month in the year, and that cheques give the least trouble.

Officers and Council.—The following list was proposed, seconded, and carried unanimously:—*President*, W. Newman, M.D., Stamford; *President-Elect*, C. Hooper, Esq., Aylesbury; *Secretaries*, J. M. Bryan, M.D., Northampton; G. P. Goldsmith, Esq., Bedford; *Treasurer*, J. M. Bryan, M.D., Northampton.

Committee of Management.—F. Buszard, M.D., Northampton; R. Ceely, Esq., Aylesbury; W. W. Clark, M.D., Wellingborough; A. Evershed, Esq., Ampthill; W. G. Johnson, Esq., Bedford; W. Paley, M.D., Peterborough; W. A. Skinner, Esq., Kingscliffe; E. Woakes, M.D., Luton.

Representatives in the General Council.—R. Ceely, Esq., Aylesbury; D. J. T. Francis, M.D., Northampton; A. D. Mackay, M.B., Stony Stratford; H. Terry, jun., Esq., Northampton; R. W. Watkins, Esq., Towcester; and J. M. Bryan, M.D., *ex officio*.

Representative in the Parliamentary Committee.—J. M. Bryan, M.D., Northampton.

New Members.—The following gentlemen were admitted, with properly signed certificates: W. Hooper Masters, Esq., Thrapston; Benjamin

C. Gowing, Esq., Daventry; Thomas C. Bailey, Esq., Weldon; James Rew, Esq., Stamford; Frederick M. R. Spackman, M.D., Harpenden; Richard W. Wilcox, Esq., Aylesbury.

Autumnal Meeting.—It was decided to hold this meeting at Stamford in September, or early in October.

President's Address.—Dr. NEWMAN read a very able address.

Papers.—The following were then read and discussed. 1. Case of Embolism of the Middle Cerebral Artery, in connection with Valvular Disease of the Heart; with Pathological Specimen. By A. D. Mackay, M.B.—2. Case of Suicide by Strychnia, with Discovery of a large Renal Calculus at the *Post Mortem* Examination; with Specimen. By J. M. Heward, Esq.—3. Case of Excision of the Olecranon, loosened by Fracture twelve months before (the subject was produced to the meeting). By W. Newman, M.D.—4. Case of Sulphuric Acid Poisoning. By J. Carruthers, Esq.—5. Contribution to the History of Scarletina. By C. E. Prior, M.D. (read by J. M. Heward, Esq.)—6. Short notes of a Case of Cancer of the Brain, following Amputation of the Breast. By R. W. Watkins and James Carruthers, Esq.

Votes.—A vote of sympathy and condolence was directed to be written to the widows of the late F. Cox, Esq., and J. G. Leete, Esq. The meeting terminated at 3.45, with a vote of thanks to Dr. Newman the President, and also to the authors of papers.

Dinner.—At 4 P.M., fourteen gentlemen dined at the George Hotel; Dr. Newman in the chair, and C. Hooper, Esq., in the vice-chair.

NORTH WALES BRANCH: ANNUAL MEETING.

THE twentieth Annual Meeting of this Branch was held at the Royal Hotel, Rhyl, on Tuesday, July 6th, at 1.16 P.M. There were twenty-four members present, besides visitors. JAMES WILLIAMS, Esq., Holywell, retiring President, took the Chair, and, after thanking the members for the kindness and courtesy extended to him during his year of office, introduced the President-elect, WM. MAUGHAM, M.D., Carnarvon.

President's Address.—Dr. MAUGHAM, before proceeding with his inaugural address, proposed a vote of thanks to Mr. J. Williams, the retiring President, for his kind services to the Branch, which was carried by acclamation. He then dwelt upon the desirability of forming a code of medical ethics for general use in the Northern Principality; and afterwards took up the question of Sanitary Laws and Regulations for the whole of the United Kingdom. With regard to the latter he said—"You will all, I am sure, join me in expressing our acknowledgments and thanks to those worthy and indefatigable members of the Association who have induced the Government to grant a Royal Commission to inquire into the operation of the sanitary laws, having particular reference to sewerage, drainage, water-supply, etc., as well as the promotion of public health and the prevention of infectious diseases. I heartily approve of the proposed inquiry, and wish it success." He then alluded to the severe visitation of cholera in the town of Carnarvon during the months of November and December 1866, and January 1867, which resulted in no fewer than seventy-eight deaths from that disease alone, and several from diarrhoea. He attributed this in great measure to the absence and neglect of sanitary regulations; and, in conclusion, said:—"Prevention is better than cure; and one essential point in carrying out this problem lies at the bottom, in my opinion, of all others, and that is, that we must educate more particularly the lower classes, and give them an easy elementary outline of the science of hygiene in all their schools, to fit them for the great battle of life. With this knowledge acquired, and with the softening and edifying influences of religion, the sanitary condition of the country would be placed upon a firm and enduring basis, and Great Britain would continue to be more than ever 'great, glorious, and free.'"

Mr. TURNER JONES (Denbigh) moved a vote of thanks to the President for his excellent address, which was seconded by Mr. LI. LODGE (St. Asaph), and cordially agreed to.

Report of Council.—Dr. WILLIAMS (Wrexham), on behalf of Mr. KENT JONES, Honorary Secretary, read the Report of Council.

"In taking a retrospect of medical events since the last Annual Meeting of the North Wales Branch, your Council find all the great questions still waiting solution, and think that no legislative action will, at least for this year, be taken upon any important subject. This is much to be deplored, but perhaps the delay may bring into union the whole body of the profession in the United Kingdom, and obtain that support from the general public more or less necessary to successfully carry through Parliament the contemplated measures. These consist in a new Medical Reform Bill, and a Bill or Act to regulate the Sanitary Laws as affecting public health.

"The recent General Election was an opportune time to solicit the

support of candidates for Parliamentary honours to use their legislative interference in medical matters, and your Council trust that the members of the British Medical Association throughout the country availed themselves of it. Communications were addressed by the Secretary of this Branch to all the members returned to the House of Commons and Peers of the realm residing in North Wales, and several satisfactory replies were received by him, promising their support to Bills bearing upon medical and sanitary subjects.

"Your Council have much pleasure in stating that the last Intermediate Meeting, held on the 4th of March, at Mold, was well attended, and they beg to convey their hearty thanks to Drs. Hughes and Williams for their kind hospitalities.

"It will be for this meeting to determine the desirability of continuing to hold intermediate meetings, and your Council trust that this subject will be handled with that careful consideration for the interests of the North Wales Branch in a purely professional and scientific point of view which its importance commands.

"Your Council congratulate the members upon the continued improvement of the BRITISH MEDICAL JOURNAL, which now stands conspicuous for its high moral and literary character. They believe that this satisfactory state is in great degree due to the talent and energy devoted to his work by the present editor, Mr. Ernest Hart.

"The funds of this Branch in the Treasurer's hands at the end of last year (December 31st, 1868) were reduced to *two shillings*. Since then, the sum of £6:5 has been received from half-crown subscriptions and arrears, bringing the total amount available for the expenses of the current year to £6:7."

Dr. WILLIAMS proposed the adoption of the Report. This was seconded by Mr. ARTHUR JONES (Carnarvon), and unanimously carried.

Dr. HUGHES (Denbigh) moved, and Dr. RICHARDS (Bangor) seconded, a hearty vote of thanks to the Council of the Branch for the past year for their valuable services, which was warmly responded to.

President-Elect for 1870, and Place of Annual Meeting for Next Year.—It was moved by Dr. ROBERTS (St. Asaph), and seconded by Mr. OWEN (Beaumaris), that Thomas Francis Edwards, Esq., Denbigh, be the President-elect for 1870, and that Denbigh be the place for holding the Annual Meeting of the Branch for next year. This resolution was carried unanimously.

Council and Officers.—Mr. WILLIAMS (Holywell) moved, and Mr. PRICE ROBERTS (Rhyl) seconded—"That the following members constitute the Council of the Branch for next year, viz:—A. E. Turnour, M.D., Denbigh; G. Turner Jones, Esq., Denbigh; J. R. Jenkins, M.D., Ruthin; O. Roberts, M.D., St. Asaph; LI. Lodge, Esq., St. Asaph; and J. Richards, M.D., Bangor."

Dr. HARVEY WILLIAMS (Rhyl) moved, and Dr. HUGHES (Denbigh) seconded, that E. Williams, M.D. (Wrexham), and O. Roberts, M.D. (St. Asaph), be the representatives of this Branch in the General Council of the Association.

Dr. WILLIAMS (Wrexham) moved, and Dr. ROBERTS (St. Asaph) seconded—"That T. Taylor Griffith, Esq., Wrexham, be re-elected to the Parliamentary Committee of the Association."

Dr. WILLIAMS (Wrexham) also moved, and Mr. KENT JONES seconded—"That G. Turner Jones, Esq. (Denbigh), be the Treasurer of the North Wales Branch for next year."

All the above resolutions, including the re-election of D. Kent Jones, Esq. (Beaumaris), as Honorary Secretary, were unanimously agreed to.

Next Intermediate Meeting, etc.—Upon the motion of the PRESIDENT, seconded by Mr. ARTHUR JONES (Carnarvon), it was unanimously resolved—"That the next Intermediate Meeting of this Branch be held in Carnarvon about the end of March or beginning of April 1870."

Papers and Cases.—The following were read:—1. Treatment of Strumous Ophthalmia. By J. Richard, M.D., Bangor.—2. Cases of Cerebro-spinal Disease. By E. Williams, M.D., Wrexham.—3. Cases of Hemiplegia. By G. Harvey Williams, M.D., Rhyl.—4. Remarks upon the recent Nitro-Glycerine Explosion near Carnarvon. By W. Maugham, M.D., Carnarvon.—5. Case of Locomotor Ataxy. By J. C. Davies, M.D., Holywell. 6. Case of Biliary Calculus. By E. Williams, M.D., Wrexham. The calculus was produced: its circumference being $3\frac{1}{2}$ inches; length, $1\frac{1}{2}$ inch; and weight, 5v and ̄i.

New Members.—The following gentlemen, after being duly proposed and seconded, were elected members of this Branch, and of the British Medical Association, viz:—W. T. Girdlestone, Esq., Rhyl; Thos. Prytherch, Esq., Ruthin; Richard Arthur Prichard, Esq., Conway; and Wm. Morgan Williams, Esq., Llansaintffraid, Conway.

Dinner.—All the members present, accompanied with their friends, partook of an excellent dinner, and spent a very pleasant evening. Several members cordially accepted the kind invitation of Dr. Harvey Williams (Rhyl), to coffee, etc., at his residence. The meeting was in every respect a very successful and agreeable one.

WEST SOMERSET BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held at Taunton on Thursday, July 1st, at 2.30 P.M. Fourteen members were present.

The retiring President, Mr. WINTERBOTHAM, shortly addressed the meeting before resigning his office, and introduced the President-elect, Mr. H. J. ALFORD, who then took the chair, and commenced the routine business of the day by producing letters from nine gentlemen, who regretted they were unable to be present.

The *Minutes* of the last annual meeting were read.

Report of Council.—The following Report of Council was read, received, and adopted.

"1. Your Council have the pleasing duty to report at this its twenty-sixth anniversary, that the Branch has continued to progress satisfactorily during the past year. The anticipation of favourable results from the meeting at Bridgewater, last year, has not been disappointed. An accession of numerical strength immediately followed; and it is hoped that such an *entente cordiale* has been established that its good fruits will continue to be longingly felt amongst the medical men of the whole of West Somerset.

"2. The number of members on the list, July 1st, 1868, was forty-two; it has since been increased to forty-nine. No loss by death has occurred; but two members have given notice to withdraw from the Branch in consequence of removing out of the district.

"3. The treasurer's accounts, duly audited, are herewith presented, and they show that the finances of the Branch are in a flourishing state.

"4. The meetings held at Michaelmas and Lady-day were fairly well attended; but, as the number of members in the Branch is increasing, better attendances and a greater supply of papers may be expected. The following is a list of communications made at the meeting." (A list of papers and cases communicated at these meetings was read.)

"5. Your Council have not been called on to engage in any matter during the past year which calls for special comment.

"6. The prosperity and usefulness of the Association are objects which every member should have at heart: all must rejoice at its vast growth during the last few years, and at the important influence which it is now admitted to possess and exercise. In conclusion, your Council take leave to express the gratification they feel at observing that this small Branch is not behind its larger neighbours in doing its meed of useful work, by promoting harmony and good fellowship among members of the profession, and helping them to the better performance of those duties which they exercise for the relief of suffering and the preservation of life."

The *Treasurer's Balance-sheet* and abstract of account was read, received, and adopted.

New Members.—The following gentlemen were admitted members of the Association and of the Branch: Dr. H. J. Kenny of Taunton, and J. D. Hine, Esq., of Ilminster.

Intermediate Meetings.—It was resolved that intermediate meetings be continued the same as last year.

Next Annual Meeting and President-elect.—It was resolved, after a long discussion as to the place for holding the next annual meeting, that J. Cornwall, Esq., of Ashcott, be President-elect, and that he be requested, in concert with the secretary, to communicate with the Somerset Central Medical Society, with a view, if practicable, to arrange for a combined meeting next summer, at a time and place to be mutually agreed on, and to report the result at the next intermediate general meeting of the Branch.

Representatives in the General Council.—It was resolved that H. W. Randolph, Esq., and H. J. Alford, Esq., M.B., with the honorary secretary, be the representatives of the Branch in the General Council for the ensuing year.

Members of Council of the Branch.—It was resolved that the following, with the *ex-officio* members, be the Council of the Branch for the ensuing year: W. H. Axford, G. Gillett, F. Farmer, H. W. Randolph, W. Liddon, and J. Cordwent, M.D.

Secretary and Treasurer.—It was resolved that W. M. Kelly, M.D., be re-elected as honorary secretary and treasurer.

Attendance at Branch Meetings.—A discussion took place respecting the small proportion of members who attend the Branch meetings, and the still smaller number who read papers or cases, also on the inconvenience as to ordering dinner, etc., resulting from members not answering the secretary's circulars. Several proposals to have fines for non-attendance were made, and, after discussion, withdrawn; but a resolution was finally passed to the effect that the secretary draw special attention to the inconvenience above alluded to in his next circular.

President's Address.—Mr. H. J. ALFORD then delivered an address. After thanking the members for the honour they had done him in elect-

ing him President, and other introductory remarks, he took a brief glance at the scientific, political, and social state of the profession, and drew the attention of the Branch to many of the advances which had taken place during the past year. Nomenclature and the new work of the Royal College of Physicians were first alluded to, and the great desirability of the profession at large adopting an uniform and national nomenclature was insisted on. Many of the advances made in the department of therapeutics, the carbolic acid treatment, subcutaneous injection, the application of electricity, and others, were passed in review. The necessity of discretion in the selection of cases, and a judicious application of the remedies, were pointed out as absolutely imperative, unless failure is to result. The President then pointed out the rapidity with which science travels now-a-days; and seeing what wonderful discoveries are being made in the action of drugs by the united aid of pathology and physiology, he urged upon the members of the Branch, individually and collectively, "to remember that we labour not only for the present but for the future; that we owe a debt to the world of science, as well as to the world of humanity"; and that, therefore, we ought all to endeavour to let experience and scientific knowledge go hand in hand, and each in our many ways add our mite of philosophical observation and research, which must tend to ennoble and raise our profession to the high standard to which it is entitled. The political state of the profession was next alluded to. The Bills before Parliament affecting the medical world were gone into, and the action of the Parliamentary Committee of the Association with regard to them were spoken of. A few words on our social condition brought the address to a close. After regretting the retaining among us still of the obnoxious "puffing" system, the President concluded as follows: "If we could, one and all, continually bear in mind that our calling is one worthy of the best energies of Christian gentlemen, many of the blots which still dim the escutcheon of medicine would be erased. Let us hope such is taking place, and that intertwined with that scientific and intellectual progress, which is the glory of our age, is that high code of honour, without which our efforts will be in vain."

A vote of thanks to the President, for his interesting and excellent address, was carried by acclamation.

Dinner.—The members (who were joined by the Vicar of St. Mary's) dined at Meeters' London Hotel. After the usual toasts had been duly honoured, a lively discussion on the character of the Branch meetings was aroused by Mr. Pranker, who considered that the meetings were not enough practically useful; and he also expressed great regret that the day of the annual meetings, both this year and last, clashed with the day fixed for the election of councillors at the Royal College of Surgeons. The latter point will engage attention in fixing the day for future annual meetings of the Branch.

MIDLAND BRANCH: ANNUAL MEETING.

THE annual meeting of the above Branch was held in the Board Room of the Leicester Infirmary, on July 8th; T. W. BENFIELD, Esq., in the chair. There were about fifty members and visitors present.

Representatives in the General Council.—The following members were elected representatives of the Branch in the General Council of the Association. E. Morris, M.D., Spalding; T. Sympson, Esq., Lincoln; Joseph White, Esq., and Joseph Thompson, Esq., of Nottingham; S. W. Fearn, Esq., and J. W. Baker, Esq., of Derby; T. W. Benfield, Esq., and C. H. Marriott, M.D., of Leicester.

Secretaries.—Messrs. White (Nottingham) and Dolman (Derby), and Drs. Harrison (Lincoln) and Sloane (Leicester), were elected to be the local secretaries.

New Members.—The following gentlemen, members of the Association, were elected members of the Branch: E. R. Denton, Esq.; C. R. Crossley, Esq.; P. A. Jackson, Esq.; C. M. Sedley, Esq.; W. E. S. Stanley, Esq.; J. B. Wilby, Esq.; R. Wright, Esq.; T. Blunt, M.D., and G. Pearce, M.D. all of (Leicester); P. Downey, Esq. (Sileby); T. Sowerby, Esq. (Loughborough); J. Francis, Esq. (Market Harborough); J. G. Collingwood, Esq. (Corby, near Grantham); H. Rainbird, Esq. (Saxelby); F. Eaton, Esq. (Ancaster); E. M. Thompson, Esq. (Billinghay); and F. Snaith, M.D. (Boston).

Next Meeting.—It was moved by Dr. MORRIS of Spalding, and seconded by Mr. SYMPSON of Lincoln—"That the next meeting be held at Lincoln; and that Dr. Mitchinson be the President-elect." This was carried unanimously.

Communications.—1. Observations on Lithotomy, with a statistical account of operations performed by the present surgeons of the Leicester Infirmary. By T. W. Benfield, Esq.—2. Two Complicated Cases of Lithotomy. By E. Morris, M.D.—3. Mr. Sydney Jones, of St. Thomas's Hospital, London, showed a large Ovarian Cyst containing numerous

teeth, bone, and hair; also Pedunculated Polypi removed from the Rectum. On the latter he read a paper.—4. Observations suggested by a recent study of the Practice of the Ophthalmic Hospitals of Berlin, Wiesbaden, Dusseldorf, and Utrecht. By C. Taylor, M.D.—5. A new Splint for Club Foot was shown by G. Grewcock, Esq., of Nottingham.—6. On Ovariectomy. By C. H. Marriott, Esq.—7. An interesting Case of Cachexia was described and the patient shown, by T. Macaulay, Esq., of Kibworth.

Dinner.—After the meeting, about forty members and visitors dined together at the Bell Hotel, the President, Mr. Benfield, in the chair.

BATH AND BRISTOL BRANCH: ANNUAL MEETING.

THE annual meeting of this Branch was held on July 8th, at 4.45 P.M., at the Philosophical Institution, Park Street, Bristol. There were nearly forty members present. The chair having been taken by R. N. STONE, Esq., the President for the past year, the minutes of the last annual meeting were read by Mr. Fowler, the Bath Secretary, and confirmed.

Mr. STONE made a few introductory remarks, in which he referred to the great regret felt by the Council that, by a mistake in the balloting papers, Mr. Coe, the retiring president of the past year, had been prevented from being re-elected on the Council. He then resigned the chair to C. H. COLLINS, Esq., of Chew Magna.

Mr. STEELE expressed his regret at having been the cause of the non-election of Mr. Coe, a president who had discharged the duties of the office in a most able manner, and explained that the cause of non-election was forgetting to affix an asterisk to Mr. Coe's name as one of those who retired from the Council, but was eligible for re-election. He mentioned that Mr. Morgan, who had served faithfully and well on the Council for many years, had resigned his seat, and hoped that Mr. Coe would be elected to the vacancy.

Dr. BRITTAN stated that the Council wished the next ordinary meeting to be rendered special, that Dr. Budd and he might move as a resolution an additional rule, enabling the Council to fill *ad interim* to the next annual meeting any vacancy which may occur in the Council during a year, with a view to Mr. Coe's being elected to the present vacancy. This fully met with the approval of the meeting.

Mr. COLLINS then read his introductory address.

Dr. FALCONER proposed, and Dr. DAVEY seconded, a vote of thanks to Mr. Collins for his address, which was carried.

New Members.—Two new members were proposed, who will be voted for at the first ordinary meeting of next session.

Report of Council.—Mr. Steele, the Secretary, read the Report of Council as follows.

"Your Council, in presenting the twenty-eighth report, has the satisfaction of informing you that, though by death, removal, and other causes, the Branch has sustained this year the heavy loss of seventeen, by the accession of sixteen new members the total number is only one less than it was last year, being now 167. The unprecedented loss of seven members by death has occurred during the past year, namely; in the Bath district, Dr. Barrett, Mr. C. F. Bayliffe of Chippenham, Mr. J. R. Dunn, and Mr. Jeston of Malmesbury; in the Bristol district, Dr. Herapath, Mr. Ogilvie, and Mr. Wintle. In Dr. Herapath we have lost one of the most distinguished chemists and medical toxicologists in the country, a warm supporter of the Association, a frequent contributor of papers of great value and much originality, and an able sustainer of discussion at our Branch meetings. During the session nineteen papers have been read, several of which have provoked sustained and animated discussion. The attendances at the meetings have been good."

The Report then contained a list of the papers—nineteen in number—read during the session.

"Your Council are happy to inform you that the Branch is now out of debt; the subscription of four shillings being found sufficient to meet the expenses of our six ordinary meetings and the annual meeting."

The income for the year was stated to be £31:16:6; the expenditure £29:17; leaving a balance in hand of £1:19:6.

"Your Council are encouraged, by the lively interest shown on the subject in the several Branches, to hope that the direct representation of the registered practitioners in the Medical Council will before long be effected."

"Your Council strongly urge the claim of the Medical Benevolent Fund upon your notice, feeling that its mode of operation, being carried on with but little expense to the funds, without cost to the applicant, with perfect privacy, and thorough impartiality, entitles it to more liberal support than it has hitherto enjoyed from this Branch."

The scrutineers appointed by your Council to examine the ballot papers for filling up the vacancies in the Council, report the following to have been elected: for Bath, Mr. E. Bush (Frome), Dr. Spender, Mr. W. J.

Church, Dr. Hensley, and Dr. Davies; for Bristol, Mr. Prichard, Mr. Morgan, Dr. Swayne, and Mr. Green."

Resolutions.—The following resolutions were then unanimously adopted. Proposed by Dr. SWETE, seconded by Mr. TIBBITS—"That the Report of Council now read be received and adopted."

Proposed by Dr. FALCONER, and seconded by Mr. BARTRUM—"That Dr. Colborne of Chippenham be President-elect for the ensuing year."

Proposed by Dr. E. L. FOX, and seconded by Mr. CROSSMAN—"That the best thanks of this meeting are due, and be presented to R. N. Stone, Esq., for his able conduct in the chair; and to the members of the Council for the past year, for their management of the affairs of the Branch."

Proposed by Mr. STONE, and seconded by Mr. BUSH—"That the best thanks of this meeting are due, and be presented to Mr. R. S. Fowler and Mr. C. Steele, and that they be requested to continue their services as Honorary Secretaries for the ensuing year."

Representatives in the General Council.—The following gentlemen were elected representatives of the Branch on the General Council of the Association: J. S. Bartrum, F.R.C.S.; F. Brittan, M.D.; W. J. Church, Esq.; R. W. Coe, F.R.C.S.; J. G. Davey, M.D.; H. Marshall, M.D.; A. Prichard, F.R.C.S.; and R. W. Stone, Esq.

A Vote of Thanks to the Committee of the Philosophical Institution for their courtesy and kindness in granting the use of their lecture-theatre for the meeting was moved by Dr. BRITTAN, seconded by Mr. PRICHARD, and adopted.

Dinner.—The members and visitors, to the number of twenty-five, afterwards dined together at the Royal Hotel, Bristol, under the presidency of Mr. Collins. Mr. Crossman of Hambrook, in proposing prosperity to the Medical Benevolent Fund, suggested that a collection should be at once made for that most useful and deserving institution. Although several gentlemen had already left the table, the sum of seven pounds was collected.

CORRESPONDENCE.

THE ACTION OF MERCURY ON THE LIVER.

SIR,—No one who reads the carefully detailed experiments by the never-to-be-sufficiently-thanked Mercurial Committee, will fail to be satisfied that, as far as dogs are concerned, mercury possesses no cholagogue action. Since I heard the report read at Norwich, I have studied the matter as carefully as I could do from the clinical aspect in dispensary patients, and I have quite satisfied myself not only that mercury does not act as a cholagogue in the human subject, but that its action is precisely the reverse. One clinical fact alone seems to me sufficient to warrant this conclusion, although I have many others in my possession. It is rare to see a case of scarlet fever which does not shew vomiting as one of its first symptoms; the more severe the case, the more severe the vomiting, and the greater amount of bile is seen in the vomit and in the stools. In very severe cases, a bilious diarrhoea is almost invariable. The presence of this bile is, of course, due to hypersecretion; and, interfering as it does with digestion and assimilation, it becomes a very serious complication. Acting on the suggestion contained in Dr. Hood's pamphlet on scarlet fever, I have always removed the bile from the stomach by an emetic, but I have found that this does not prevent its re-accumulation. A dose or two of calomel will, however, *invariably* put an end to the morbid secretion; and, permitting digestion and assimilation to go on, brings about an equally invariable and favourable termination to the case. Within the last fifteen months I have treated more than sixty cases of scarlet fever in this way without a fatal result.

As I am engaged in surgical work, I have no time to devote to the investigation of this point, but I shall have much pleasure in supplying observed material to any physician who will take it up.

I am, etc.,

LAWSON TAIT.

Wakefield, May 1869.

DEBATING COLUMN FOR DISCUSSION OF PAPERS, ETC., PUBLISHED IN THE "JOURNAL".

THE LAW OF PARSIMONY.

SIR,—The meeting of the British Medical Association last year at Oxford will assuredly be a very memorable one. The addresses delivered on that occasion were unsurpassed in ability by those delivered at any previous meeting of the Association, and I am glad to notice that they have recently been published in one volume. But the publication of these discourses in such a form has rendered them more amenable than before to just criticism. I may at once state that it is with Pro-

fessor Rolleston's address that I have any fault to find. Upon the first and major part of that discourse I have nothing to bestow, but unbounded admiration for the wonderful erudition displayed by the learned Professor. It, therefore, pains me to say that I am unable to speak in the same eulogistic terms of the latter and minor part of his address.

I entirely dissent from Professor Rolleston's interpretation of the logical canons which he undertook to expound and illustrate. In introducing this part of his address to his hearers, Professor Rolleston proposed "to consider, and that mainly by the light of recently attained biological results, the value of two great rules for the conduct of the understanding." The first logical canon which he passes in review is the "Law of Parsimony"; but, when he comes to interpret and illustrate this law, it will be found that he regards it not as a rule for the conduct of the understanding, but as a law binding upon nature. "What then," asked Professor Rolleston, "is the legitimate application, where does nature really bind herself to the observance of a law of parsimony? In, as I think, three distinct lines of her operations—where an organ can be diverted from one and set to discharge another function, there nature will spare herself the expense of forming a new organ, and will adapt the old one to a new use." But if it be true that "an organ can be diverted from one, and set to discharge another function", this is a physiological law and not a logical canon; and if this be an apt illustration of the "Law of Parsimony," that law can no more be regarded as a rule for "the conduct of the understanding" than any other physiological, nor, indeed, than any physical law, such as that of gravitation. If, then, the law of parsimony be a law of nature, it is amenable to the canons of induction, as it can lay no claim to be an intuition of the mind. That the evidence of the law, as thus interpreted, must rest upon induction, appears to be recognised by Professor Rolleston, since the instances which he gives in illustration of the law are positive instances where Nature is niggard of her means. But, before such a law as this can be fully established, it is necessary to show that there are no instances to the contrary, and that nature invariably acts by simplicity and not by complexity of means. But so far is this from being the fact, that the means employed by nature are often so complex and manifold as to baffle all our attempts to unravel them; and, if nature could not accomplish the same ends by simpler means, then the God of Nature is not an Omnipotent Being. But Professor Rolleston is not the only one who has mistaken this logical canon for a law of nature. Sir W. Hamilton in one place speaks of this law as "the most important maxim for the regulation of philosophical procedure when it is necessary to resort to an hypothesis"; while, in another place, he grounds our belief in this law upon the theory that "Nature never works by more and more complex instruments than are necessary." Now, if this theory constitute our real grounds for believing in the "Law of Parsimony," then that law is a law relating to the successions of phenomena; and, therefore, cannot be at the same time "a maxim for the regulation of philosophical procedure when it is necessary to resort to an hypothesis" for unravelling those successions; it is a law of nature, and not a maxim for the guidance of the understanding in investigating the ways of nature. If, therefore, we adhere to the interpretations given by Professor Rolleston of the "Law of Parsimony," this law becomes simply identical with the maxim of Aristotle, "that God and nature never operate without effect, they never operate superficially, but always through one rather than through a plurality of means"; and the Professor is right when he says that Bacon would have classed this maxim with his *Idola Theatri*. According to this view, the law of parsimony is a hasty generalisation from the rudest experience, an empirical law of the weakest order, and contradicted by our daily experience, and as worthless as any of the other *Idola Theatri*, such as "that nature abhors a vacuum"; nor can it be made subservient to the purposes of science, however distinguished may be the school in which it is taught, and however emphatic may be the utterance of him who enunciates it.

But the truth is, as pointed out by Mr. Mill, that the law of parsimony "rests on no assumption respecting the ways and proceedings of nature. It is a purely logical precept, a case of the broad practical principle not to believe anything of which there is no evidence." "The assumption of a superfluous cause," he adds, "is a belief without evidence, as if we were to suppose that a man who was killed by falling over a precipice must have taken poison as well." The law, as enunciated by Newton, is, in the language of Sir W. Hamilton, "a most important maxim for the regulation of philosophical procedure when it is necessary to resort to a hypothesis" respecting causation. Not only does the negative part of Newton's maxim forbid us to assume a cause *without a necessity*, but the maxim, in its positive aspect, lays down certain restrictions which it is necessary to observe whenever a cause is assumed for the explanation of a phenomenon. The cause assumed must not only be such as would explain the phenomenon, which is the first and most obvious law of an hypothesis, but it must also be a *vera causa*. It is clear

that the injunction that the cause assumed be proved to be a *vera causa* is perfectly distinct from the first requirement that it explains the phenomenon. A purely fictitious cause may be invented to explain the phenomenon, but such a cause would not be a *vera causa*. It is, therefore, necessary to prove from independent evidence that the cause assumed is not fictitious, but actually exists either as a fact or as a law of nature. It is not improbable that Newton meant by his injunction that the cause assumed be a *vera causa*, not only that it be proved from independent evidence to exist as an antecedent, but that it should also be proved to be the real cause of the phenomenon. In order, therefore, to take the final step, and to advance the hypothesis to the level of a rigid induction, it is necessary to prove that no other possible assumption would accord with the facts. But whether or not this last rule of a scientific hypothesis be implied in Newton's maxims, no one knew little better how to apply it in practice. The "Law of Parsimony," therefore, especially as enunciated by Newton, being a most important logical maxim for unravelling the successions of phenomena, what is the use of converting it into a vague, useless, unproved, and unprovable law of the successions of the phenomena themselves?

Professor Rolleston has not been much more successful in his interpretation of the second logical canon which he undertook to expound. It is not my intention to enter into a disquisition upon the doctrine of "essences," as held by the ancients; but I enter my protest against the Professor's dictum "that in biological, and medical problems, by the phrase 'all the circumstances of that case by any possibility be of the essence of the case,' we mean practically 'all the circumstances of the case,' without any qualifying limitations." A living organism is so much modified by external nature, that, if all the circumstances of the case are to be observed, we must, in short, observe all the facts that exist in the universe at the time our observations were made; and if this injunction is ever attempted to be followed, there is virtually an end to all investigation of nature. But if it were possible to comply with this injunction it would be singularly unnecessary. It is not necessary, for instance, when observing a case of disease, to observe the position of the stars, or to note whether the person wore an amulet, although it would be unphilosophical to neglect such observations at a time when mankind believed in astrology, and in the efficacy of charms. A large portion of the facts of the universe can be eliminated by a very simple induction of instances, and the remaining facts that cannot be excluded ought to be observed. It is often, therefore, not in the extent of the observations made, but in the choice of what to observe, that one man so much excels another as an observer.

I am, etc.,

JAMES ROSS, M.D.

Newchurch, 1869.

THE FORCEPS IN MIDWIFERY.

SIR,—I have read, with very much interest, the papers by Dr. Swayne on the use of obstetric instruments, published in your JOURNAL, being myself engaged in a large private and public midwifery practice. Eminent as Dr. Swayne is, I feel that I may be deemed guilty of presumption in venturing to criticise any of his statements; but I could not conscientiously act upon his suggestion, that it is well to wait at least two hours, with the head immovable, before using the forceps. Why should we wait nearly so long, the woman suffering all the time terribly, if delivery can be safely accomplished without so doing? If the pains be strong, and the head unmoved by them, why not assist nature in her difficulty, and help the head along? I have used the forceps sixty-five times, without death in a single case as the result of their use, and without any accident, except in one case, when the woman sprang from me just as the head was passing over the perinæum. I have used them about once in fourteen cases, and, as it has always seemed, with manifest advantage, and to the subsequent delight of the woman. Convalescence is, as a rule, much more rapid than after a moderately long case unassisted.

The advantages from the use of these instruments are especially great among a town population: the strong, lusty wife of the agricultural labourer has power enough without their use; but the town woman, who sits much indoors, is not so strong, and the pains, though agonising, are often not powerful enough to overcome the resistance. This deficient motive power is admirably supplied by these instruments, which certainly appear, in skilled hands, quite free from danger in ordinary cases. Why allow the soft parts to be contused for two hours when so simple a remedy is at hand? The use of the forceps in these cases gives but little more acute pain than that of delivery without them, and the duration is very materially abbreviated.

I am, etc.,

HENRY B. SPENCER, M.D.,

Medical Officer to the Oxford Lying-in Charity.

47, High Street, Oxford Street, June 1869.

MEDICO-PARLIAMENTARY.

HOUSE OF LORDS.—Thursday, July 22nd.

THE MEDICAL OFFICERS' SUPERANNUATION (IRELAND) BILL passed through committee.—Lord Redesdale, in reporting the Bill to the House, expressed his opinion that the Bill was the most monstrous job that he had ever witnessed. It could not be contended that medical officers, who could come and go when they pleased, and who could carry on a private practice, were in any case entitled to superannuation allowances.—The Earl of Longford felt convinced that the Bill only did justice to a deserving body of men, who frequently did good service in return for what was merely a starvation allowance.—On the following day, the report of amendments was agreed to.

HOUSE OF COMMONS.—Thursday, July 22nd.

POLLUTION OF RIVERS.—Mr. Dodds asked the Under-Secretary of State for the Home Department whether the further evidence taken before the Royal Commission for inquiring into the pollution of rivers would be laid before the House during the present Session; if so, whether with or without any further report, and when it was probable that the Commission would complete its labours.—Mr. Knatchbull-Hugessen said that the reports of the Commission would hardly be ready for distribution before the end of the Session.

OFFICERS OF LUNATIC ASYLUMS.—In reply to Mr. Bagwell, Mr. C. Fortescue said it was necessary to make some improvement in the existing rules for the guidance and regulation of the officers in lunatic asylums in Ireland, and new rules were in course of preparation.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on July 20th:—

Allchin, William Henry, Bayswater (University College)
Archer, Thomas Buttin, Ely, Cambridgeshire (St. Bartholomew's)
Barracough, George, Streatham, Surrey (Guy's)
Bilham, James, Westbourne Park Place (St. Mary's)
Budd, Samuel P., Plymouth (Sheffield Hospital)
Ellis, Ellis Henry, Bangor, North Wales (Dublin)
Furnivall, Henry Wallace, Hutton, Somerset (Manchester Royal Infirmary)
Hallam, Arthur, Sheffield (Sheffield Hospital)
Hitchcock, Henry Knight, Market Lavington, Devizes (Sheffield Hospital)
Hood, Donald William Charles, Craydon (Cambridge and Guy's)
Leckie, Walter James, Euston Road (Sheffield Hospital)
McAndrew, James John, Castlebar, co. Mayo (Charing Cross)
Mackenzie, Stephen, Weymouth Street, Portland Place (London)
Meagher, Joseph Stanislaus, Dublin (Dublin)
Miller, Frederick Montague, Stoke Newington Road (St. Thomas's)
Morrish, Richard Alfred, Ledbury, Gloucester (St. Mary's)
Owen, Simeon Holgate, Manchester (Manchester Royal Infirmary)
Parker, Robert William, Ilford, Essex (London)
Price, Thomas, Bangor, North Wales (Dublin)
Pritchard, Urban, Highbury, Middlesex (Guy's)
Roberts, Arthur, Staleybridge (Manchester Royal Infirmary)
Shipman, George William, Grantham, Lincolnshire (Guy's)
Sloman, Samuel George, Farnham, Surrey (St. Bartholomew's)
Thomas, David William, Festiniog, Merionethshire (Dublin)
Tomes, Charles Sissmore, Cavendish Square (Middlesex)
Wallis, Frederick M., Bexhill, Sussex (Guy's)
Williamson, John Gover, Hertford Square, W.C. (St. Bartholomew's)

Admitted members on July 21st:—

Amsden, George, Highbury, Middlesex (King's College)
Andrews, Arthur, Hertford (St. Bartholomew's)
Anningson, Joseph W., Burnley, Lancashire (Manchester)
Ashby, Alfred, Staines, Middlesex (Guy's)
Baxter, Evan B., Gate Street, W.C. (King's College)
Broughton, Richard N., Ruyton, Salop (Birmingham and St. Bartholomew's)
Cufaude, Frank, Acle, Norfolk (Edinburgh)
Griffin, James, Banbury, Oxon (University College)
Guy, Frederick George, Plumstead, Kent (King's College)
Herbert, Samuel Lymas, Demerara (King's College)
Mason, Hugh Herbert, Burton-on-Trent (University College)
Rawlings, John Adams, Swansea (Birmingham and Guy's)
Smith, James Adolphus, Winchcombe, Gloucestershire (St. Mary's)
Thomas, Andrew Appleby, Jamaica (Guy's)
Thorne, Frederick la Coque, Leamington
Urquhart, John, Forbes, N.B. (Newcastle-upon-Tyne)
Wills, Charles, Narborough, Leicestershire (Middlesex Hospital)
Mr. Frederick Hall, of Leeds, passed his examination under the old regulations of the College, and was also admitted a member.

It is stated that eight out of the forty-nine candidates examined on the above named days failed to acquit themselves to the satisfaction of the Court, and were referred to their hospital studies for the full period of six months.

Admitted members on July 22nd:—

Box, William Henry, Forest Hill, S.E. (Westminster)
Dawson, Frederick William E., Auckland, New Zealand (Westminster)
Green, Charles Josephus, Little Ealing, Middlesex (St. Bartholomew's)
Hughes, William, Carnarvon, North Wales (Glasgow)
Kesteven, William Henry, Holloway
Lucas, Robert Harry, Burwell, near Newmarket (Middlesex)
Matthews, James Forrester, Royston, Cambridgeshire (London)
Martyn, Geoffrey Theodore, Dublin (Dublin School)
Peacock, Edward, Oldbury (Birmingham)
Power, John Joseph, Dublin (Dublin School)
Sandiland, Arthur Henry, Bicester, Oxon (St. Bartholomew's)
Shaw, Ollive Sims, Stockport (Guy's)
Stuart, George Ballingall, Blairgowrie, Perthshire (Melbourne and Edinburgh)
Tait, George Walter, Knowle, Warwickshire (Birmingham)
Townsend, Thomas Sutton, Clifton, near Rugby (Guy's)
Ward, William Simpson, Leeds (Leeds General Infirmary)

It is stated that of the twenty-five candidates examined, only two failed.

Admitted members on July 23rd:—

Anderson, Richard Benjamin, Theddlethorpe, Lincolnshire (St. Mary's)
Atkins, Francis Day, Dalston, Middlesex (Guy's)
Bolton, Richard E. N., Dublin
Burgers, Alexander, Finsbury Place (Birmingham)
De Morgan, Edward, Haverstock Hill (University College)
Hart, Eugene John, Lee, Kent (Guy's)
Hendley, Thomas Holbcin, Charlton, Kent (St. Bartholomew's)
Higgins, William Henry, Birkenhead (Edinburgh)
Jones, Thomas Derry, Fitzroy Street, Fitzroy Square (University College)
Knowles, John, Beccles, Suffolk (King's College)
Langford, Phineas Pitts, St. Mary's Square (Middlesex)
Paterson, Walter Hugh, Brigg, Lincolnshire (Edinburgh)
Prigg, Frederick, Bury St. Edmunds (St. George's)
Roberts, William Lloyd, Festiniog, North Wales (Glasgow)
Messrs. Ferdinand Edward Jencken, Dublin, and John Wardleworth, Bury, Lancashire, passed their examinations under the old regulations, and were also admitted members of the College.

It is stated that of the twenty-six candidates examined, three failed. This is the last examination for the membership of the College until November.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 22nd, 1869.

Brown, William, King's Norton, Birmingham
Jones, Thomas Derry, University College
Porter, John, Fleetwood, Lancashire
Roberts, Arthur Copleston, Southernhay, Exeter
Skrimshire, Charles Parnham, Holt, Norfolk
Thomas, David William, Festiniog, Merionethshire
Thorne, Frederic La Cocq, Leamington

At the same Court, the following passed the first examination.

Aston, John P., Leeds Hospital	Harvey, Thomas, Westminster
Batchelor, Ferdinand C., Guy's	Hind, Henry, St. Bartholomew's
Baumgartner, John R., King's College	Pearse, Francis J., Westminster
Coombes, George A., Guy's	Phillips, George A., St. Bartholomew's
Denne, Thomas S. H., Charing Cross	Rose, William, King's College
Greaves, William, Guy's	

As an Assistant in compounding and dispensing medicines.
Procter, Samuel James, Great Malvern

MEDICAL VACANCIES.

THE following vacancies are declared:—

BALLYSHANNON UNION, co. Donegal—Medical Officer for the Ballintra Dispensary District (£60 per annum, and Vaccination Fees): election, 3rd August.
BELFAST GENERAL HOSPITAL—Resident Surgeon & General Superintendent.
BOURNEMOUTH GENERAL DISPENSARY—Resident Surgeon (£100 per annum, with furnished apartments, coals, gas, and attendance).
CASTLECOMER UNION, co. Kilkenny—Medical Officer for the Workhouse (£70 per annum): 16th August.
CHESTERTON UNION, Cambridgeshire—Medical Officer and Public Vaccinator for District No. 3 (£50 per annum, and extra fees): election, 12th August.
DARLINGTON HOSPITAL AND DISPENSARY—Resident Visiting and Dispensing Medical Officer (£100 per annum, with furnished apartments, attendance, coal, and gas): applications, August 4th.
DORSET COUNTY LUNATIC ASYLUMS, Dorchester—Assistant Medical Officer (£100 per annum, with furnished house, board, etc.): applications, 31st.
EAST LONDON HOSPITAL—Medical Officer (£100 per annum, with board and lodging): applications, 4th August.
GENERAL INFIRMARY, Leeds—House-Surgeon.
GLASGOW—Medical Officer for District No. 7, Barony Parish (£55 per annum): applications, August 2nd.
GLASSARY, Argyllshire—Parochial Medical Officer: appointment, 3rd August.
HAY UNION, Brecknockshire—Medical Officer for the Radnorshire District (£45 per annum, and extra fees, which amounted last year to £37:15): application, 4th August; election, 5th August.
HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton—Resident Clinical Assistant: applications, 31st July; Medical Committee, 2nd August.
ISLE OF MAN HOSPITAL AND DISPENSARY—Resident Medical Officer (£75 per annum, with rooms, attendance, cooking, coal, and gas, and an additional £10 per ann. for visiting the House of Industry): applications, 11th Aug.
METROPOLITAN FREE HOSPITAL, Devonshire Square—Assistant-Physician: applications, 5th August.
NEWCASTLE-UPON-TYNE INFIRMARY—Physician: appointment, 7th Aug.
NORTH LONDON CONSUMPTION HOSPITAL—Visiting Physician.

NORTH STAFFORDSHIRE INFIRMARY, Hartshill—Medical Officer; Dental Surgeon: applications, 5th August; both elections, 24th August.
NORWICH DISPENSARY—Physician: appointment, 3rd August.
NOTTINGHAM FREE HOSPITAL FOR SICK CHILDREN—Honorary Medical Officer: applications, 5th August; election, 12th.
PLOMESGATE UNION, Suffolk—Medical Officer for the Orford District (£65 per annum, and extra fees): applications, 7th August; election, 9th.
ROSS DISPENSARY—Dispenser: applications, 22nd; appointment, 23rd.
ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road—Physician.
ROYAL INFIRMARY FOR CHILDREN AND WOMEN, Waterloo Bridge Road—Physician: applications, 4th August.
ROYAL INFIRMARY SCHOOL OF MEDICINE, Liverpool—Lecturer on Botany and Demonstrator of Anatomy.
ROYAL PORTSMOUTH, PORTSEA, and GOSPORT HOSPITAL—House-Surgeon (£120 per annum, with furnished apartments, board, and washing): applications, 4th August; election, 6th.
ST. GEORGE'S HOSPITAL—Assistant-Surgeon.
ST. MARY'S HOSPITAL, Paddington—Aural Surgeon: applications, 31st July.
TIVERTON UNION, Devon—Medical Officer for the Thorverton District (£31 per annum).
WESTPORT UNION, co. Mayo—Medical Officer for the Louisburgh Dispensary District (£100 per annum, with Registration and Vaccination Fees, residence, and two acres of land): 16th August.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

***BRADBURY**, J. B., B.A., M.B., M.R.C.P., appointed Physician to Addenbrooke's Hospital, Cambridge, in the room of Henry J. H. Bond, M.D., resigned.
 ***GLYNN**, Thomas R., M.B. Lond., appointed Physician to the Northern Hospital, Liverpool.
LAKING, Francis, M.D., appointed House-Physician to St. George's Hospital.
MILLIGAN, W., L.R.C.P. Ed., M.R.C.S., to be Honorary Assistant-Surgeon to the 11th Derbyshire (Matlock) R.V.C.

BIRTHS.

ARMSTRONG.—On July 15th, at Gravesend, the wife of *John C. Armstrong, Esq., Surgeon, of a son.
JOB.—On July 24th, at Newark-upon-Trent, the wife of *S. Job, Esq., Surgeon, of a son.
SOUTER.—On July 24th, at Nottingham, the wife of *J. Clement Souter, M.D., of a son.
THURSFIELD.—On July 29th, at Leamington, the wife of *T. W. Thursfield, M.D., of a son.

MARRIAGES.

CHIENE, John, M.D., F.R.C.S.E., Edinburgh, to Elizabeth Mary, eldest daughter of the late David LYALL, Esq., formerly of Calcutta, at St. James's Church, Blackheath, on June 29th.
CRESSWELL, Richard, Esq., Surgeon, to Marion, eldest surviving daughter of the late James PARKER, Esq., of Glasgow, at Bothwell, Lanarkshire, on July 22nd.
LANE, the Rev. Albert Grant, to Sarah Alicia, second daughter of *George ROGERS, M.D., of Clevedon and Long Ashton, at Clevedon, on July 20th.
RIDDELL, George D., Esq., Assistant-Surgeon 3rd Infantry Hyderabad Contingent, to Laura Mary, youngest daughter of the late Major-General H. C. GOSLING, Bengal Army, at Ootacamund, on May 20th.

DEATHS.

BRODRICK, H. C., M.D., Acting Superintendent of the Madras Ophthalmic Hospital, at Madras, aged 37, on May 27th.
JONES, Walter D., M.D., at Laneych, Pembrokeshire, aged 77, on July 17th.
LEE, Henry, M.D., at Alvechurch, aged 76, on July 10th.
STEPHENSON, James, Esq., Surgeon, at 661, Mile End Road, aged 42, on July 14th.
SUMNER.—On July 23rd, at Wellington Road, St. John's Wood, aged 3 months, Geraldine Anne, youngest child of W. Allen Sumner, Esq., Surgeon.

BEQUESTS.—The late Mr. Thomas Openshaw, of Bury, Lancashire, has bequeathed £500 to the Dispensary of that town. The late Mr. W. H. Browne, of Edgbaston, has left £1000 each to the Queen's and the General Hospitals, Birmingham.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.
WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

To PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE CHAIR OF PHYSIOLOGY IN KING'S COLLEGE.—Dr. Braidwood, of Birkenhead, informs us that the report that he was a candidate for the Chair of Physiology in King's College, was incorrect.

BERRY DEFENCE FUND.

SIR,—The Committee of the above Fund will be obliged by your inserting the following list of subscriptions.

July 21st, 1869.

I am, etc.,

E. SANDWELL, Hon. Sec.

Amount already acknowledged, £14:12; Dr. Hyde Salter, £1:1; E. Canton, Esq., £1:1; Dr. Barr Meadows, £1:1; Dr. E. Head, £1:1; W. Adams, Esq., £1:1; H. Haneock, Esq., £1:1; F. Hird, Esq., £1:1; R. Barwell, Esq., £1:1; Dr. Essex Bowen (Birkenhead), £1:1; Dr. Calthrop (Netley), 10s. 6d.; Dr. Wilkinson (Shaftesbury), 10s. 6d.; Dr. Dowse, 10s. 6d.; E. Dyer, Esq. (Clerkenwell), 10s. 6d.; Peter Marshall, Esq., 10s. 6d.; W. Pretty, Esq. (Croydon), 10s. 6d.; W. Powell, Esq. (Tenbury), 10s.; Dr. Airey (Camden Town), 10s.; W. Cox, Esq. (Mitcham), 5s.

GOOD ADVICE.

SIR,—Dr. Campbell of Lancaster published, in the year 1785, a pamphlet on an epidemic of typhus, which prevailed amongst the operatives in certain cotton mills in Lancaster and Buckbarrow. In the course of it, he alludes to a similar outbreak which occurred at Radcliffe, and which was of so formidable a character as to attract the serious attention of the resident magistrates, who appointed Drs. Percival, Cowling, Easton, and Chorley, of Manchester, to inspect and report.

These far-seeing men, after stating what precautionary and remedial measures they considered essential, concluded with this impressive warning.

"We earnestly recommend a longer recess from labour at noon, and a more early dismissal from it in the evening, to all who work in cotton mills. But we deem this indulgence essential to the present health and future capacity for labour of those who are under the age of fourteen. For the active recreations of childhood and youth are necessary to the growth, the vigour, and the right conformation of the body. And we cannot excuse ourselves, on the present occasion, from suggesting to you, who are the guardians of the public weal, this further very important consideration, that the rising generation shall not be debarred from all opportunities of instruction at the only season of life at which they can properly be improved."

C. J., Lancaster.

MEDICAL OFFICERS OF ASYLUMS AND THE COUNTY ADMINISTRATION BILL.

SIR,—A question that has been in abeyance ever since the celebrated Bucks controversy has just cropped up in a very unexpected quarter. I allude to the dependent and precarious position held by the Superintendents of English County Asylums; it has even been made the subject of remonstrance to Mr. Bruce, the Secretary of State.

A deputation of Middlesex magistrates, consisting of Mr. Pownall, Chairman of Quarter Sessions, Mr. Turner, Chairman of the Parliamentary Committee, and others, have had an interview with the Right Honourable gentleman, and the second of them expressed his fears that, in the event of the County Administration Bill passing, old servants, good officers of the county, might be disturbed without compensation, and he trusted that provision would be made for them. This gentleman, while objecting to others having disturbing powers over the Medical Superintendents would, however, reserve it to himself and his compeers.

The 10th Clause of the County Administration Bill provides that the executive powers of the County Board may be delegated to a Committee, but such Committee shall not be deemed to be duly constituted unless it consist of an equal number of official and elected members, the latter of whom must be elected members of Boards of Guardians in the County.

The security, fortunes, and honour, of a considerable number of medical men are thus placed absolutely at the disposal of this delegated Committee, without any power of appeal to or redress from any superior Board or authority whatsoever.

That the Medical Journals, the various Associations, the General Medical Council, and others interested in the general or material prosperity of their professional brethren, should have so long overlooked this definite and pressing grievance must be a matter of surprise.

The subject, nevertheless, has not escaped the scrutiny of some gentlemen of high standing authority and acquirements, so far back as 1859—Her Majesty's Commissioners of Inquiry into the State of Asylums in Ireland. In their valuable and instructive Report (p. 9), the opinions and recommendations on the subject of Asylum appointments are fully recorded; and with regard to this particular question, the power of discharging the chief officers, they report to Her Majesty that the Government, and not the Visiting Committees, should have a power of removal, founded on full investigation of the officers' incapacity or misconduct.

This document is signed by Sir Thomas Redington, R. Andrews, Esq., Messrs. Lutwidge and Wilkes, Commissioners in Lunacy, and by Sir Dominic Corrigan, names that have done the State some service.

The rights that have been bestowed upon the Irish Superintendents must surely be the due of the English; nor should the inferior position of the latter be allowed to rest without redress. The Poor-law medical staff have been long emancipated from the power of the village Guardians. Will they allow their less fortunate brethren to come within their control? Will they not rather render assistance in obtaining the insertion of a Clause in the new County Administration Bill, that no medical officer of any asylum, maintained wholly or in part out of the public rates, shall be dismissed without the sanction of the Secretary of State being first obtained, and that founded on a full investigation into the officer's incapacity or impropriety of conduct.

I am, etc.,

Londoh, July 1869.

ALIQUIS.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. Richards, not later than *Thursday*, twelve o'clock.

DRUGGISTS' CHARGES.

SIR,—Apart from the difficulties that beset the path of an earnest physician, philanthropist, and philosopher, in the attempt to reconcile theory and the result of his experience—as, for example, the action or not of mercury or podophylline on the secretions of the liver or bowels—one of the main bars to interrupt his progress in the practice of his profession, lies in the relation and conduct of the modern chemist and druggist—the old apothecary; who, instead of being his help and co-adjutor, as he ought to be, is frequently a thorn in his side, and tends to thwart his best endeavours to deal honestly with those under his care. I am led to these remarks from a circumstance, far from unprecedented, that has just occurred in my practice. I ordered, for a lady from the country, the following prescription: Ammon. chloridi ʒi; ext. glycyrrhiza ʒiiss; aquæ destill. ʒvi; sumat cochleare magnum ter die ex aquæ cyatho. Her husband took it to a chemist and druggist in Brompton, who actually charged him *three shillings* for the bottle of simple six ounce mixture! Now, Sir, the price of sal ammoniac, best quality, is, I find, about 1s. per lb.; and the best extract of English liquorice, 4d. per ounce. One penny would represent the value of half a pint of distilled water, and say two-pence for the bottle; six pence therefore fully covers the actual value of the materials supplied, even including labour. Had the druggist, therefore, charged 1s., or even the customary 1s. 8d., for the bottle of mixture, he would have been amply paid; and I should not now be writing to complain of what I can only designate as a scandalous imposition. My patient called upon me complaining of the *expensive* nature of the medicine I had ordered. I replied that it was the very reverse. He then told me what he had been charged; and I must say I felt thoroughly indignant.

Now, it seems to me a most extraordinary circumstance that, in all the legislative acts of our profession, the true position, relation, and connection between the practitioner or prescriber and the druggist, have never been fairly recognised, limited, or controlled—in fact, the supervision of the means and material of action is absolutely ignored; and, whilst the College of Physicians very properly and professionally sets its face against its members having any personal interest or even interference with drugs, it yet has no power nor control over those upon whose knowledge, integrity, honesty, and care, its own members and the public, *i.e.*, the patients, must eventually rest and trust.

The Pharmaceutical Society, to a certain extent, with a laudable desire to raise their status, are a guarantee of the knowledge of their members; but in their assumptions, they are, if anything, rather antagonistic than otherwise to the medical profession, who ought to have the chief control over those who supply their materials or means of action and labour; and I hope, Sir, that you will turn your earnest attention to what appears to be a most anomalous defect in the laws and organisation, as it certainly is in the practical working of the profession. I am, etc.,
A PHYSICIAN OF 25 YEARS STANDING.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, July 28th; The New York Medical Gazette, July 10th; The Parochial Critic, July 21st; The Tewkesbury Weekly Record, July 24th; The New York Medical Record, July 8th; The Scotsman, July 27th; The Glasgow Herald, July 15th; The Indian Volunteer Gazette, May 11th; The Tower Hamlets Independent, July 24th; and the Liverpool Mercury, July 26th, 1869.

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. R. Barnes, London; Mr. W. T. Black, London; Dr. Wolfe, Glasgow; Dr. A. Ransome, Bowden, Manchester; Dr. P. M. Braidwood, Birkenhead; Dr. Pearce, Botterdale, Suffolk; Dr. J. T. Vale, Birkenhead; Mr. J. Cartwright, Lintwardine; Dr. J. C. Souter, Nottingham; Dr. J. B. Bradbury, Cambridge; Dr. Mapother, Dublin; Mr. Harry Leach, London; M.D., London; Mr. J. C. White, London; Mr. J. B. Moxon, Brigg; Amicus Curie, Nottingham; R. S. B., Shiffnall; and Mr. B. Baker, Brentwood.

LETTERS, ETC. (with enclosures) from:—

Dr. Chadwick, Leeds; Dr. Beatty, Dublin; Dr. R. Elliott, Carlisle; Mr. F. Le Gros Clark, London; Mr. W. G. Kemp, Nelson, New Zealand; Mr. E. Lund, Manchester; Mr. T. Nunneley, Leeds; Mr. Hulke, London; Dr. T. R. Glynn, Liverpool; Mr. S. Job, Newark-on-Trent; M.D.; Dr. Protheroe Smith, London; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Mr. Lomax, Stafford; The Registrar of the Medical Society of London; Dr. Lomas, London; Dr. R. M. Miller, Wolverhampton; Dr. J. Braxton Hicks, London; Dr. Paul, London; Dr. Thomson, Bournemouth; Dr. Milligan, Wirksworth; The Secretary of the Society for Widows and Orphans of Medical Men; Dr. Greenhow, London; Dr. Arthur Walker, London; Dr. Murchison, London; Dr. Stamford Felce, London; Dr. T. O. Duffield, London; The Secretary of the Devonshire Hospital and Buxton Bath Charity, Buxton; and Dr. W. Rutherford, Edinburgh.

BOOKS, ETC., RECEIVED.

Menton and San Remo; with Observations on the Influence of Climate. By Edwin Lee, M.D. Second Edition, enlarged. London: 1869.
Matter and Force considered in Relation to Mental and Cerebral Phenomena. By J. Thompson Dickson, M.A., M.B. Cantab. London: 1869.
The Retrospect of Medicine; being a Half-Yearly Journal. Edited by W. Braithwaite, M.D., and J. Braithwaite, M.D. Lond. January to June 1869. London, Edinburgh, and Dublin: 1869.
The Case of Sagar *versus* The Lancashire and Yorkshire Railway Company, briefly reviewed. By H. Hannote Vernon, M.D. London, Manchester, and Southport: 1869.
Report on the Sanitary Condition of the St. Giles District during the year 1868. By George Ross, M.D. London: 1869.

Results of Meteorological Observations, for the week ending Saturday, July 24th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.								Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	WIND.										RAIN.	
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.	Number of days it blew in certain directions.								Mean Force 0-12.	Number of days it fell.	Amount in inches.				
														N.			N.E.	E.	S.E.	S.	S.W.				W.	N.W.	Calm, etc.	
BATH..... Dr. Barter, F.M.S.	30.035	0.278	66.8	61.8	57.8	74	88.5	50.5	38.0	77.9	56.6	135.0	..	4	6	..	0.6	1	0.4	..	2	..	..	3	2	0	0
BOURNEMOUTH Dr. Compton, F.M.S.	30.088	0.200	63.6	60.0	57.0	79	77.2	50.8	26.8	73.2	55.3	150.0	46.6	1	4	0.3	2	..	0.3	..	1.7	2	..	0.7	1.3	0	0	
DUBLIN Dr. J. W. Moore.	29.977	0.296	64.2	59.0	54.6	71	75.1	53.0	22.1	71.8	57.5	..	45.3	4.3	..	..	..	0.9	1	0.4	3	0.7	0.7	0.3	2	2	0.26
KEW Dr. Treutler, F.L.S., etc.	30.065	0.289	67.0	60.6	55.5	66	89.9	52.9	37.0	78.3	57.7	151.8	45.8	2.9	5	..	1.7	0.7	0.3	0.7	0.7	1	0.3	1.7	1.4	0	0	
LLANDUDNO Drs. Nicol and Dalton.	30.015	0.300	63.5	59.8	56.7	79	77.0	54.5	22.5	73.1	57.6	3.8	1	1.3	0.7	3.7	0.3	..	1.4	0	0
MALVERN Messrs. W. and J. Burrow.	30.050	0.271	65.1	59.6	55.1	71	86.6	51.2	35.4	78.4	55.7	156.7	47.7	4.2	2.1	0.6	0.6	0.3	0.3	0.3	2.6	..	0.6	1.3	0.5	0	0	
SCARBOROUGH Dr. C. Fox, M.R.C.P., etc.	30.008	0.678	60.0	58.0	56.2	88	80.5	52.7	27.8	72.9	54.7	151.5	46.9	4.2	5	1	..	..	..	1	1.7	2.3	..	1	3.1	2	0.12
SIDMOUTH Dr. Mackenzie, F.M.S.	30.080	0.232	64.9	60.6	57.1	75	79.0	52.0	27.0	73.2	55.6	..	..	1.5	5.7	..	..	..	..	3	3	1	..	..	0.5	0	0
WORTHING W. J. Harris, Esq., M.R.C.S.E.	30.055	0.227	63.5	60.4	57.8	82	79.9	54.0	25.9	72.9	58.1	129.1	46.3	3.2	4.4	1	1	0.7	1.7	..	0.7	0.7	..	1.3	1.2	0	0	

REMARKS.—The weather of the past week has differed but little from that of the previous one. Atmospheric pressure has undergone a general diminution, and continues remarkably steady and uniform, the greatest difference being between Dublin and Bournemouth, and amounting to 0.111 inch. Temperatures have decreased at all stations, and have been generally more equable since the range has been somewhat less. Winds have been very light, and though still variable have had on the whole a more south-westerly direction. The amount of clouds has scarcely varied,—it has been slightly greater than that of the previous week. Ozone has increased very little. Rain is reported to have fallen at only two stations, but it appears that there have been showers of a very local character in the neighbourhood of most stations: the quantity of rain fallen, however, has been but small in any case. Oats were first cut near Worthing on the 23rd. Generally speaking, the weather has been fine and genial, the days not too hot, nor the nights disproportionately cold. The want of rain is, however, universally felt. A few cases of summer diarrhoea occurred at Kew and Sidmouth, but the general health is reported as very good.

Plants first seen in flower during the week at Kew and in its vicinity.—Ballota nigra; Cichorium Intybus; Epilobium parviflorum; Epilobium hirsutum; Lycopus europæus; Butomus umbellatus; Spiræa Ulmaria; Galium palustre; Helosciadium nodiflorum; Scutellaria galericulata; Verbascum nigrum; Stachys palustris; Inula dysenterica; Poa aquatica; etc., etc.

Kew, W., July 28th, 1869.

W. J. TREUTLER.

ADDRESS IN MIDWIFERY,

DELIVERED AT THE

THIRTY-SEVENTH ANNUAL MEETING OF THE
BRITISH MEDICAL ASSOCIATION,*Held in LEEDS, July 27th, 28th, 29th, and 30th, 1869.*

BY

THOMAS EDWARD BEATTY, A.B., M.D.,

President of the King and Queen's College of Physicians in Ireland.

GENTLEMEN,—To deliver an Address in Midwifery which shall not exceed one hour in duration, to an Association now in its thirty-seventh year of existence, every year of which has been marked by learned and able addresses in Medicine and Surgery and Physiology from the eloquent tongues of the most gifted and distinguished members of the medical profession; to deliver an address which, it is expected, shall be in some degree worthy of the occasion and of the audience, on such a subject as Midwifery has become in this the second half of the nineteenth century, and to condense it into the short space of one hour,—that is the task which the kindness of the Council of this Association has induced me to undertake. When I came to consider seriously what I had promised to do, I confess I was astounded at its magnitude. Accustomed as I had been for many years to lecture on Midwifery, a whole host of subjects came rushing before my mind, tumbling over and jostling each other to obtain priority of observation, any one of them of sufficient importance to claim far more than one hour for its proper discussion. The great difficulty lies in the multitude of interesting topics, the *embarras de richesses* which is spread before me. In fact, to accomplish a result in any way satisfactory to my own mind, I would require a hydraulic press of the greatest power to condense all I could and would wish to say within the prescribed limit. But you will say, and with justice, “See how that spendthrift wastes the time which he knows to be too short for his purpose.” I take the hint, and act upon the suggestion. It is Midwifery, and not myself, that I am here to-day to speak about.

The midwifery of the present day is very different from what it was in the hands of the midwives of ancient history, when, as we learn in the book of Genesis, Rachel, who died in labour, was attended by a midwife; and Tamar had the same assistance when she brought forth twins. There is not much reason to believe that the knowledge possessed by Phænareta, the mother of Socrates, who was a celebrated midwife in her day, was of a more extensive nature than that of which Aristotle speaks when he says the midwives were skilful in cutting the cord. They were called by the Greeks “Ομφαλοτομοί”. This would seem to be the limit of their interference; and, connected with that operation, we have handed down to us, in the book of Exodus, the names of two midwives, Shiphrah and Puah, who refused to obey the order of Pharaoh when he wished them to cut the cords of the children of Hebrew women in such a manner as that they should bleed to death. Before midwifery arrived at the dignity of a science, it had to go through various phases, and struggle through dark ages of ignorance, superstition, and presumption; and, if time permitted, a most interesting account of its progress might be laid before this meeting.

What midwifery is now, is best described by the definition offered by Velpeau more than forty years ago. It is “the collection of all human knowledge relating to the reproduction of the species.” Regarded from this point of view, essentially physiological, it is placed on a basis worthy of the object it embraces; and at the same time the strange and vulgar prejudice, that no one can be at the same time a skilful accoucheur and a learned physician, is effectually overturned. It was said by M. Leroy, that he could write all the necessary rules in midwifery on the back of a playing card; but the absurdity of that and similar demonstrations of ignorance is rendered manifest when we refer to this definition of Velpeau. Comprising everything relating to the reproduction of man, and dealing with two beings at the same time from the earliest impregnation to the hour of delivery, the amount of knowledge requisite for its perfect comprehension is of a very wide extent. The theory of generation, its phenomena, we might almost say its mysteries, not only in man, but in all animated beings; the study of ovology, so

accurately demonstrated and brought within our reach by the labours of many modern physiologists; the intimate acquaintance with the anatomy and physiology of the unimpregnated uterus and its appendages; the progress of gestation, and the causes of its premature termination; the phenomena and diseases of pregnancy,—such are some of the subjects demanding our fullest attention before we arrive at that stage in the process of reproduction to which some would limit the title and functions of midwifery. I will not waste time in any lengthened argument in proof of this statement; but I will content myself by simply mentioning the questions that are every day proposed for the consideration of practitioners in midwifery, and to which they are expected to give true and satisfactory answers. Is A. B. physically incompetent for procreation? Is C. D. pregnant? Has E. F. aborted? If so, how old was that ovum? Is that ovum diseased? or could it have come to maturity? G. H. is dead. Is she pregnant? or has she recently aborted? If pregnant, how old is the foetus? The magnitude of the issues that depend upon the answers to these questions, involving as they do reputation, property, liberty, and even life itself, is too manifest to require more than their mere recital. It would take many packs of cards to contain the amount of knowledge necessary to him who would conscientiously consider and respond to such inquiries, and this long antecedent to the full period of gestation, at which the peculiar knowledge and duties of the accoucheur are, by those ignorant of the object and scope of the science, supposed to commence.

That gestation and delivery are natural functions, and not diseases, no one will deny; but the proposition that, because they are so, they should be left to nature, and do not require the interference of science and art, is too absurd to require contradiction. If man had remained perfect, as he came from the hand of the Creator; if sin had not debased the fair forms that ranged through Eden; if disease had not followed close on sin, and, in the long lapse of ages, multiplied and diversified itself in so many hideous and deadly forms; if the civilisation of which we boast had not brought with it degeneration and deformity,—then the science of the physician and the surgeon and the accoucheur would now be unknown; there would have been no disease to study and combat, no dystocia to understand and rectify. But the animals that we are now, and that we find our fellow-mortals to be, are very unlike that standard of perfection. A glance at our new nomenclature of disease is sufficient to carry this conviction to the heart of the boldest advocate of the superiority of man. We find that civilisation, with its train of vices and crimes, generated and forced to exuberance in those hotbeds of depravity, our great towns and cities, has undermined the originally strong fabric of natural man, has warped his frame and enfeebled his powers. It would be little comfort, and still less assistance, to one of the victims of this degeneration, who, with a contracted pelvis, finds herself in labour, to tell her that, according to the account of M. Grantz, the Greenlanders take no precautions for delivery; that Bruce tells us the women of the Nile have no trouble about it; that Pitavel says the same of the women of Abyssinia; that the African tribes visited by Winterbottom had no midwives; that Chardin says that in Persia and China the art of midwifery is unknown; and that, even in our own country, many women are delivered without any suffering or danger. Would any harangue founded on such statements persuade such an unfortunate sufferer that she did not stand in need of prompt and skilful aid? or would it enable her to deliver herself without assistance? A vile slanderer of the profession, of which he was a disgrace, attempted, nearly one hundred years ago, to write down midwifery in France, calling to his aid such testimony as I have just alluded to. M. Roussel, after describing “the delicious pleasure of having presented life to a new being”, goes on to say: “But wherefore must it be that this state is the price of a train of inconveniences and a gradation of suffering often insupportable? and why are we here compelled to envy the kinds of animals amongst which pregnancy is without embarrassment, and delivery almost without a pang, or at least exempt from the sad or fatal consequences which so often follow it in the human species? It would nevertheless be wrong,” he says, “to tax Nature with injustice; we yet find races in whom her primitive impress has never been effaced by the abuses of a refined society, and amongst whom women enjoy nearly the same privileges as the females of animals. The women of the Ostiaks, it is said, never have any uneasiness about the time of their delivery, and take none of these precautions which European effeminacy renders almost indispensable. They are delivered, wherever they may happen to be, without any inconvenience; they, or the persons who assist them, plunge the new-born infant into water or snow; and the mother returns immediately to her ordinary occupations, or continues her march, if on a journey. As these people dwell in the vicinity of the Samöides, between the fifty-ninth and sixtieth degree of north latitude, they do not fail to attribute this vigour of constitution to the severity of the climate.” “Meanwhile,” continues M. Roussel, “in

the same history we read that the wives of the dwellers in the island of Amboyna, towards the third degree of south latitude, are in the same category; and the author or compiler of that history, in reporting the fact, discovers the cause of it in the heat of the climate, which renders women's members supple, and capable of accommodating themselves with ease to the labours of parturition. One may perceive from this," he says, "how versatile are the explanations obtained from heat and cold, and how, in the jargon of mechanicians, causes altogether opposite can serve for proof of the same effect." A great deal more in a similar strain is urged by M. Roussel, and then comes his grand deduction, viz.: "Delivery is an animal function, which, in all likelihood, Nature had no desire to render a disease. This function exercises itself almost without pain and without danger in the brute. In all places where the means of assisting it have never been reduced to art, women have, ordinarily, labours less severe and more fortunate than in those localities which swarm with accoucheurs and midwives. Whence comes this distinction," he asks, "if it is not from the difference of manners and method of treatment in the one and the other, or from the abuse which in the latter places is made of a pretended science?" By a similar line of argument, it might be satisfactorily proved that, because Sir W. Jenner and his noble band of associates inhabit London, and because Leeds has the misfortune to have among its inhabitants Dr. Chadwick and all the other distinguished men by whom he is surrounded, therefore disease of all kinds is found to prevail in those localities. It is not true that brutes are exempt from suffering and death in delivery; and what occurs among women in savage life we have no means of knowing, from the fact that they always retire from view at the time of parturition, and travellers hear nothing about them if they die.

In civilised life, the great majority of women go through labour without the necessity of any unusual interference. Eight times out of ten, according to Dionis, the aid of the accoucheur is required; while Courtin limits it to one in a hundred; the latter estimate being as much too wide, as the former is too limited. A very large number do escape without any untoward accident, but every woman in labour is liable to such; some preventable, when their advent is foreseen; some remediable when they do occur, but all dangerous to life if not promptly and efficiently combated. That is what renders the peculiar study of midwifery, and the devotion of a life to its practice, of such importance. Who can judge of the deviations of nature from her usual safe course, but he who has made himself familiar with every phase of that marvellous process? In one patient, he will foresee the advent of convulsions, and, by a timely bleeding, may ward off the attack; in another, he perceives that rupture of the uterus is imminent, and by timely delivery, may prevent that dreadful accident; in another, he may feel certain that severe flooding will follow delivery, and he is prepared to arrest it. Not to multiply instances, these are enough to show the value of the presence of a skilful and trained observer within reach of every parturient woman. Most fortunately, in the great majority of them, the less he interferes the better for his patient; but he never knows the time at which her life may depend upon his knowledge and promptitude of action.

As it is utterly impossible that I could even enumerate the subjects of interest that might claim our attention, I must content myself by a very hurried allusion to a few of the modern improvements in the practice of midwifery proper. To go outside that, and treat of diseases of the uterus and its appendages, including the modern operations of ovariotomy, and for vesico-vaginal fistula, and for polypus uteri, and prolapsus uteri, and others, all of which I have myself performed, would be altogether foreign to the subject allotted to me. Of all the appliances which have been introduced into the practice of our art in recent times, the employment of anæsthetics in labour is that which affords substantial benefit in the greatest number of cases. That remarkable prophecy of Marx, in his letter to Hermann Boerhaave, quoted by Sir James Simpson as a heading to his essay on Anæsthesia, has been most completely fulfilled in our own time. Marx says: "The multiplied experiments to prevent pain in surgical operations which bear so delightful a testimony to the humanity of their authors, will certainly, in the course of time, be crowned with success." The glory of accomplishing this long desired feat was reserved for the second quarter of the present century, when our brethren at the western side of the Atlantic solved the long debated problem. To Dr. Morton, of Boston, the world is indebted for the announcement that the inhalation of the vapour of sulphuric ether will quench the sensation of pain in surgical operations. Obstetricians, under whose eyes a greater amount of pain has been witnessed than all the operations in surgery ever inflicted on mankind, were not slow to seize upon and employ such a beneficent agent. The discovery was soon recognised and adopted in these countries; and, although of course it met with violent opposition at first, some practitioners commenced the use of sulphuric ether inhalation in labour. The results not being as satisfactory

as might still be hoped for, it occurred to the sagacious mind of Sir James Simpson that some other of the class of highly carbonised volatile fluids might produce anæsthesia more easily, perfectly, and safely than the vapour of sulphuric ether. Accordingly, he instituted a course of experiments in which he did not scruple to submit himself as a test, and finally decided that the perchloride of formyle, now called chloroform, was the agent that produced anæsthesia in the most complete and safe manner. In addition to all the sufferers in surgical operations who have enjoyed the comfort of its employment, tens of thousands of women in labour have had good reason to be thankful for its administration, and to bless the name of Simpson. Having had the good fortune of being acquainted with, and enjoying the friendship of that distinguished man, I was made aware of the results of his experiments as they proceeded; and I was, if not the first, certainly among the first in Ireland who employed chloroform in midwifery. From that time to the present day I have not ceased its use; and, after a very extensive experience of its effects in natural, difficult, and instrumental labours, my testimony is that I and my patients have always derived the greatest comfort from its use, and that I never witnessed the slightest ill effects either at the time of, or subsequently to, its administration, with one exception, of which I made mention in one of my papers on Chloroform, in the year 1850. I allude to the tendency of chloroform to favour the occurrence of hæmorrhage after delivery. In the paper just alluded to, and republished in my volume in 1866, I made the following observations.—"My principal object in this communication is to show how chloroform can be advantageously used in a class of cases which seem almost to forbid its employment; I allude to tedious labours produced by sluggishness of the uterus. If the first effect of a good dose of chloroform be the arrest of uterine action for a short time, it follows, as a matter of course, that, if the pains be slow and weak, they will be the more surely and effectually interfered with. Now, it has happened to me to have patients under my care who were determined to inhale chloroform during labour, and who were most clamorous to get it at a time when the uterus was indisposed to act with vigour and celerity. To give the vapour as long as matters thus stood, would have only increased the evils and protracted the labour; but, by anticipating the use of chloroform, by the administration of a full dose of *secale cornutum*, the difficulty was quite removed. It has been said, that uterine hæmorrhage has occurred more frequently in women who have inhaled chloroform than is usual with those treated in the ordinary way. It must strike any one conversant with such matters, that the uterus most likely to be relaxed after delivery is that in which the pains have been most infrequent and feeble. If chloroform alone be given in such a case, it would be very likely to increase the tendency to relaxation after delivery; but when its use is preceded by that of ergot of rye, such danger is completely guarded against." With such a safeguard, cases in which, from previous experience, uterine hæmorrhage is to be expected, may be undertaken with confidence. I must hurry past the use of chloroform in operative midwifery, as there is little difference of opinion upon that subject; and I will just pause for a moment upon its employment in a class of cases little likely to be considered suitable. I allude to cases in which *post partum* hæmorrhage has run the patient to the very verge of the grave. A case in illustration, taken from my paper, will save time. "February 14th, 1853. I was brought five miles from Dublin to attend a lady who, while she resided in the city, had been under my care in three former confinements. On my arrival, I found the head just passing through the vulva, the labour having been short and easy. The child was soon expelled; and, before the placenta came away, a very profuse hæmorrhage took place. A drachm of ergot of rye was now administered, pressure was of course attended to, and the placenta, being found in the vagina, was removed. The hæmorrhage continued with great rapidity, notwithstanding very good contraction of the uterus. Vinegar and water freely applied seemed unavailing. The ground was covered with snow at the time. I ordered a bucket full to be brought up to the room; and, making up balls, I passed them into the vagina, and heaped the hips and abdomen with snow. By these means, the hæmorrhage was arrested, but the patient, a very small slender woman, was reduced to a very low ebb indeed. The pulse was nearly imperceptible, the breathing distressed and gasping, and the formidable complaint of noises in her ears was urgently made. Fifty drops of laudanum in brandy were given; and, in a quarter of an hour, the symptoms growing worse, seventy drops more, with large quantities of brandy, were administered. Great exhaustion, great nervous excitement, and anxious desire for sleep, harassed the patient. Repose was indispensable for her safety; opium did not procure it; time was of consequence. It occurred to me that, if I could tranquillise the nervous system, for even a short time, the opium she had taken would come into play, and continue the narcotic influence so essential to her life. I, fortunately, had chloroform with me, and as she lay tossing from side to side, and calling for aid, I applied

the chloroform to her mouth and nose. She soon became more calm; by degrees the jactitation ceased; she assumed a more composed attitude; and, to my great delight, sleep, quiet and natural, soon came over her. Hot jars were applied to her feet and legs; and, finding the sleep so natural, I held the instrument with the chloroform at a distance from her mouth, so as to keep up the action in a faint degree. It was most exciting to watch the state of the pulse during this time. I had tried an experiment with a new agent, but my firm belief was that it would save her life. With my finger on the wrist while she slept, I waited for the returning wave; sometimes imagining the pulse was greater, again finding it feeble as before. But it did increase in strength, and before she had slept half an hour there was a manifest improvement in the beat. The feet were kept warm, and the sleep was kept up for two hours, at the end of which time she awoke, most miraculously refreshed. In fact, I never saw any patient, so circumstanced, so thoroughly recovered at the end of twenty-four hours, as this lady was at the end of two. She rapidly returned to perfect health." The rigid rule of one hour compels me to abstain from any reasoning or commentary on this case: my kind hearers will themselves supply the deficiency.

I cannot refrain from saying a few words respecting the mode of administering this powerful agent in natural labour. Surgical operations, and instrumental deliveries, together with cases of malposition, which require version of the foetus, all demand a more complete state of insensibility than is required in the progress of natural labour. To enable us to produce perfect anæsthesia in such cases in the safest manner, and with the least expenditure of chloroform, the apparatus contrived by Dr. Skinner is the best, and is that which I now always employ; but in natural labour it is not necessary to produce insensibility: a sufficient amount of anæsthesia can be secured without depriving the patient of consciousness. For this purpose I employ a small inhaler, made by Coxeter of London, which resembles the original ether-flask of Sir James Simpson. This is applied to her mouth by the patient herself when she feels the advent of a pain, and is removed when the pain subsides; the inhalation of the vapour during that time giving all the relief that is required. This mode of administration becomes its own safeguard against an over-dose; for if insensibility approaches, the hand that holds the instrument falls, and thus the vapour is removed, and with it all chance of danger.

Among the modern improvements in midwifery, none have been more decidedly successful than the various methods that have been suggested for the preservation of the life of the foetus. These have reference to two periods of intrauterine existence. The first is that before the termination of the full time of gestation; the second is after labour has set in at the end of the ninth month of pregnancy. The induction of premature labour for the purpose of saving the life of the child, and very often that of the mother at the same time, is a proceeding of rather modern times, and of English origin. In April 1861, this subject was most ably handled by Dr. Barnes in the important essay read by him at the Obstetrical Society of London. In that paper he says: "It is somewhat more than a century ago, and in this town (London), that the artificial induction of labour was proposed and sanctioned as one of the legitimate operations in midwifery. English midwifery, pre-eminently conservative, claims the high honour of introducing and establishing an operation which has probably been the means of saving more lives of mothers and children than any other operation we know of. The forceps and turning only may compete with it; and, on the part of the artificial induction of labour, it may certainly be said that it is available in the greatest variety of dangers and the most serious complications." It is worthy of remark that, to discuss the propriety of admitting this operation, the most eminent obstetricists in London met in consultation. The proposition was felt to be one of such magnitude as to demand all the professional knowledge and all the moral weight which a body of honourable men, meeting under a sense of individual and representative responsibility, could confer upon their deliberations. Denman informs us, "About the year 1756, there was a consultation of the most eminent men at the time in London to consider the moral rectitude of, and advantages which might be expected from, this practice." It met with their general approbation; but Denman expressly tells us that "it afterwards became almost obsolete or forgotten."

In later times, however, the importance of this proceeding has been recognised, and various methods have been adopted for its performance. These have been so well described and arranged by Dr. Barnes in the paper alluded to, that I am saved the necessity of commenting upon them, and I will content myself by referring all who desire a full knowledge of the subject to that exhaustive treatise. But I must bear testimony to the great value of the means so strongly recommended by Dr. Barnes. He has amplified and improved the plan first suggested by Dr. Keiller of Edinburgh in 1859, and brought under notice by Mr.

Jardine Murray. That consisted in the introduction of an empty caoutchouc bag into the os uteri, and distending it by air. About the same time, Dr. Storer used the same kind of bags, but distended them by water. Dr. Barnes' improvement consists in varying the shape and size of the bag, so as to be applicable to all cases, and also the contrivance whereby its introduction is so much facilitated. He also employs water as the distending medium. Another very important paper on this interesting subject was read at the Obstetrical Society of London in October 1867. This was from the pen of Professor Lazarewitch of Kharkoff in Russia. It is remarkable that in that paper the Professor takes no notice of the dilators of Dr. Keiller and Dr. Barnes, but extols the method most disapproved of by Dr. Barnes. The Russian Professor details twelve cases in which he induced premature labour for various causes, by injecting warm water into the uterus. He sums up his paper with the following conclusions: "Of the twelve cases described above, ten required only one injection; in the first and eighth, a second injection was made only to increase the labour pains. The water injected was warm, 28° R.; with regard to quantity, in the first three cases, and in the ninth, six ounces; in the fourth, five ounces; and in the remaining seven cases, four ounces. Immediately after injection, the labour pains commenced; only in one case they took place after the lapse of a few hours. The labours continued from three and a half to thirty-six hours; their mean duration, from the time of injection to the termination of labour, was about nineteen hours. The result was in all cases favourable to the mother, except in the fifth, when the death of the patient was by no means caused by the operation, but by the previous illness. Of the children, nine were born alive, one still-born, and two died before the operation. In all cases, the aim of the operation was either fully or partially attained, and was done with the greatest ease and without causing pain."

The plan of the Russian Professor is not a new one. It is that introduced by Cohen, and often called by his name; but it comes before us now stamped with the authority of one who has evidently paid great attention to the subject, and has tested the value of the proceeding by experience. The great merit which it seems to possess is that of instantly producing the desired effect. In this respect it is superior to the method very much employed lately in these countries: I allude to the injection of large quantities of water into the vagina, as originally proposed by Kiwisch. That is an operation which has to be repeated several times in many cases before the uterus is stimulated to contraction.

Notwithstanding this high eulogium on the intrauterine injection, Dr. Barnes, in a subsequent paper, and Dr. Kidd of Dublin, condemn the practice, as fraught with extreme danger. "Both in this country and abroad, several cases of severe shock and of sudden death have been caused by it." It appears to me that the danger in such a case arises from the possibility of injecting air into the uterus along with the water, which may make its way into the veins through the uterine sinuses. I was once called to see a lady who had died suddenly during the attempt to induce premature labour by pumping air forcibly into the vagina. Some of it, no doubt, made its way into the uterus, and thence into the veins, producing instant death. The safest plan, in my mind, is that of passing a gum elastic bougie into the uterus, between it and the membranes, and leaving it there till labour begins, when, if necessary, the dilatation of the os uteri can be expedited by means of Dr. Barnes' fluid dilators.

Closely connected with the subject just treated of, is the method of bi-manual version of the foetus *in utero*, so admirably described by Dr. Braxton Hicks in 1860. By that method, as is now well known, the process of turning can be effected without the introduction of the hand into the uterus, a thing much to be desired in all cases, as tending to the safety of both mother and child. Dr. Barnes dwells so forcibly upon the advantages of this proposal of Dr. Braxton Hicks, that I will close this allusion to it by a quotation from Dr. Barnes' paper. "The account of the means of effecting premature delivery would not be complete, without some notice of the new method of turning without passing the hand into the uterus. We may succeed perfectly in dilating the passages; we may puncture the membranes; we may exhaust all the means of exciting the uterus to contract, and yet find that labour makes no progress; or the child may present, as is very frequently the case, unfavourably. Moreover, we have to deal with the uterus at a stage of immature development, when it is smaller and less distensible than at the full period. In this condition, forcible dilatation of the cervix by the hand, and the violence required to squeeze the hand through the cervix high up into the cavity of the uterus to turn in the ordinary manner, is a proceeding likely to be attended with considerable difficulty and certainly with considerable danger. The like objection will also hold against the forceps. This is pre-eminently the case in the instance of placenta prævia, where the highly vascular cervix is

liable to be bruised, and the injury to be followed by pyæmia. But, resting the case simply on the argument, that we should never use unnecessary force, then I contend that passing the hand into the uterus is altogether to be condemned. It is both more easy and more safe to turn and to extract without. I presume that no one who has had much experience in cases of difficult turning, has not found that the right hand, placed outside on the mother's abdomen, is often far more efficient in version than the left hand, which seizes the knee or foot in the uterus. By the steady consentaneous action of the two hands in this way, it has happened to me many times to turn with comparative ease, where I had been called in to eviscerate after fruitless attempts at turning by others. This operation is the final resource that enables us to bring a labour to conclusion at our discretion; and to Dr. Braxton Hicks must be ascribed the merit of bringing it to perfection."

The next stage of fetal life at which, by the interference of art, we can contribute to its safety, is at the full period of gestation, after labour has commenced; and here, again, we find that British midwifery claims the honour of being the leader in this most important of all obstetrical improvements. Prior to the days of the Chamberlens, midwifery possessed no means whereby a living child, arrested in its passage through the pelvis, could be extricated from its state of peril, and delivered in safety. The great invention of the forceps marks an epoch in the history of the obstetric art as remarkable as that of the steam-engine in mechanical science. Its importance as a means of saving human life ranks second to none, except that other glorious triumph of British medicine, the discovery of vaccination by the immortal Jenner. The instruments of Chamberlen were rude and clumsy, and so were the first steam-engines; but the principle commended itself to the understanding, and subsequent obstetrists have from time to time made endeavours to improve upon the original model. To any one who had the privilege, as I had, of seeing the exhibition of instruments at the *conversazione* of the Obstetrical Society of London in 1866, it was manifest that a vast amount of ingenuity and thought has been expended upon this very desirable object. Without any attempt to criticise the merits of these respective instruments, I will content myself by stating what appear to me to be the conditions necessary for a perfect forceps: 1, sufficient strength in the smallest possible compass; 2, facility of introduction and application; 3, freedom from injuring mother and child; 4, efficiency when rightly used. Now, as every crow thinks its own bird the whitest (I know it is generally thought that that phase in ornithological vanity is not absent in Irish crows), I hope I may be excused for saying that I think my forceps, originally described in 1842, fulfils these intentions more completely than any other with which I am acquainted. My reasons are so fully set forth in the friendly controversy which took place between Dr. Barnes and myself on this subject in the *Medical Times and Gazette* (September 1867), that I will not now repeat them. I exhibit the instrument, and let it speak for itself.

To use any forceps with safety and success requires, on the part of the operator, an accurate knowledge of the position of the child's head, and of the mechanism of labour. To Nægele we are indebted for the most accurate description of this process; but, in ascribing to that author the merit he so justly deserves, I cannot omit to observe that the first step in the right path was taken by an Irishman in 1742. Sir Fielding Oulde was the man who first enunciated the doctrine that the head of the child does not enter and pass through the pelvis in the same position in which it is seen to emerge, which was formerly believed; but that it occupies a transverse position at the brim.

Before I leave this part of my observations, I wish to allude briefly to a communication I made to the Obstetrical Society of Dublin in February 1867. It was in reference to what may be called rigidly contracted vulva. This condition, as every obstetrists too well knows, often gives rise to considerable delay after every other stage of a labour has been satisfactorily passed through, and is often the cause of fearful rents of the perinæum and rectum. In the paper alluded to, I detailed a case of this description, in which, after waiting in vain for some hours, and seeing every probability of extensive laceration taking place, I concluded the labour at once, and in safety, by passing a probe-pointed scissors between the child's head and the perinæum, and dividing the latter to the extent of an inch. In the observations which I made upon this proceeding, I alluded to the suggestions of some modern authorities, who speak of a similar proceeding. Some time afterwards, in looking through the volume of Sir Fielding Oulde, I was not a little surprised to find that we had been anticipated by that very accurate observer; and that, almost in the same language as I employed, he had described the case, and proposed the same remedy.

This leads me to observe that lacerations of the perinæum, when they do occur, either in instrumental or natural deliveries, are not now as formidable as they were formerly. The plastic operations so frequently performed on these parts have taught us to treat such lacerations at

once, and close them by sutures before leaving the patient. Silver or iron wire, or silk, may be employed. I have used them all; and I prefer the silk ligature, for this reason; that, in the daily ablutions which are so important, the rigid ends of the twisted wire are sure to be caught by the sponge, and hurt the patient—an objection that does not apply to the soft ends of silk ligatures.

Connected with a process so wonderful as that of conception, pregnancy, and delivery, and when the superintendents and assistants were of the class of ignorant superstitious women, it is not surprising to find a huge mass of the strangest notions, and the most absurd and often disgusting practices. Every country has more or less of these handed down by tradition, and preserved generally among the lower order as objects of reverential belief. An interesting account of some of these medical superstitions and practices in Ireland was published just twenty years ago by Sir William Wilde, a very few of which I will quote from his essay.

Love charms, philtres, potions, and incantations, administered or performed to secure the affections of the opposite sex, were and are still, in some parts of the country, in high repute. Of these, the following is about the most remarkable.

"A female, accompanied by a charm-working crone—such a *cailliagh* as would have been burnt in Scotland, with the 'witch's branks' in her mouth, not long ago—proceeds to a churchyard, and at dead of night (twelve o'clock) exhumes a male corpse which has been nine days buried. With a black-handled knife she removes a stripe of integument, a couple of inches broad, from the entire length of the body—from head to heel—including, if possible, those parts which are usually covered with hair, as the scalp, face, breast, pubes, etc. Having restored the corpse to the grave, the strip of skin is next stretched upon a tombstone; and over it certain spells are cast, and certain incantations pronounced, by the attendant priestess, who sprinkles it with water found in the hollow of a sacred stone; and then, folding it up in the form of a cross, places it over the beating heart of the credulous girl, who, under her dictation, mutters certain other incantations. Thus provided, the love-sick lass returns home; and, watching a fitting opportunity, surrounds with this charmed bandage either the breast, leg, or arm of the man whose love she wishes to obtain. To prove efficacious, it must be applied and removed without his knowledge; to effect which a state of anæsthesia by means of whiskey is generally induced."

To procure or prevent abortion, and to cause or remove impotence and barrenness, the charms and nostrums are of the most wonderful, filthy, and revolting nature. But, as might be expected, tedious or difficult labours have given rise to innumerable devices, charms, and mystic ceremonies. One of the most common is that of loosening every place, person, or thing, in or about the house; unlocking of all the locks, unbarring of all the doors and windows, untying all knots, and even setting free the cows in the byre, in the hope that by some occult sympathy, not well defined, the matrix may be induced to dilate, and the womb expel its imprisoned contents.

Applications of various kinds are made to different parts of the woman's body: I have no time to mention them. But not the least curious of these is placing the hat of some notorious cuckold upon the head of the patient. An anecdote is related of a woman in a village in the west of Ireland, who, notwithstanding a great variety of popular charms, still remained undelivered. At last, it was thought right to try the cuckold's hat. It happened that there was a well known character, named Jim Flanagan, residing in the village, to whose hat his wife had taken good care to impart the desired efficacy. Scouts were despatched in search of Jim Flanagan's hat; but the owner could not be found, and the messengers returned in despair. The unfortunate woman, whose agony and cries had redoubled in their absence, when told of the failure, exclaimed, "Well, then, bring Paddy's; that will do well enough." Her husband's hat was accordingly made trial of, and soon proved efficacious.

In his highly interesting and instructive work, with the curious name, *Chips from a German Workshop*, Mr. Max Müller has given an account of a custom connected with parturition to which it is difficult to give credence. "Who could believe," he says, "that there was one single tribe, however silly in other respects, which should carry its silliness so far as to demand that, on the birth of a child, the father should take to his bed, while the mother attends to all the duties of the household? Yet there are few customs more widely spread than this, and better attested by historical evidence during nearly two thousand years." Marco Polo observed this custom in a province in China in the thirteenth century, where it exists at the present day. Strabo, about the beginning of the Christian era, describes it among the Iberians of the north of Spain; and M. F. Michel found the same custom, a few years ago, among the modern Basques, their descendants. "In Biscay," he says, "the women

rise immediately after childbirth, and attend to the duties of the household; while the husband goes to bed, taking the baby with him, and thus receives the neighbours' compliments." In Corsica and at the south of the Black Sea, and in the West Indies, a similar practice is described upon undoubted authority. In France, it received the name of *faire la couvade*. M. Du Tertre gives the following account of the *couvade* among the Caribs of the West Indies. It is not a very inviting account of the pains and penalties attached to paternity in that region. "When a child is born, the mother goes presently to her work; but the father begins to complain, and takes to his hammock; and there he is visited as though he were sick, and undergoes a course of dieting which would cure of the gout the most replete of Frenchmen. How they can fast so much, and not die of it," continues the narrator, "is amazing to me. When the forty days are up, they invite their relations, who having arrived, before they set to eating, hack the skin of this poor wretch with agouti teeth, and draw blood from all parts of his body, in such sort that, from being sick by pure imagination, they often make a real patient of him. This is, however, so to speak, only the fish, for now comes the sauce they prepare for him. They take sixty or eighty large grains of pimento or Indian pepper, the strongest they can get; and, after well washing it in water, they wash with this peppery infusion the wounds and scars of the poor fellow, who, I believe suffers no less than if he were burnt alive. However, he must not utter a single word, if he will not pass for a coward and a wretch. This ceremony ended, they bring him back to his bed, where he remains some days more, and the rest go and make good cheer in the house at his expense. Nor is this all; for through the space of six whole months he eats neither birds nor fish, firmly believing that this would injure the child's stomach, and that it would participate in the natural faults of the animals on which its father had fed. For example, if the father ate turtle—poor alderman!—the child would be deaf and have no brains, like that animal." There is encouragement to matrimony and procreation! The chapter from which I have quoted is full of such extraordinary descriptions, well rewarding perusal; but I must conclude with the remark of the author, that a custom which ought to be peculiar to Bedlam has been traced during more than 1800 years in the most distant parts of the world, among tribes who, as far as we know, had no historical intercourse with each other, and whose languages certainly show no trace of relationship.

So far I have spoken of the means of preserving infantile life; and if the still-unborn or new-born had no other enemies to contend with than those furnished by nature, the appliances of science and art would keep their death-rate within reasonable bounds. But when we come to contemplate the fearful extent to which the murder of human beings is carried in modern times, under the forms of criminal abortion and infanticide, we find enough to startle the most rigid stoic, and make him shudder at the amount of crime not only committed, but encouraged and justified by the descendants of him who was created in God's own image. Dr. Storer of Boston remarks—"The practice of destroying the *fœtus in utero*, to say nothing of infanticide, history declares to have obtained among all the earlier nations of the world, the Jews alone excepted, and to a very great extent. Aristotle defends it, as does Plato. It is mentioned by Juvenal, Ovid, Seneca, and Cicero, and is denounced by the early Christians. It was common in Europe through the middle ages, and still prevails among the Mohammedans, Chinese, Japanese, Hindoos, and most of the nations of Africa and Polynesia, to such an extent that we may well doubt whether more have ever perished in these countries by plague, by famine, and the sword." If such wholesale destruction of human life had been prevalent only in former times, or was now to be found only in nations whom we designate as barbarous or semi-barbarous, we might take pride in our boasted civilisation, and point to the absence of this crime as one of its fruits. But alas! the very comprehensive tables given by Dr. Storer prove the very reverse, and show that in the great majority of European nations criminal abortion prevails to a very great extent, and is yearly on the increase; while in America, the practice has attained a formidable height. Dr. Storer remarks: "From these figures there can be drawn but one conclusion—that criminal abortion prevails to an enormous extent in New York, and that it is steadily and rapidly increasing." Again, he says, "Almost doubling, therefore, as New York does, the worst of those fearful ratios of fetal mortality existing in Europe, it is not strange that our metropolis has been held up even by a Parisian to the execration of the world;" and again, he says, "In this description of New York we have that of the country. The comparative frequency of abortions in Massachusetts is eight times as great as in the worst statistics of New York." Few persons could have believed possible the existence of such frightful statistics, or the dread cause from which they spring. In asserting the results, at once so awful and astounding, we desire to fix upon them the attention and scrutiny of the world. Speaking of the open manner in

which this crime is committed, Dr. Storer goes on to say, "The number and success of professed abortionists is notorious. If arrested, they are always ready with bribes or abundant bail. Hardly a newspaper throughout the land that does not contain their open and pointed advertisements; or a drug-store whose shelves are not crowded with their nostrums, publicly and unblushingly displayed; the supply of an article presupposes its demand. The profits that must be made from the sale of drugs supposed abortifacient, may be judged from the extent to which they are advertised, and the prices willingly paid for them. From these facts we may fairly estimate the extent of the nefarious traffic." After quoting the testimony of many physicians in different parts of the country, Dr. Storer says: "We are compelled, from the preceding considerations, to acknowledge not merely that criminal abortion is of alarming frequency among us, but that its frequency is rapidly increasing. The crime is fast becoming, if it has not already become, an established custom, less honoured in the breach than in the observance."

Are we sure that, if we had the same means of ascertaining the truth, something of a similar kind might not appear among ourselves? The attention of the police has been not infrequently directed to houses both in the metropolis and in the provinces where there is good reason to believe that criminal abortion and premature deliveries have been largely perpetrated. The result of the investigations not long since made by a leading medical journal went to show that all the accommodation and appliances, and even the operators, were not only accessible, but numerous. The necessary cost of a sojourn in such establishments points unmistakably to the class who must be their frequenters. Some years ago, a gentleman of high social position called on me to request my aid in getting him out of a scrape. He stated that he had been too familiar with the governess of his own children, and her pregnancy was the result; and in a very free and easy manner, he proposed that I should procure her abortion. He seemed surprised when I inquired if he was aware of the penalty attached to the crime of even making such an audacious proposal; and, as a palliation of the insult, he assured me that he did not think it any harm, and that he had had it done four times in other women while he resided in England. In very laconic language I referred him to his former acquaintance, and ended the interview. Although it is not fair, from a single instance, to draw any general conclusion, yet this circumstance may be taken as a sign of the way in which criminal abortion is regarded by persons of his stamp. The light way in which he spoke of it, and the readiness with which he said he could have it accomplished elsewhere, helped to impress me with the idea that the crime was, though perhaps costly, not infrequent.

Establishments, in which delivery can be effected at all stages of pregnancy, are not publicly advertised in these countries; but I have seen such in Parisian journals, and, when that is the case, it is not going too far to infer that the practice is not rare. But, if we are struck with the destruction of life by criminal abortion, what can we say of the holocausts by infanticide, a crime which there is too much reason to know has reached to a fearful height? The various forms in which it is perpetrated: direct violence, drowning, baby farming, neglect, "quietners," are all so many ways of accomplishing the same object; and the wholesale slaughter committed is scarcely to be estimated. Such monsters as the woman Windsor, and the more recent case of the woman Delpech, in France, are fortunately not often met with; but isolated cases of child-murder are too frequently recorded in the public journals to permit us to believe that the crime is not one of the prevalent vices of the day. We have heard of mill-ponds, in the neighbourhood of factories, that have been made the receptacles for many a new-born child. I was informed lately, on good authority, that on an occasion when it became necessary to empty one of them, a vast number of corpses of infants were found at the bottom; and that the lower stratum was a mass of bones and *débris* of what must have been hundreds of similar victims. In the annual reports of Dr. Lankester, we have a fearful account of the prevalence of the crime of infanticide, so great, indeed, as almost to warrant the assertion of a recent journalist that "it is rapidly assuming the character of an institution."

Can we wonder at the prevalence of this crime, when we find the odious doctrines openly recommended by societies composed of the upper ranks of the people, and presided over by noble senators; when we see books written and published, in which infanticide is not only enjoined, but the means of perpetrating it are pointed out; and when no notice of such is taken by the Government of the day, and the author is allowed to escape the punishment so richly deserved. This subject has been recently ably handled by Dr. Whittle of Liverpool, who has laid the evidence of such barbarity before the profession and the public, and most properly resents the insult offered to the profession by "a suggestion publicly made, and apparently emanating from high authority, that its members should lend themselves to some scheme of

limiting the numbers of children born into families." This, coming from a society which is found to patronise the pseudo-philosophy of Malthus, and which advocates his monstrous propositions, is a specimen of what that school recommends; and, although shelter may be found under the phrase "limiting the number of children born," yet it is too plain to what the desire to accomplish that end may lead, and that the doctrine and advice of the author of the book before alluded to (one of the most advanced pupils of the Malthus school) might soon become the rule for the regulation of society. In the book to which I have referred, there is a chapter in which it is enjoined that no more than three children shall be allowed in one family, and that if, by the production of abortion or by other means, it has not been possible to prevent the birth of others, the superfluous children are to be removed. That is what has been preached, and although, as I have said, the society alluded to, which has taken the name of "Dialectical," has not yet gone as far as the author of that book, yet the audacity with which they invoke the cooperation of a respectable profession in their base endeavours to substitute a scheme engendered in their obscene imaginations, for the moral government of the God of nature, gives some reason to doubt the lengths to which they might finally drift, and, at last, find themselves entitled to the name not of "dialectical," but of "diabolical."

The inexorable pendulum warns me that I have no time to advocate a remedy for this mass of disgusting vice, and abominable crime. I must content myself by simply stating it to be Foundling Hospitals supported by the State.

I cannot let this opportunity pass without bringing under the notice of this large and influential Association a subject deeply affecting the peace and happiness of families, and the procreation of healthy infants. I allude to what may appear to be the mysterious dealings of syphilis in married life. Take a case in illustration. A young man, in whom no trace of disease can be discovered, is married to a healthy young woman. Twelve months afterwards she comes to consult you, and her history is that immediately after marriage she became pregnant; that in about a month afterwards she got what she calls a cold and sore throat, and some spots appeared on her body and limbs; that she had some soreness about the vulva; that, about the beginning of the seventh month of pregnancy, the movements of the foetus, which up to that period had been vigorous, began to diminish in strength, and finally ceased altogether; and that, at the end of the seventh month, she had given birth to a dead, putrid, black, child. She will tell you that she recovered very well after her confinement, and that she is now pregnant for the second time about three months, and wishes to know what course she must pursue in order to avoid a repetition of her disappointment. Judging from my own experience of the number of cases similar to that I have hurriedly sketched, I am inclined to think that many of my hearers will recognise in it a not unfamiliar acquaintance. I have seen them in all grades of society, from the highest ranks of the peerage down to the peasant. During all this time, no suspicion had arisen in the mind of the husband that there was anything wrong or out of the common in his wife's case. It is only when questioned in private that the fearful truth bursts upon him, and he becomes conscious that he has unwittingly been the contaminator of the pure blood of the dearest object of his affections. You learn from him that some time before his marriage he had venereal, of which he was supposed to have been, and he imagined himself to have been cured. You examine his throat, and strip and scrutinise his body and generative organs; not a sign of disease is to be found upon him. Nevertheless, the condition of his wife, and the putrid child, are proofs too convincing that his system is still impregnated with syphilis. When inquiry is made as to the treatment adopted at the time of his supposed cure (I speak now of my own observation, and there are members of this Association who know that my experience in these matters has been very extensive), what is revealed? You learn that this unfortunate, now heart-broken man, with his innocent wife, and their dead child, are victims of the modern theory and practise of curing syphilis without mercury.

Some of the men whom I have seen were civilians, but the great majority of them were in the army, where the non-mercurial system of practice so much prevails. I often wish, when dealing with these sad cases, that the surgeons who, because they had healed up sores, imagined they had eradicated disease, could now witness with me the results of their boasted triumphant success; that they could witness the agony of mind experienced by a high-minded honourable gentleman, who now is made aware of the fact that he has unconsciously communicated a loathsome disease to a pure, confiding, and still unsuspecting wife. Within the last twelve months I have seen four of these unhappy cases, all of them in the army, and all treated without mercury. In none of the men was there any trace of syphilis, but their wives had all gone through the course I have described. Heart-burnings and self-reproach, with

anathemas upon the system under which they were treated, constituted but small consolation to their distracted minds.

It is now forty-eight years since this subject was brought under the notice of the profession by my father, the late Dr. John Beatty, in a paper published in the *Transactions* of the King and Queen's College of Physicians in Ireland. In that paper he states that he was cognizant of the effects of venereal taint so far back as the year 1798, and he related some cases that occurred to him in that year, and at subsequent periods. One that happened in the year 1816 I will take the liberty of reading, as it so strongly resembles those to which I have been alluding. "In October 1816, he says, I delivered the wife of a cavalry officer of a putrid child, in the eighth month. The gentleman had been on the Continent with his regiment, without his wife, and had contracted a slight venereal complaint, of which his surgeon considered him well before his wife joined him in France. I could not detect any venereal symptoms in the parents, but was so satisfied with the cause of the child's death, from the peculiar appearances on the body, that I recommended them to consult some eminent surgeon, and Mr. Todd was called in, who met the regimental surgeon with me, and advised the use of mercury, which was regularly persevered in by both for several weeks. After this course, pregnancy was soon the result, and, in November 1817, I had the gratification of attending her, when she had a living girl. She has had several living children since." In this case, the parties obeyed directions and were rewarded by perfect cure. As a contrast to it, I will trespass on your attention by quoting another from the same paper.

"In August 1812, I attended a patient who was delivered of a putrid child in the seventh or eighth month, which she said was the third that she had born dead. I discovered so much of venereal affection, as to recommend that they should put themselves under the care of some experienced surgeon for the use of mercury. They applied to Mr. Collis; and when she was pregnant in the following year, Mr. Collis told me that they had not continued a sufficient time under his directions to satisfy him that they were cured of the venereal complaint; which I found to be the case in July 1813, when I delivered her again of a putrid child in the eighth month. I then declared that I never would attend her again, until Mr. Collis told me he was satisfied with the result of the mercury used. They again returned to him; and, fully attending to his directions, in October 1814 I attended her, when she bore a living girl at the full period of gestation. She has had several living children since." It is rather amusing to me to read in the latest work on syphilis published in France the following passage. "In a discussion at the Academy which caused great sensation, Professor Moreau quoted the case of a woman who, after several successive pregnancies, all followed by delivery before the time, and by the death of the foetus, was subjected, as a last resource, to antisyphilitic treatment, and whose fresh pregnancies ran on to the full time." And this, after the whole story had been told by my father nearly half a century ago.

It was thought that Hunter did not believe in the hereditariness of syphilis; but this opinion was shown to be erroneous by Adams, the author of the celebrated work on Morbid Poisons, who published an edition of Hunter's work on the Venereal Disease in 1810. Nevertheless, I find this mistake respecting Hunter repeated in the very last work on Syphilis. M. Lancereaux, in his admirable and exhaustive treatise published in 1866, and recently translated by the Sydenham Society, observes: "Hunter, as we know, denied the hereditariness of syphilis, which did not prevent him from relating two most conclusive cases of congenital syphilis. The successors of Hunter do not all share his opinion, and some have sought to prove by special treatises the transmission of syphilis by inheritance; such are, in particular, Doublet, Mahon, Bertin, and Hutchinson. Ricord, who accepted most of Hunter's views, could not refuse to admit hereditariness. The same holds good for Diday his pupil. This mode of transmission is indeed now one of the most firmly established. The father and the mother are the factors, whose single or joint influence requires to be investigated." I wish I had time to pursue this subject, and quote more fully from the valuable works of Diday and Lancereaux; but the fleeting moments warn me that I dare not. I will return to what I said in the commencement of my observations on this subject. I spoke of the mysterious dealings of syphilis in married life. Having been a pupil of the late Richard Carmichael, I am fully aware of his theory and practice; and I fully admit that men may be apparently cured of primary and secondary, and even tertiary, symptoms, without mercury, and that they may continue in the enjoyment of vigorous health, and if they have the good fortune not to marry, they may never have any reason to know that a vicious taint still lingers in their systems. But, from a long, extensive, and sad experience, I am forced to declare that this apparent freedom from disease is only an illusion, to be

dispelled by the most heartrending proofs when the man has disordered his wife, and killed his child. Mercury for both parents is now the only cure for their lamentable condition, and it is a certain one. Mercury given to the man when first diseased would, I firmly believe, have prevented this terrible calamity; and I would now humbly suggest to all who undertake the treatment of venereal disease that, if they have a certainty that their patients will remain celibates all their lives, they may heal up their sores, and dispel their eruptions and sore throats in any manner they like; but that they have no right to expose the pure, innocent, high-minded females of society to contamination by marrying men treated without mercury. I am quite aware that this doctrine is at variance with that entertained by many able men at the present day, and may be unpalatable to some of my hearers; but I trust, Mr. President, that you and the other members of this great Association will give me credit for sincerity in thus declaring the result of a long experience, and advocating a line of treatment which that experience compels me to believe is most essential for the well-being and protection of society. To investigate and arrive at truth in medicine, is one of the cherished objects of the British Medical Association; and, honoured as I have been by the request to deliver this address, I feel that it would be an unworthy requital of your kindness if I were to shrink from promulgating well-grounded opinions because other and abler men entertain the contrary. Truth in medicine can be established only by experience; in the necessarily hurried manner that time permits I have endeavoured to communicate my own; others, with equal opportunity for observation, must have encountered cases resembling those upon which my convictions are founded; and I earnestly hope that their communications will furnish such an accumulation of evidence as will enable the profession to arrive at sound conclusions.

THERAPEUTICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

ON THE USE OF STRYCHNIA IN CERTAIN FORMS OF EPILEPSY.

By WALTER TYRRELL, ESQ., Great Malvern.

IN a disease like Epilepsy, of which the pathology is very obscure, it is satisfactory when we can say that we have established any definite fact, more especially when that fact is one bearing upon treatment. Now that bromide of potassium has a decided effect in relieving certain forms of epilepsy is one such fact; and I wish to point out in this note what I think will be established, on trial, as another fact equally worthy of notice; viz., that other varieties of epilepsy may be cured by strychnia. I do not mean to say that I can point to this or that case, and say it will be cured by strychnia; in our present state of knowledge we are unable to do this with any remedy; but I think I can point to a large class of cases in which the administration of strychnia will be followed in the majority of cases by the most beneficial results. There is a common form of epilepsy in which anæmia and defective nervous control are prominent symptoms. The majority of these patients are women, and with them the disease is apt to commence at or about the time of the first menstruation; and the attacks show a disposition to occur more frequently and with more severity near the catamenial epoch. In the intervals of menstruation, the disease often shows itself irregularly in the form of *petit mal*. In such cases, and in children in whom epilepsy, often commencing with some of the varieties of *petit mal*, gradually passes into the more severe form, this plan of treatment by strychnia is very successful; and there are few cases which are not benefited by a perseverance in its use.

My experience would lead me to believe that large doses are unnecessary; for, although I have carried the dose as high as one-third of a grain twice daily, with benefit, I am now in favour of employing smaller amounts, given more frequently. I have been using this remedy now for nearly ten years, and I can certainly show some valuable results. I am now preparing to tabulate the whole of my cases for publication in a collected form.

I much wish that some of my medical brethren would give the remedy a fair trial in some of the cases I have mentioned, or in any cases in which bromide of potassium has failed to relieve. To any wishing to give it a trial, I shall be happy to give any further details.

ADDRESS IN SURGERY

BY

THOMAS NUNNELEY, ESQ., F.R.C.S.,

Surgeon to the General Infirmary at Leeds.

MR. PRESIDENT AND GENTLEMEN,—Long years ago, when I first became a member of this Association—then in its infancy, and numbering only a few hundred country members, being, as its name implied, a Provincial Association—it was thought no small honour to be the person selected to read the annual Address in Medicine or Surgery. Now, when not only its title, but its constitution, is changed, and it is in fact, as it is in name, a British Medical Association, counting its members by as many thousands as in those times it did by hundreds, and embracing not only the *élite* of the provinces, but many of the worthiest in each metropolis of the three divisions of the kingdom, many of the best men in our own colonies, and honoured by the fellowship of numbers of the most distinguished men in Europe and America; when, year after year, the Professors of most of our oldest and largest Universities, who, by themselves and their predecessors in their respective chairs, have made the study of our profession an honour to the British name, and a credit to human nature, have appeared in the office I am now called upon to fulfil, the honour is indeed great. But with that how greatly is the responsibility increased! so much, indeed, that, had I not first been named by my professional brethren amongst whom I live, and had not the selection been afterwards confirmed by our governing Council, I should hardly have presumed to venture upon the office. Even now, in so doing, I must throw myself upon your favourable indulgence, and appeal to that kindly feeling which, I trust, the friendship engendered by our meetings through so many years, will allow me to crave, not in vain, at your hands. That you appreciate my zeal in the cultivation of our noblest of professions, I feel assured; that you will forgive and look favourably upon my present shortcomings, I presume to hope.

Last year, the learned Linacre Professor of Anatomy in Oxford gave, as you well remember, an elaborate and interesting dissertation upon some most important questions in physiology—especially those in which modern science has made most progress—and showed the Association how great is the aid to be gained by the extended application of physical science to the unravelling of physiological problems. To have even attempted this a few years ago would have been not merely useless and impossible, but by many would have been denounced as presumptuous, irrational, and profane. How the advanced ideas laid before you by the learned Oxford Professors, Drs. Acland and Rolleston, were supported, and even carried still onwards, by the profound reasoning, the extended learning, the mathematical calculations, and the chemical knowledge of the Dublin Professor, I need not remind you; for no one who had the opportunity of hearing the address of Dr. Haughton can fail, even now, to remember how wit and wisdom were conjoined, and to have been deeply impressed with the fact that, if medical men are to be capable of efficiently dealing with physiological and pathological questions, and the correct treatment of disease, they must be something more than mere anatomists and routine administerers of drugs; that they must dive deeply into and quaff freely of that extended scientific knowledge to the importance of which all our seats of learning have at last become alive, and which they are making such praiseworthy exertions to afford facilities for enabling their alumni to acquire.

Gentlemen, had I merely consulted the bent of my own feelings, I might have ventured, at however humble a distance, to follow in the same direction; for such inquiries have ever been amongst those which, from early life, have had attractive charms for me. I have ever regarded an extended acquaintance with the operations of nature as the true path by which the laws of life, whether of man, animal, or plant; the production, increase, maturity, decadence; the calling into existence and the passing into decay; the maintenance in health and vigour; the lapse into weakness and decay; the advance or degeneration of the species; the restoration and improvement; the descent into feebleness and imbecility of both mind and body in the individual—are to be learned and understood. I have ever felt that, in proportion to our knowledge of Nature, so will be our power, both for good and for evil, over her; and that, as man is but one manifestation of Nature, the better we

are acquainted with the laws of matter, so shall we, whose especial province it is to deal with matter in its noblest and most refined forms, and the innermost laws which govern what we call inert matter; and, depend upon it, ascending from the simplest forms of organic material through a more and more complex combination of atoms until we arrive at man, with his varied mental and corporeal powers and weaknesses, so shall we understand the laws by which he is created, maintained in health, cast down by disease and decay, and finally returned to that dust whence he sprang. So also shall we be better able not merely to ward off those changes which constitute disease, but we shall be enabled to apply our means, whether it be by the application of hygienic laws or the administration of drugs—not as at present, for the most part empirically, but with a knowledge of their specific effects, so that they shall act directly and certainly, accomplishing the purpose for which we employ them, even as now the chemist in his laboratory manipulates his agents; and thus we shall raise our profession to the dignity and precision of a true science. Chimerical as it may perhaps appear to those who are not familiar with the progress of the collateral sciences, those who know what has been done and is being done by modern scientific investigations, will readily admit there are not wanting premonitory indications which, like the rising cloud, now no bigger than a man's hand, presage that such an era may ere long burst upon the world in full power, and bring with it changes as great and beneficial as did that little watery vapour, and far more universal. To mention no other fact; look what Marshall Hall's discovery of reflex nervous action, not more than thirty years old, following as it did rapidly upon those of Bell and Magendie, has done for physiology. Why may we not reasonably look forward to like advances in therapeutics and practical medicine? We have men amongst us this day who have done much, and who will certainly accomplish more. Why may not those great general laws which govern and regulate the universal phenomena of gravitation, light, heat, electricity, magnetism, galvanism, chemical and vital action, by which the face of all Nature, not of this earth and its inhabitants alone, is changed and metamorphosed, be proved to be mere modifications of one all-pervading principle, which alike controls and explains the creation and distribution of distant worlds, and the origin and action of microscopic cells, and regulates the stupendous results of their various modifications and influences? When we consider how little was known of these subjects a century ago, and what is now understood and done with them, who shall presume to say how soon and how much more knowledge may not be obtained?

To-day, however, such is not my duty. While this lofty aim is ever to be kept in view as the goal which it is the duty of all of us—especially of those who are entering the medical profession, and of its younger members, who have leisure for the task—to strive to reach, we must not forget our present condition. We who are older, have suffering humanity to relieve, health to restore, and disease to mitigate, with such means as we best can employ. As last year physiology was the theme, I have this year assigned to me, what is to us and our fellow-citizens, as practical men, of at least as much immediate importance, the duty of addressing you on Practical Surgery, and pointing out, as far as may be in the limits of an address, the improvements and alterations which in recent times have taken place in it, both as a science and as an art.

This, considering the busy place in which we are assembled, can hardly be thought otherwise than appropriate. The splendid hospital which the liberality of the town and neighbourhood has raised, is a practical proof how pressing and important, in our every-day life, Surgery is. It must never be forgotten, that the cultivation of both science and art is essential to the constitution of a good surgeon. While he who is really a dextrous and exquisite artist, or a mere "practical surgeon", may, if he has not a competent knowledge of the scientific principles which should guide and regulate his art, be a most dangerous man, and really a bad surgeon; so, on the other hand, a man who has a profound knowledge of his profession as a science, may, if his hand have never acquired or have forgotten its cunning, or if his mind be so constituted that he cannot apply his knowledge to the case before him, be utterly unworthy to be trusted with the manipulation of diseased parts. Though it is undoubtedly true, that the more thoroughly the principles of surgery are understood, the less the practice of it as an operative art will be required, I apprehend the most Utopian dreamer will never figure to himself the day when operative surgery will be otherwise than a necessary blessing to mankind. So long as man is a machine, controlling and controlled by resisting matter, so long will he be liable to the laws of matter, and be subject to accident and disease which require manipulatory interference. Hence the great importance of all improvements, not only in our means of diagnosis, but in the practical treatment of disease. In this respect, our profession has no reason to be ashamed. Great as has been the advance in the various branches of scientific

knowledge, I venture to say that in no single one has it been greater than in our own. Let those who are acquainted with the history of our profession—those who have adopted the excellent method of devoting some of their leisure to the study of the works of the many great men who have lived and worked in bygone days—declare the progress and improvements within even comparatively modern times. Nay, let those of only this generation, men of my own age, recollect what has been done within their own day, and they will not blush; for the progress made is unsurpassed, and such as, were it set forth in full, would much astonish those who are merely *au courant* with the professional opinions of the present day. It is my duty to lay some of these improvements before you; and here the very richness of the material is a source of embarrassment. Of all it is impossible to speak even in passing words. Where volumes would hardly suffice to indicate their value, I must, for the most part, be content merely to glance.

I recollect the time when the *stethoscope* was almost an unknown instrument, and well remember the hesitation there was in arriving at an opinion as to its value as a means of diagnosis; yet it has done far more for mankind than many a battle fought and won, which has ennobled and made famous its general throughout the length and breadth of the land. Forty years ago, the *microscope* was little more than a toy—as often, from its imperfections, its aberrations of colour and sphericity, and its feeble defining powers, leading to error as to truth. Now it has become almost perfect, and its most skilful and ardent manipulators are those of our profession; while its employment, not only for histological investigations, but in the daily diagnosis of disease and its treatment, has become almost as essential to the scientific practitioner as is the telescope to the astronomer. The *ophthalmoscope* is of so recent introduction, that it may safely be said that the majority of medical men have not mastered the difficulties of its application; yet it has already revolutionised the diagnosis and treatment of several of the most serious affections of the eye, and rendered our knowledge of much that before was confused, uncertain, and impossible to understand, clear and precise. So the *laryngoscope* has enabled us to illuminate the larynx and trachea, which until now were closed, dark, and unapproachable to any of our senses; and thus not only can we see diseases which heretofore could hardly be guessed at, but, by operation and treatment, cure them. Though the *endoscope* has as yet not accomplished all that its votaries have said in its favour, and in the hands of the practical surgeon has, I believe, so far failed to be of very much use in illuminating the deeper cavities of the body, it is doubtless the forerunner of improved instruments, which will enable us to light up more than one of the hollow organs, and to see what is there going on. Nay, those are not wanting amongst us who anticipate the day as not very distant when we may be able to read as in a book the darkest recesses of our bodies; and I believe he who denies that this shall ever come to pass will be a bolder and a rasher man than he who believes in its realisation. Then, again, the *sphygmograph*, as a help to precision in estimating the true value of the variations in the pulse and the measure of the heart's action, in a more exact manner than digital touch alone can accomplish, is an application of physiological and mechanical skill which is worthy of great praise. Nor must the employment of delicate *thermometers* for ascertaining calorific variations, under different abnormal conditions, be passed over without mention, as in many cases tending to help diagnosis and prognosis.

THROMBOSIS and EMBOLISM, as now understood, are comparatively recent terms, by which are indicated conditions the most serious and dangerous, often suddenly fatal, which heretofore were utterly incomprehensible; and, though the study of these conditions may not, so far, have done all that could be wished in enabling us to cure them when once actually existing in a severe degree, it has taught us to understand the nature of the affection, and the cause of the great danger of it; to know what not to do, which formerly was, in ignorance, often done injuriously; and to do much to avoid the occurrence of the affection—even, if the attack be of lesser dimensions, and the obstructing plug be seated in the smaller vessels, or in those whose patency is not essential to the immediate maintenance of life, to greatly assist nature in effecting a cure.

The term PYÆMIA is of modern introduction; and, though much still remains to be solved respecting the true cause of the origin of the dreaded condition which it indicates, the very recognition of its existence shows a great advance towards precision of diagnosis, and throws a beam of light into that chaos of confusion which, within our own times, enveloped the true cause of that fatal result which so often follows accidents and operations. Though much still remains to be elucidated, what is known is an important onward step towards that scientific precision which eventually will enable us to reduce the fatality following surgical injuries, whether inflicted by accident or by operation, to the least possible proportion.

At no very distant date, DROPSY was most commonly, in the medical mind, as it still is in the non-medical, an entity, a positive affection, to be treated as a distinct disease; whereas now even the youngest student knows that it is very rarely, if ever, otherwise than a consequence of disease in organs often seated far away from the dropsical part; and that to cure these organs is to remove the dropsy, while merely to busy ourselves with the removal of the effused fluid, and neglect the abnormal condition which gives rise to it, is truly to let the patient die untreated. Though some distinction was recognised between two most dissimilar conditions giving rise to a like state of abdominal distension, and having, on a cursory examination, many of the same symptoms depending upon the effused fluid, the pathological nature of ascites and ovarian disease, totally differing as they do, was hardly comprehended—the one most commonly a mere consequence of disease; the other a serious local malady, but little, if at all, under the control of drugs, but amenable to direct surgical interference. Until recently, the poor sufferer from ovarian disease was doomed to almost helpless distress, dragging a miserable, comfortless, and, for the most part, short existence, after the disease had once been developed; the temporary relief obtained by tapping being by no means so dangerless as many imagine; for I find, in looking over the record of operations in our infirmary—and there is no reason for believing that the ratio is materially different from that of other hospitals—that, of the last thirty-eight cases of paracentesis for ovarian disease, ten ended fatally. Now, as the result of modern surgery, ovarian disease is a curable one. If, in any of the great achievements whereby mankind has been benefited, Great Britain is entitled to a foremost place, most assuredly she may assert her claim to it in this; for her surgeons may call the operation their own. So bold was the conception, so surrounded with difficulties and dangers in the diagnosis and the execution, was the proceeding, that no wonder the world stood aghast and incredulous at the proposition, or that those who were the pioneers were denounced and subjected to obloquy for their temerity. That at first, from many causes, deaths were frequent, was unavoidable; that ovariectomy will always be one of the most important and serious operations to which a human being can be subjected, is certain; but it has now fairly won its place as equally legitimate as any other of the great operations in surgery. By it, hundreds of women in this country and in America have been restored to all the blessings of health and all the functions of life; so that the operation is now practised wherever surgery is cultivated. Even in France, Germany, Italy, and other countries which have been slow in adopting it, ovariectomy is now not very unfrequently performed. The dangers of it are constantly decreasing; for, with continued experience, what cases are fitted for operation, and what are not, is better determined; the kind of operative proceeding and all its surroundings, and the proper after-treatment, are better understood. I believe it would be no difficult task to prove that, in experienced hands, ovariectomy is a less dangerous operation than amputation of the upper thigh. Less than thirty years ago, a man who proposed ovariectomy was denounced by more than one of those who were then princes in medicine and surgery, as a dangerous lunatic. Now, in this country, it is of almost daily performance.

From time immemorial, STRICTURE OF THE URETHRA has been a terrible curse to the unfortunate sufferer from it, and—shall I add?—an opprobrium to surgery. Now, if this be not entirely removed, it is certainly immensely mitigated. For generations, one device for the relief of stricture has followed another; various forms and many materials have been employed, in instruments and chemicals, for passing along the urethra; and operations without number have been invented for enlarging its constricted and unyielding calibre; but, at the best, these contrivances have only been effectual in the least severe forms of the malady; and not unfrequently, even in these, the improvement has only been temporary; while, in the more severe and distressing cases, tedious and painful curative attempts have too frequently resulted in failure. Many of the suggestions for destroying the strictured part by escharotics, or for dividing the thickened membrane, whether from within or from without the urethra, have not been dangerless to life, and have so frequently failed in effecting a cure, that it is no exaggeration to say no practical surgeon has been satisfied with the result which he has obtained by the use of them. Now, thanks to the simple, innocuous, and, comparatively speaking, painless operation, and the ingenious instruments devised by Mr. Holt, in the great majority of cases, even those of the worst description, a speedy and permanent cure may be obtained. Wherever a passage exists along the urethra, no matter how small, and a bougie, no matter how slender, can be got along it into the bladder, I believe that, with few exceptions, the complaint can be quickly cured. I have now done the operation so many times, without, in any one instance, any dangerous or serious symptoms supervening, that I can endorse all that Mr. Holt, in the last edition of his book, has said of it. In my opinion,

surgeons have only to give it that fair trial which it deserves, to secure for it very general adoption. Were it employed in an early stage of the complaint, I believe that those dreadful and yet not very unfrequent cases, where the perinæum is riddled with false passages, and the structures burrowed with hard gristly sinuses, would no longer be seen.

During the last few years, great activity has been exhibited in OPHTHALMIC SURGERY. Our greatly improved means of diagnosis in affections of the retina, choroid, vitreous humour, and crystalline lens, since the introduction of the ophthalmoscope, is an unalloyed good, *when the diagnosis is founded upon sufficiently practical skill in the management of the instrument, and an accurate acquaintance with the precise appearances presented by the various tissues of the interior of the eyeball in a normal, as well as in a morbid condition.* To obtain this, however, in passing, I may venture to say, I suspect to require a more patient investigation than is always given; and hence, as with the microscope in the hands of the inexperienced, the instrument has not very unfrequently led to error, rather than to truth, from supposing all that appears to be seen, exists in the eye; whereas it may be merely an optical delusion, or a confounding of the really natural appearance of the normal structures with those which result from diseased changes in them. That the method suggested by O'Ferrall, of removing the entire globe of the eye when it has suffered destructive change, or when it continues in an irritable condition after mechanical injury or inflammatory action, so that its presence excites sympathetic mischief in the other one, leaving its muscles and fibrous capsule as a moveable nucleus, is a great improvement over the old plan of merely removing the anterior half of the ball, all those who have frequently practised both will readily admit; for not only is the operation far less severe, but it is far more successful in its results. I must, however, presume to express a doubt whether operative dexterity and bold manipulation have not in some instances taken the place of true surgical knowledge and acumen, and not unfrequently led to consequences the reverse of beneficial to the patient, in some of the many operations now so readily resorted to upon the interior tissues of the eyeball. I doubt not that occasional success has rewarded the operator when it might not have been achieved by the more cautious treatment of the older surgeons; but I fear, not unfrequently harm, rather than benefit, has ensued when operations have been practised upon eyes so changed by disease as to afford little probability of restoration to healthy function. Of all the tissues of the eye with which an undue liberty has been taken, almost as though it had been uselessly placed in the organ, is, I think, the iris, which, if it could complain, would, I suspect, with some justice do so. Its physiological value seems to have been unduly ignored; and, in more than one kind of operation, it is now ruthlessly, and, I fear, sometimes unnecessarily, destroyed. Thirty or forty years ago, our best and most successful ophthalmic surgeons rarely touched it, if they could avoid it. Now it would appear as though it could not be too frequently excised or torn away, whether it be healthy or diseased. Experience must determine which of the two proceedings is the best; but I must own to my judgment—perhaps some of my hearers may be disposed to exclaim, “Your prejudice”—inclining me rather towards the earlier than the more modern proceeding.*

Operations for the closure of RECTO-VAGINAL AND VESICO-VAGINAL FISTULÆ I need do no more than mention; for, as is well known, when successful, as they so often are, by rescuing the miserable sufferer from these horrible complaints, and from a life of forced seclusion and misery, in which existence is a burden to themselves and a nuisance to all about them, and restoring them to the enjoyment of companionship and activity, they are a benefit to humanity, and a triumph of modern surgical skill.

Though the introduction of LITHOTRITY is not of so very recent a date, many of those now present were in active practice before it was known, and it is only within the last few years that improvements in instruments, and the method of using them, can be said to have placed it upon a firm basis, and given it that hold upon surgeons and the public which it now possesses. I am not about to enter upon a critical examination of its advantages, as compared with those of lithotomy, otherwise than to say that, while unquestionably is it in many cases an operation to be preferred to lithotomy, I am not altogether convinced it is so infinitely superior, that in every doubtful case it should be selected, or that the mode which has sometimes been adopted in comparing the results of the two methods, is so correct and impartial, as to give an exact and reliable comparison of the true value of them. In selected cases, it may be perfectly certain there are very few of us who, were we ourselves the

* Let me not be understood as decrying operations for detaching adhesions of the iris when they will not otherwise yield to treatment, or operations for artificial pupil when necessary, or even excision of a portion of the iris when it has been lacerated or bruised in cataract operations, but rather to the frequent removal of large portions of the iris in extraction of the lens, and in glaucoma, when the objects to be achieved can be equally well attained without such destruction of important tissue.

subjects of operation, would not prefer lithotrity to lithotomy; yet I believe it to be true that in many cases the latter is the better operation of the two; and, taking everything into consideration, in comparing the results of them it will be found the ratio of recoveries after them approaches nearer than the advocates of lithotrity have sometimes striven to show. Those cases which are selected for lithotrity and do well would, so far as my experience goes, almost invariably do as well with lithotomy. In looking over the records of the two operations in our infirmary for the last sixteen years, I find that out of 111 lithotomy operations there were 97 recoveries and 14 deaths; while out of 25 lithotrity cases, 21 recovered and 4 died, showing a decided percentage in favour of lithotomy. Upon many points these records are not sufficiently explicit to allow of a very accurate judgment being formed, otherwise than it is clear that the patients subjected to lithotrity were in at least as favourable a condition for recovery as were those who underwent the cutting operation. That this high percentage of deaths after lithotrity is decidedly in excess of what it ought to be, according to other and larger returns, is certain; and were, all the details known, it might be possible to reconcile and explain the very great discrepancy between it and those of several excellent surgeons, particularly Sir H. Thompson, which are much more favourable. Still the fact remains that, as a rule, the cases which are submitted to lithotrity are in a condition far more favourable for recovery than those which are lithotomised, independent of the operations themselves, and two most important conclusions may be asserted without fear of contradiction: 1. That many persons having large and hard stones, who could not be relieved by lithotrity, do recover after lithotomy; 2. That many of those who die after lithotomy do so directly or indirectly solely in consequence of the great size of the stone. The size of the stone has, in my experience, more to do with the success or the failure of the operation, than any other single thing. Age has great influence, but the size of the stone has more; and yet it is precisely these unfavourable cases which are subjected to lithotomy, and not to lithotrity. With a small stone and a healthy young subject all experience proves lithotomy to be an operation of very little danger—a fact which ought always to be borne in mind when canvassing the respective value of the two methods.

THE REMOVAL OF THE ENTIRE TONGUE is altogether a modern surgical operation. Though for time out of mind greater or less portions of the tongue have been removed by cutting instruments, escharotics, actual cautery or ligatures, the importance of the organ in deglutition and articulation, the difficulty of reaching its base, and especially the fear of not being able to arrest the hæmorrhage, owing to the depth of the wound, the size of the arteries, and their near origin from the carotids, have not unreasonably deterred attempts at more than partial amputation of it. I believe it was Mr. Syme who first suggested an operation for its entire removal, and performed it in the presence of many members of the Association, when its meeting was held in Edinburgh. Unfortunately that patient, as well as a second, died a few days after the operation; and a solemn warning was published by Mr. Syme, who declared that the operation was so serious, that farther attempts were not justifiable, as no one could recover from it. Subsequently, I believe, in a third case, Mr. Syme was, by a like proceeding, rewarded with success; and Mr. Fiddes in Jamaica, and Dr. G. Buchanan in Glasgow, have also succeeded by the plan laid down by Mr. Syme. However, believing that the severity of the operation depended far more upon the method of proceeding than upon the mere removal of the tongue itself, I devised what I hoped would prove to be a less formidable one, and which experience has proved to be so. Up to the present time I have removed the entire tongue 19 times, and Dr. Fenwick* of Montreal has done the same operation once, without any untoward symptom following in a single instance. In most cases, the patient has not required any after-treatment, being able to sit up the following day, and in ten days to be considered well. In the majority of operations, not a drachm of blood has been lost. In two cases only has there been any hæmorrhage, and in those not more than half an ounce of blood was lost. In one, a point of hot wire, and in the other, a ligature, at once arrested the bleeding. The little constitutional disturbance which follows this operation is surprising; indeed, in the majority of cases, there is none. Now I do not for one moment assert or believe that this operation will permanently eradicate cancer of the tongue, or prevent its recurrence, any more than the removal of the disease by the scalpel in any other part of the body will secure immunity for the future; but this I do declare, that, by

affording an easy and safe method of getting freely beyond the disease, and demonstrating how very little inconvenience in articulation and deglutition is caused by the ablation of the entire organ, it will encourage much earlier resort to the operation than would otherwise be thought proper; and thus, so far as operation can do, cure the patient. The importance of the subject, and the little opportunity which there has yet been of making the method known, will, I trust, be considered a sufficient excuse for my introducing a matter in which I am personally interested.

Ever since the time of Tagliacotius, and more especially since John Hunter's immortal work on *Inflammation*, made surgeons understand the *rationale* of the union of parts newly brought together, PLASTIC OPERATIONS, as they are now commonly called, have been practised more or less frequently, and with more or less success; but I doubt if even now their value and importance is sufficiently appreciated, or the enormous benefit which can be effected by them, when every other plan of treatment fails, in those dreadful contracted cicatrices which result from burns, is adequately recognised. Every surgeon must know of such cases. I have reason for believing that in the Leeds Infirmary such cases have been, and still are, more frequently and successfully treated by operation than they are in some places; and, perhaps, more commonly than some surgeons are aware of.

In tabulating the records of operations done in the Leeds Infirmary during the past sixteen years, I find one hundred and seventy-two cases of plastic surgery entered. Of these, none were on the lower extremity, forty were on the upper; of which thirty-two were cured, six relieved, and two failed. These were all contractions of the axilla, whereby the arm was tied down to the side; of the bend of the elbow, the fore-arm being greatly contracted on the arm; or of the wrist, palm of the hand, or fingers. Many of the cases were extreme and complicated, more than one contraction existing; fifty were of the neck and face, whereof forty-one are entered as cured, seven as relieved, one no better, and one as dead: many of these, also, were extreme, requiring more than one operation. Several were operated upon by the late Mr. Teale, and supplied the data for his papers on Plastic Surgery. Two cases were of the chest, both being relieved. Staphyloraphy was performed four times, two of the cases being cured, and two greatly improved. In one, a rhinoplastic operation improved the nose. The remaining seventy-six cases were either of the cheeks, eyelids, or lips, the majority being single or double hare-lip operations. It is, however, of cicatrices following deep burns that I wish more especially to speak, as I believe every other kind of operation than the transplanting of normal skin, to be not unfrequently worse than useless. That occasionally some benefit may follow the stretching of the tender and inelastic new cutis, and the hard, rigid, fibrous bands under it; the dissecting the skin from the subjacent tissues, the simple division of it, the entire removal of it, and allowing the gap so caused to granulate and cicatrise afresh when on the stretch; or the attempt to form new cutaneous tissue by metallic setons, and various other contrivances, I am not prepared to deny, after what has been stated by surgeons to occur; but in my experience it has not been so, and I cannot but suspect that, if we had a fair account after the lapse of two years of most of those cases which at first appeared to have been benefited, we should find the condition of the parts very much less favourable than at first they promised to be, for almost invariably contraction in the new tissue gradually goes on until a hard, unyielding cicatrix is again formed, as bad as it ever was. John Hunter long ago wisely remarked that Nature was more chary of forming new skin, as though it were more difficult for her to do it, than almost any other tissue in the body.* When she does form new skin, after the entire substance of the dermis and subcutaneous tissue has been destroyed, it is, as every surgeon knows, a very poor apology for the original structure. The only effectual method for obtaining a cure, I believe to be the substitution of a portion of the neighbouring sound skin for the cicatrix. That the attempt is not altogether free from risk is certain; for, if the flap should slough, as it may do, the patient may be rendered worse than he was before. But in every operation there is some risk: the deformity to be remedied is often so distressing and serious, the cure in many cases is so complete, and the proportion of failures to cures is so small, that I am strongly impressed with the propriety of operating in every case where a satisfactory flap of sound skin can be obtained. The operation is so important, and frequently so tedious, that it is not to be undertaken without due consideration of all the proceedings to be adopted. Some of those which are necessary to success I will shortly call attention to in the JOURNAL.

Every surgeon knows but too well that FRACTURES OF THE SPINE are

* See a report of the operation in the *Canadian Medical Journal* for December 1868; see also the *Lancet* for November 14th, 1868, where Mr. Sampson Gamgee relates a case in which he removed the tongue by a different proceeding—Rignoli's; terrible hæmorrhage occurred at the time of operation, and also subsequently, the patient dying of exhaustion and sloughing of the parts. During the last week, Dr. Bell of Ottawa, Canada, has favoured me with a visit, and informed me of a second successful case which he and Dr. Fenwick have just had.

* "Skinning is a process in which Nature is always a great economist, and without a single exception."—Hunter's Works by Palmer, vol. iii, p. 501.

not only amongst the most fatal, if not the most fatal, injuries we have to do with; but also that perhaps they are those for which surgery has hitherto done the least. Though we occasionally hear of a patient who is supposed to have suffered from a fracture in some part of the spinal column recovering, this exception to the usual course is so very rare, as only to prove the truth of the rule; and in some of the alleged instances it is permissible to inquire whether the symptoms may not rather have resulted from concussion of the cord, effusion of a small quantity of blood in its sheath, twisting of its ligaments, or some similar condition, than from fracture of, and compression by, displaced portions of the bones. I do not mean to question the possibility of recovery taking place after fracture of the spine, even though nothing be done; indeed, there is sufficient evidence to prove that it has; but that it is to be looked for in any given case, is more than any surgeon would anticipate. So hopeless are these injuries, that Sir Astley Cooper more than once declared, if one patient out of one hundred cases can be saved by operative interference, it is one saved from death.

I believe Mr. Henry Cline was the first who actually trephined the spine, though, as Dr. McDonnell in his two excellent pamphlets has pointed out, he was not the first to discuss the propriety of its being done.* The suggestion was first made by Dr. James long before,† and also by Louis; but I cannot find from the passage in James' *Dictionary* that he had either seen or knew of the operation having been done; or, from the report in the *Archives Générales*, that Louis did more, in the case of a fractured spine by a musket-ball, than introduce his finger into the wound whence a ball had been extracted, and take away some loose fragments of bone, though both of them perfectly understood the *rationale* of the operation; and Louis actually discussed with M. Duplessis the propriety of making an aperture when there was not one.‡

Though Mr. Cline's patient died, the case served to direct much attention to the operation; and indeed to divide surgeons into two parties as to the propriety of the proceeding. Opposite opinions were expressed with very great bitterness, into which personal feeling largely entered. Sir A. Cooper expressed himself strongly in favour of the operation,§ in which he was supported by several excellent practical surgeons, such as Benjamin Bell, Tyrrell, South, and others. (To these names may now be added that of one of the most distinguished living authorities on the structure and functions of the medulla spinalis, Dr. Brown-Séquard.) Sir C. Bell, John Bell, and Alexander Shaw, on theoretical grounds alone, denounced it in such unmeasured terms as to show that at least as much feeling and prejudice as surgical knowledge controlled their judgment.|| Though the operation of trephining the

* *A Case of Fracture of the Spine*, in which the operation of trephining was performed, with observations, by R. McDonnell, M.D., F.R.S., etc., 1865; *On the Operation of Trephining in Case of Fracture of the Spine*, by R. McDonnell, M.D., F.R.S., 1866.

† "If the spinal marrow is wounded, death follows inevitably. Though, as it may seem cruel not to attempt the relief of one under the unhappy circumstances, the surgeon should lay the injured part bare by the knife, and elevate the fragments, which press upon the medulla, in a proper manner; or, when they are quite loose, extract them in a proper manner; then let him cleanse the wound thoroughly, and apply balsamic medicines, using the napkin and scapullary. He must continue this until the wound heal or the patient dies" (*James' Medicinal Dictionary*. London: 1745. Vol. ii. *Fractures—Fracture of the Vertebrae*).

‡ *Archives Générales de Médecine*, 1836, tome ii, p. 421.
§ "Mr. Henry Cline was the only person who took a scientific view of the accident. He considered it to be similar to fracture with depression of the cranium, and to require that the pressure should be removed; and as the cases had proved so uniformly fatal, he thought himself justified in stepping out of the usual course, with the hope of preserving life. He made an incision upon the depressed bone, as the patient was lying on his breast, raised the muscles covering the spinal arch, applied a small trephine to the arch, and cut it through on each side, so as to remove the spinous process and the arch of the bone, which pressed upon the spinal marrow. The only case in which he tried it did not succeed: and, unfortunately, he did not live to bring his opinion to the test of experience to warrant a decided judgment being formed. He was blamed for making this trial. I am not sure he would have been ultimately successful; but in a case otherwise without hope, I am certain such an attempt was laudable."

"I beg the reader to observe this operation is not mine; that I have expressed some doubt of its ultimate success, but I wish the trial to be made as the only means of deciding positively on its utility; and if it saves a life in one hundred, it is more than I have yet seen accomplished by surgery" (Cooper, on *Fractures and Dislocations*, 4to, p. 516).

Referring to the above passage in Cooper's work, Sir C. Bell says: "The man must be already dead whose condition is not made worse by such an operation as this. What sort of schooling must he have had who does not believe that a man would be the worse for having a bone dug out from around the spinal marrow?" (*Observations on Injuries of the Spine*, by Charles Bell, 1824, p. 22).

"Such are the symptoms, and such frequently the manner, of our patient's death; and, notwithstanding the bloody operation described in books of making incisions, finding the fractured or luxated bone, and drawing it out by the spine or splinters, there is nothing practicable; and these very ignorant directions, given upon the highest authorities, are dangerous to none but boys. The cutting into the fractured vertebra is a dream." (John Bell, *Principles of Surgery*, 4to, vol. i, p. 626).

|| Mr. Le Gros Clark, in his *Lectures on Surgery*, just delivered at the Royal College of Surgeons of England, expresses an opinion decidedly adverse to the operation.

spine has occasionally been done in this country, in France, and Germany, and still more frequently in America, the statement will probably be regarded as near the truth that, from one cause or the other, the great majority of surgeons have never entertained a sufficiently favourable opinion of the operation to induce them to perform it. For many years it seems to have been almost forgotten. Yet I cannot but think this neglect has resulted more from submission to habit, to traditional authority, and a want of a due consideration of all the facts connected with the subject, than from a full and careful consideration of them. Doubtless the almost uniform fatality after fracture of the spinal column has greatly tended towards inclining surgeons to regard operative interference as useless.

Dr. McDonnell, in the first of the two pamphlets to which I have referred, has collected all the cases he could find recorded where trephining of the spine had then been performed. These are twenty-six in number, in seven of which, he says, life was preserved for some time. Since then, Dr. McDonnell has operated upon a man whose life was certainly prolonged by it, and in whom, for a time, marked improvement took place. I have operated upon four men, three of whom died, the injuries, as shown by *post mortem* examination, being such as not to allow of recovery taking place; but the other man, who most assuredly, judging from all the cases I have seen of fractured spine, must shortly have died, recovered, and lived for upwards of two and a half years after the operation, which was done August 1st, 1866. He continued in excellent health: though weak and partially paralysed in the legs, he had full power in the upper extremities. His condition at the time of the operation was most unfavourable; and after it he was most unfortunate, for he had a very severe attack of hospital gangrene, which was then prevalent in the Infirmary; this caused very extensive sloughing over the sacrum and where the wound had been made. Dr. Gordon of Dublin has had an equally successful case.* Dr. Brown-Séquard informs me of a case he saw in 1867, in Western New York State, where Dr. Potter had, with most satisfactory results, operated. Though the spinal cord had been completely crushed, life was saved in an enjoyable condition. In May of this year I operated upon a third case, and again in June upon a fourth. Thus out of 33 cases of fracture in various parts of the spinal column, where trephining has been resorted to, life has been permanently saved in at least three of them, and considerably prolonged in several others; while, in some who died, marked improvement immediately followed the operation. Moreover, in no one of these successful cases was the condition of the patient favourable. In all of them the accident had occurred some time before the operation was performed, so that pressure on the spinal marrow had been prolonged, and much mischief thereby done. In Dr. McDonnell's case, the injury was inflicted five weeks before the operation was performed. In my patient, who recovered, as long a time had elapsed. In my fourth case, the operation was done on the tenth day after the injury; while, in Dr. Gordon's, two months had actually intervened between the fall which occasioned the paralysis and the operation. I am aware this very length of time may, by those who are opposed to the operation, be adduced as an argument against it, and as favouring the assertion that these patients recovered in spite of the operation, rather than in consequence of it. However, before arriving at such a conclusion, I would venture to advise those who are inclined to use it, to make themselves acquainted with the details of the cases, when I shall be much surprised if they should continue to do so. If so, I should merely reply that if such a mode of arguing were allowed, it would render all observation useless. It would be a mere assertion, contradicted by every analogous fact. If Sir A. Cooper's experience of these cases, when left to themselves, be true (and that it is so I believe all who have seen many such cases will coincide in), then I would declare the success which has attended the operations lately done, is as satisfactory evidence of the propriety of them, in suitable cases, as is that for the propriety of trephining the skull when fracture and depression of it have happened.

The three great arguments which may be adduced against the operation are:

1. The difficulty in diagnosing between those cases in which the operation may be useful, and those in which it cannot possibly afford relief, owing either to the extent of the fractured bones, the impossibility of removing the pressure, or of remedying the mischief which has already been inflicted upon the medulla spinalis or to other organs, as in my fourth case, where a good deal of blood had been effused about both, and within one, of the kidneys. That this is a serious question is undoubtedly true; but it is almost equally so in fracture of the cranium and many other dangerous injuries involving important operations. If we are to be deterred from operating in every case which is not free from doubt, we must abandon many operations which all agree ought

* *Medico-Chirurg. Trans.*, vol. xlix, p. 21.

to be undertaken. It is a good argument for putting us on our guard, and for inducing us to carefully watch and minutely investigate every symptom; but it is not so for prohibiting operative interference, provided this be based upon sound anatomical and pathological knowledge. I believe careful attention and extended experience will enable us, in fracture of the spine, to determine with as much accuracy upon what cases are fitted for trephining and what are not, as it has done in fractures of the skull, and in selecting such cases of ovarian disease as may be submitted to operation, and such as ought to be let alone.

2. The position of the fractured bone often renders it impossible to reach it. It is said, with some truth, that commonly it is by the body or bodies of one or more vertebræ being broken and displaced, that pressure on the front of the medullary cord is caused; and, as this cannot be removed, the mischief will not be relieved by merely taking away the arches and spinous processes behind it. No doubt this is correct in many cases, but it is not so in all, and possibly not so commonly as is supposed. It not unfrequently happens when the fracture is caused by direct violence, as in this district it often is (and likely enough in others), applied to the part itself, as by the falling of stone or earth in quarries and coal-pits, when the man is in a bent position, that the arches are broken and depressed upon the cord, causing pressure of it, precisely as a piece of depressed skull presses upon the brain.* Now, why the elevation of the bone should not relieve the pressure and its effects in the one, as it is expected to do in the other, I am at a loss to conceive. Such also, I presume, will be the effect where the pressure is caused by effused blood, rather than by depressed bone. In the cranium, if blood be effused under the dura mater, even though we might not think of dividing the membrane, we should not hesitate to elevate the depressed portion of bone lying over the effused blood, in the reasonable hope of relieving the pressure, and so in the spine. If the blood be external to the membrane and immediately under the bones, the pressure would certainly be more effectually removed in the spine than in the cranium. It must also be remembered that in many instances it happens, even when the fractured and displaced portion is the body of one of the vertebræ, that the offending piece of bone may be small and not greatly displaced, so that, by removing the counter-pressure caused by the arches, which, perhaps, may also be displaced, the narrowing of the canal, though mainly caused by the anterior pressure, may be effectually removed. As the cord does not completely fill the bony canal, is not tightly strung in it, and is not inflexible, there is no reason to suppose that it cannot recover from a slight displacement in any direction, or that it will not accommodate itself to its altered position, provided the calibre of the canal be not materially lessened, and the cord itself have not been injured. The brain recovers from temporary pressure, and I see no reason why the spinal cord may not equally do so. Indeed, we have ample proof that it does, in the frequent recoveries after not only lateral, but the most excessive and acute angular curvatures of the vertebræ. When disease in the bones has ceased, we find the functions of the distorted cord are as perfectly performed as they are in the straightest vertebral columns. The degree of displacement in such cases of extensive caries of the vertebræ is often far greater than can occur in recoverable cases of displacement by injury.

3. Destructive inflammation of the medulla and its membranes set up by the operation, has been declared to be an almost necessary consequence of trephining the spinal bones, and has doubtless deterred many surgeons from venturing upon it. Upon this Sir Charles Bell and Mr. Shaw were particularly emphatic. Yet experience has proved that to a great extent the fear is imaginary; for, if the operations which have been performed have not been sufficient to remove all other objections to the operation, they certainly have been sufficient to prove this one has been very greatly exaggerated. It must not be overlooked that, owing to well known anatomical arrangements, the spinal cord is far more favourably placed than is the brain. The dura mater in the cranium, owing to its intimate connection with the bones, is very much more likely to suffer when fracture occurs than it is in the vertebral column, where it is not in close apposition with the bones; and I need not remark upon what every surgeon so well knows, that upon its integrity

depends the condition of the arachnoid and pia mater. If it be opened, they most probably will become inflamed and suppuration follow; if it be not injured, their normal condition may be maintained, and the brain and cord substance escape inflammatory mischief. In my three cases where death followed, careful examination showed no trace of inflammatory action about the cord or its membrane.

It has been asserted as a reason why the operation should not be performed, that it is a very difficult and painful one; that the wound would not heal, and that, even though the cutaneous and muscular one should do so, the bones cannot be reproduced, and thus the spine will be left too weak to support the head and shoulders. These are imaginary fears which have been proved to be altogether groundless. That the operation requires care is perfectly true, but so do most other important operations in surgery. It is neither so delicate, nor involves so much anatomical knowledge as many which are constantly undertaken. It is not a very painful one; the parts which are divided are not particularly sensitive, and even if they were so, there is, in the majority of cases, no reason why an anæsthetic should not be given. Whenever the fracture is below the middle dorsal region, so that respiration and the heart's action are not interfered with, there appears no reason why such may not be administered. Chloroform was given in Dr. McDonnell's and Dr. Gordon's cases, as it was fully in three of mine, and partially in the fourth. The same argument would forbid nearly every operation. In all the cases which have recovered, the wounds have healed up well and quickly, and in the three which have permanently recovered, no weakness of the spine has been complained of, or is at all apparent. The man upon whom Dr. Gordon operated is following a mechanical occupation, and he upon whom I operated could easily have done so, as his arms and head were perfectly supported, and moved; indeed his sister, with whom he lived, declared he was "wonderfully strong in his upper parts;" while the man in New York State, operated on by Dr. Potter, enjoys life. Moreover, there is great reason to believe that breaches to a moderate extent in the vertebral arches may be filled, if not with ossific deposit, at least with strong fibrous tissue. This supposition is strongly supported by experimental inquiry upon animals; for Dr. Brown-Séquard has been good enough to show me preparations, which he has taken the trouble to bring from Paris, of the spinal columns of cats and dogs, where, during life, he removed some of the vertebral arches and spinous processes, and after death found the spaces partially filled with deposit of bony material. The want of ossific deposit after trephining the cranium is not regarded as an argument against the operation where a portion of the skull has been depressed. Other arguments *pro* and *contra* could easily be brought forward, were I writing a treatise upon the subject, which I am not, and for which this is neither the time nor place; but I hope I have said sufficient to induce surgeons to consider the subject impartially, and to give the operation a fair trial. That success will be frequent, I do not pretend to anticipate; the nature of the injury does not allow this to be hoped for; the fatality after similar operations upon the cranium alone would not justify this, but if one case in twenty should be successful, as I think may fairly be anticipated, it would still be great gain; for Sir A. Cooper declared that if one in the hundred recovered, it would be the one snatched from death. So far, out of thirty-three operations, permanent success has been obtained in three cases, and prolongation of life in several others.

ABNORMAL CONDITIONS OF JOINTS and their treatment form no small or unimportant part of a surgeon's work. From time immemorial they have done so; and there is no reason to think they will not do so in the future. Disease in the articulations has probably been the cause of important surgical interference almost as frequently as disease in all other parts of the body put together. Probably more limbs have been amputated in consequence of disease in, or accidents to, the joints, than from all other causes conjoined. Hence, whatever improves the surgery of the articulations, is an immense gain. Not to dwell upon the gradual but immense advance in the surgery of rest, which for fifty years has been steadily growing, and which really was the true cause of much of the success of Scott's treatment, though he himself was not fully aware of it, I think I may unhesitatingly claim your attention to two of the greatest advances in surgery—the reduction of dislocated limbs by manipulation, and the excision of such joints as are hopelessly diseased, instead of amputation of the whole limb. These two great improvements could hardly have been made prior to our own day; for until anæsthetics were discovered, manipulatory reduction of dislocated limbs could only have been practised in very exceptional instances, and excision of joints would not have been frequent.

Here I would venture for one moment to digress, to point out how the unity of all parts of our profession is demonstrated, and the absolute necessity there is for those who pursue one branch to be educated in all. Nature has constituted vitality one; and we who are the handmaids of Nature, helping her in her distress, putting her in the right

* Even complete separation of the bodies of the vertebra does not necessarily destroy the cord. I have recently had a very interesting case which proves this. A man on the roof of a building nearly forty feet high slipped, and fell transversely upon some iron palisading. Two of the spikes penetrated the long muscles of the back, fracturing the transverse processes of two lumbar vertebræ, and the floating ribs on each side, passed into the abdominal cavity and wounded the liver and other viscera. Yet the poor fellow retained complete sensation and motion in both lower extremities, and during the night actually got out of bed and walked round it. After death, the fibro-cartilaginous body between the second and third lumbar vertebræ was found to be completely divided, and the spinal and transverse processes separated, the only connecting structures between the vertebræ, being the ligaments. This specimen, with three others, taken from the fatal cases where trephining had been performed, are exhibited in the museum. In more than one instance, it will be seen that though the bodies of the vertebræ have been separated from each other, there has been no displacement of them.

when she is wrong, and assisting and encouraging her when she is right, must deal with her in her entirety if we would be good medical men. To understand one condition, and to ward off the other, wherever the disease which causes it may be seated, we must know all, and discard as unphilosophical and dangerous errors, mere specialities. Anæsthetics, when first introduced, were regarded as a blessing, by the saving of pain; but none of us then fully recognised how greatly they would extend our surgical power, by enabling us to accomplish so much more than had ever been done before. True it is that dislocated bones have been put into their sockets from time to time by rude movements; but such attempts have been conducted on no rule: in the great majority of cases they altogether failed, and when they did succeed, it was more frequently by brute force or chance than by skill.

In the whole round of surgery, I know of nothing more perfect than the reduction of a dislocated limb by manipulation, as it has been not inaptly called. To those who have only seen a dislocated hip, for instance, replaced by the common method of extension and counter-extension with pulleys, and for the first time witness a few painless and comparatively gentle movements made with the dislocated thigh by the unassisted surgeon, the process very likely not occupying a minute, and find the limb restored to its normal condition, the proceeding must appear almost like magic. To Dr. Reed of Rochester, U.S., we are, I believe, indebted for first directing attention to this plan, which he pointed out as applicable to two of the four varieties of hip-joint dislocation. The method is, however, capable of a far more extended application than Dr. Reed appears to have been aware of. In our Infirmary, we have reduced not only every form of dislocation the hip is liable to, but those of the shoulder also. I have practised it in a man seventy-three years old, and I have assisted my colleague, Mr. T. P. Teale, to do so in a child of only two years. My own cases of success number upwards of twenty, and each of my colleagues has had several. Many cases have been reported by Mr. Birkett in Guy's; Mr. Hutchinson in the London Hospital; and by other surgeons in hospital and private practice, so that the general value of the method may be regarded as fairly established. I may mention that its successful performance mainly depends upon attention to two things—I, our anatomical knowledge, enabling us to place the bones and muscles in the most advantageous position; and, 2, on bringing the muscles into a proper condition, in which they shall have neither too much nor too little power of action, for either state will prevent success. If their action be too great, their resistance cannot be overcome; on the other hand, if it be entirely suspended, the head of the bone will not be drawn into or maintained into its natural cavity. Hence the anæsthetic should only be carried far enough to suspend volition and spasmodic action, leaving some little power of perception and contraction. When in this semi-passive condition, the limb should be firmly seized, put into gentle rotary motion in such a direction as our knowledge of the attachment of its muscles tells us, when they act, will cause them to draw the head of the bone towards its socket, and then, by a sudden and more forcible action, they are roused into quick contraction, by which the bone is partly thrown and partly pulled into its socket. To every dislocation of the ball and socket-joints, this simple method is applicable; to the hinge-joints, it is not equally so.

Though excision of the knee, shoulder, and elbow-joints, was introduced in the latter part of the last century, the operation was so little practised, and took so little hold that, as a practical operation, EXCISION OF JOINTS may fairly be claimed as of recent date. Mr. White* of Manchester appears to have the honour of being the surgeon, in 1768, who first successfully excised the shoulder-joint, and, on theoretical grounds, to have suggested excision of the hip-joint, though he never performed it. It was, so far as I know, Mr. Park of Liverpool, who first performed excision of the knee-joint, which he did in July 1781, on a seaman who, after a long and dangerous illness, recovered so completely that he was reported to be able to perform the duties of a common sailor. In a second operation, the patient died. These two cases appear to have constituted Mr. Park's experience. Soon after the publication of the successful case, the two Moreaus, father and son, in France, excised, with more or less success, not only the knee-joint, but the shoulder also. A few excisions were done in France and Germany. The results, however, do not appear to have been very satisfactory, and for many years the plan seems to have sunk into oblivion. In 1827, Mr. Crampton of Dublin wrote in favour of the operation, after which a joint was now and then excised; but still the feeling against the operation was so strong, that it was regarded as almost forbidden, especially of the knee. Mr. Syme† published a work on Excision of Joints, in which he spoke in favour of excision of the shoulder and elbow-

joints, but forbade excision of the wrist and hip, and spoke doubtfully of the knee-joint.* During the last thirty years, and especially the last five, excision of joints has come more and more into vogue; and at the present day many surgeons practise and advocate it. Mr. Jones, Mr. Price, Sir W. Fergusson, Professor Humphry, and others, may be named as advocates of it. Still, however, in many hospitals, it is not frequently performed; and many surgeons look upon excision—except, perhaps, of the elbow—with considerable distrust, and choose amputation as the preferable operation, believing the danger to the life of the patient to be less; and thus agree with Samuel Cooper, who, in his *Dictionary of Surgery* (6th ed.), says, after reviewing the operation: "I see no reason for preferring excision to amputation. No doubt, more limbs might be saved by the practice than by that of amputation; but more lives would be lost."

One of the latest English writers on the subject, who even proclaims himself an advocate for excision, says: "I believe excision of the knee to be a more severe operation than amputation, more immediately dangerous to life, and requiring a longer time for convalescence."† Dr. W. Mac Cormac of Belfast, in a recent article, where he compares the results of excision of the knee with those of amputation of the thigh (speaking, however, it should be stated, more from the cases which he has tabulated from the practice of other surgeons, than from his own experience), declares excision of the knee to be at least twice as dangerous an operation as amputation of the thigh.‡ On the other hand, in addition to the surgeons whose names I have above mentioned as in favour of the operation, must be placed that of Mr. Butcher of Dublin, who speaks in the most decided terms of the advantages and comparative safety of excision of the knee. Out of seven cases upon which he has operated, six made good recoveries; only one proved fatal.

I think I am hardly speaking too decidedly when I say that nearly all surgeons who have practised excision of joints agree that, whatever be its merits so far as the lower extremity is concerned, there can be no doubt of its advantages in the upper. I have now performed excision of joints so many times with success, and with so few failures, that, were I to speak only from my own experience, I should, in suitable cases, give an almost unqualified opinion in favour of excision of nearly every joint in the body, as compared with the corresponding amputation necessary to get rid of the disease; while I believe my colleagues, from their experience, would hardly be disposed to speak quite so strongly. I have successfully excised the shoulder-joint three times. The elbow-joint I have removed eight times. Five of the cases recovered with useful arms. Two of the cases died, one being a woman who, when nearly well, was carried off by erysipelas, then prevalent in the infirmary; the other was a man with compound comminuted fracture of the joint, caused by a fall from a great height with bales of wool; these fell upon him, and crushed his body: peritonitis was set up, and, I believe, was the cause of death. The remaining case was one of partial excision, which in the end required excision of the whole joint, and then did well. Twice I have removed the wrist-joint according to Lister's excellent method. One case did exceedingly well; the other required amputation, the metacarpal bones being found extensively involved. The hip-joint I have excised six times, with only one death, and that from an attack of diphtheria seizing the boy three days after the operation. One operation, where long continued suppuration of the pelvis had previously existed in a bad subject, was followed by great suppuration and very slow healing of the wound. The other four patients recovered quickly and well, with hardly any lameness, a high-heeled shoe being all that is required. I have excised the knee eight times, with uniform success. Some of the patients walk with no other lameness than a stiff knee. In two of these cases, the condition is quite equal to that reported of Park's sailor. One man gains his living by selling coals, a sack of which he commonly carries on his back. Excision of the various bones of the foot, one, two, or three being removed, where awhile ago amputation above the ankle would have been adopted, I have done and seen done very frequently, with uniform success, so far as immediate recovery is concerned, and, in the great majority of cases, with a permanently useful limb; but, to ensure this, the greatest care

* The feeling against excision of the knee-joint was doubtless increased by the ill success of those who practised it; for not only were many deaths caused, but long and tedious recoveries often only resulting in misshapen and useless limbs, so that no one appears to have realised anything like the signal success reported by Park; and thus suspicion was raised in many minds that the extraordinary usefulness of the limb in that case had been overstated. The unfavourable feeling towards the operation was certainly not lessened by the fact that in more than one instance where excision of the knee-joint had been done in children who recovered, the growth of the limb was arrested, and thus, as they grew up, one leg increased with the body, while the other remained that of a child.

† Holmes's *Surgical Diseases of Children*. 8vo. London.

‡ "Observations on Amputation of the Thigh and on the Merits of that Operation, as compared with Excision of the Knee." By Wm. Mac Cormac, A.M., M.D. *Dublin Quarterly Journal of Medical Science*, August 1868.

* White's *Cases in Surgery*, 1770.

† A *Treatise on Excision of Diseased Joints*. By James Syme. 8vo. Edinburgh: 1831.

must be taken to remove every affected bone. If this be not done, the probability is great that, in the end, amputation will be necessary. From not being sufficiently careful on this point, in some cases, Syme's or Chopart's amputation has been required before the patient could be said to be well.

Thus, then, I think I am justified in declaring that, in my experience, excision of joints has been most satisfactory, not merely as regards the immediate effect of the operation, but in the after-condition of the patients. Their power of locomotion, when the lower extremity is concerned, and the retention of the hand and arm, with all their varied movements, in full, as compared with their maimed and comparatively helpless condition when amputation has been performed, even though supplied with the best apparatus the skilled mechanic can furnish, contrast most favourably. The records of our Infirmary show that, in the last sixteen years, sixty-six excisions of joints have been performed. Of these, five died; one was relieved; in two, amputation was subsequently done; fifty-eight recovered. Of the sixty-six, thirty-eight were excisions in the upper extremity, and twenty-eight in the lower. Six of the upper extremity were primary, for accidents. Of these, five recovered, the average age being $22\frac{1}{4}$ years; the man who died was 43 years old. Of the thirty-two pathological excisions of the upper extremity, thirty recovered. One, aged 30, was greatly benefited temporarily; amputation became necessary, which also relieved for a time, and was followed by death from phthisis. One, aged 55, died from exhaustion after erysipelas; while the average age of the thirty who recovered was $17\frac{3}{4}$ years. Of the lower extremity, only five were primary excisions for injury, being all of the tarsal bones; four of them recovered, the average age being 37; one died, aged 34 years. The pathological excisions were twenty-three, of which nineteen recovered, the average age being 17 years; two were relieved, of the average of $22\frac{1}{4}$ years; two died, of the average age of 19 years; and a boy, aged 13, died of diphtheria, after excision of the hip-joint; the other, aged 25, after excision of the knee. These statistics do not, I think, contrast unfavourably with those of corresponding amputations.

The success of joint-excisions, I am convinced, very greatly depends upon the selection of suitable cases for the operation, the manner in which this is performed, and the after-management of the case. If the disease be principally in the synovial membranes, ligaments, or cartilages, or if the bones be involved only to a moderate extent, and that owing to the disease having extended from the first named structures to them, the whole disease may be extirpated without the loss of much bone, and that which is left will probably be healthy. On the other hand, if the bones be the parts which have been primarily diseased, or are extensively so, it is doubtful if the whole of the parts involved can be removed; so that the mischief may still go on; sinuses leading down to carious bone are formed; these give rise to pain, inability to move, and exit to a large discharge of pus, by which the patient is worn out, or so much bone requires removal (as I have seen done), that the medullary canal is laid open and involved in the suppuration, by which pyæmia, in all probability, will be induced, and the unhappy patient soon carried off; or, should he struggle through, the limb will be rendered useless, from great shortening or want of firm union, if the excessive suffering does not necessitate amputation. If the subject be young, and the epiphyses be removed, there will be great danger, if not certainty, that the development of the limb will be arrested, as has happened not unfrequently. A very striking and interesting illustration of this result has fallen under my own observation in a girl fifteen years of age, whose knee had been excised when she was six years old, by which the growth of the thigh, as well as of the leg and foot, had been arrested; so that, when she was presented to me, she had one limb that of a well-grown girl of fifteen, and the other that of a child six years old. Moreover, the union was very loose and imperfect, and at so bad an angle, that the limb was an useless burden. I re-excised the parts, and got good bony union, with the limb perfectly straight.

A second most important consideration towards obtaining success is, I believe, not to make the wound in the soft parts larger than necessary. This is a point too often not attended to, and incisions far larger than necessary to allow of the bones being removed are often made. Now, I consider that any division of parts larger than is necessary for the section and removal of the diseased bone, without any rough handling, is a direct evil unnecessarily inflicted. Such large wounds lead to greater hæmorrhage, to greater danger of pyæmia, and to greater drain upon the system; for, as they invariably suppurate, the larger the wound, the greater is the suppuration; and thus, at the best, the recovery is thereby rendered more prolonged.

The after-treatment of the limb is of the utmost importance; though I cannot help thinking too great stress has been laid upon it, in every case at once getting the limb into an immovably fixed and often dly extended position, and that very often a different one from what,

possibly for many months, it has been retained in. The knee is the only joint I care immediately to put into an extended and fixed position, and even that much less rigidly than is said to be necessary.* A few days before the operation, I have a piece of strong firm sole-leather, extending from the trochanter to the heel, and broad enough to encircle three-fourths of the limb, well soaked in water, and accurately moulded to the sound leg, upon which it is allowed to dry. Upon this splint, immediately the wound has been closed by iron sutures and wet lint, I lay the operated one, with a little padding of cotton-wool, which protects the limb and absorbs the discharge. Two sand-bags, placed on each side of the thigh and leg, are sufficient to keep the whole limb steady. This I find to be far more comfortable to the patient, and to keep the limb in a better position than the wooden box of Jones, Price, Butcher, and others, which, I think, has a tendency to tilt the end of the femur forwards, and the tibia backwards, and so to assist in union taking place at an angle, to which there is already a tendency. After excision of the hip and the elbow, I do not confine the limb in any apparatus. There is very little disposition to move it. After excision of the elbow, I commonly simply lay the limb in a semiflexed position upon a pillow. Children, after excision of the hip, I allow to lie in the same bent position in which they have almost invariably lain before the operation. After two or three weeks, or when the wound has nearly healed, I slowly bring the limb down by means of graduated weights suspended by the ankle. Union, whether by bone or ligament, does not take place before this time; and in the meanwhile the patient rests much more comfortably in the position to which he has been accustomed, the wound heals much more readily than it would do in the constrained one of full extension, and strength is more quickly gained.

It is yet a moot question whether, in excision of the knee-joint, the patella, supposing it not to be implicated in the disease, should be left, or it should in all cases be removed. Mr. Butcher, Mr. Holmes, and some others, are very decided in their belief that in every case it should be taken away. To determine this question, I have not removed it in three cases; in two, where the cartilaginous surface was diseased, I have removed the whole inner half of it by a longitudinal section; and in the remaining case I have taken it away altogether. Indeed, in one case, which had originated in a fall upon the knee, the patella itself had been the chief seat of the disease, and had in a great measure disappeared. My mind is not fully made up on the question; but I think, when the patella has been altogether taken away, the recovery has been somewhat more speedy, and the limb has been more slightly afterwards. But, on the other hand, where the patella has been left, I think that the ankylosis has been firmer and the limb stronger, though the patella forms an ugly protuberance. Provided the epiphyses are not removed, I see no objection to excision, and much in favour of it, in children. Youths and young adults are the most favourable cases. After thirty-five years of age, each year puts the patient in a less favourable position for the operation; though even then, all other things being favourable, I would not hesitate to perform excision. I cannot but hope and believe, as cases are well selected, and due care taken in the operation and after-treatment, the plan will grow more and more into favour, as its success becomes demonstrated; and the long delay, which is now allowed before the operation is performed, during which the pain and discharge enfeeble the patient, will be considerably shortened; by which, though possibly some patients may be subjected to excision of a joint who might have recovered by ankylosis, I am by no means sure even such will not have been gainers by the operation; while I am confident many others will be saved a vast amount of misery and confinement, and be restored to health and activity, who otherwise would not be.

I need not remind this assembly, so learned in all that relates to professional lore, by what slow steps our forefathers progressed in attaining that knowledge and practice by which BLEEDING FROM A WOUNDED ARTERY is now, in ordinary circumstances, so easily arrested; but the mere student of the present day practice alone, who, seeing a divided or open artery simply tied by a thread, and the hæmorrhage at once cease, likely enough considers the process so easy as almost to have been intuitively adopted even in the earliest times, should refer to works of a former day, when he will find that, ever since surgery has had an existence, down to the penultimate generation, the fear and danger of loss of blood from an open blood-vessel have been a matter of supreme difficulty, and directly or indirectly, by operations which have not been undertaken from a fear of fatal hæmorrhage, or which have been done in order to avoid this catastrophe, have, perhaps, inflicted more misery, distress, and loss of life upon mankind than anything else in surgery. He will then find how limbs were burnt off, and how tumours were sawn away by hot chains; how constantly actual and potential cauteries were in liberal employment in every surgical operation; and how one never-

* Butcher, *On Excision of the Knee-joint.*

failing styptic after another was invented, lauded, and abandoned, merely from this difficulty. "It is really this accident of hæmorrhage," says John Bell, "that has retarded our profession for ages; for the ancients, ignorant of the ways of stopping hæmorrhagies, did not venture to cut out the most trivial tumour, or they did so with fear and uncertainty. They performed these operations slowly and imperfectly, with burning irons or ligatures, which we now perform rapidly and safely with the knife. If they ventured to amputate a member, it was only by cutting, after it was gangrened, among the putrid flesh. They merely separated parts that were already dead and bloodless; so great was their abhorrence of blood."* It was not until the middle of the fifteenth century that Ambrose Paré thought of tying an open artery; being then, as he says, "inspired by God with this good thought for the good of mankind and the improvement and honour of surgery"—a thought too simple and grand to be easily adopted, and so it met with such opposition as, with other good things done by him, to lead to his being prosecuted by the Paris College of Physicians. The invention was badly received and slowly adopted. It was not until a century later that Petit invented a rude form of tourniquet; and not until the present century the single ligature, as now employed, was commonly used. Indeed, prior to the time of John Hunter and the most important and conclusive experiments of Jones, supplemented as they were by the observations of Scarpa, Freer, Hodgson, and others, the principle of the ligature could not have been understood. Until then, the fear was lest the artery should be cut through too soon; and every possible means was adopted to prevent that action which we now know to be essential to success. Though in this country the works and practice of these surgeons had caused the multiple ligature to be abandoned, for many years later it had not been entirely given up on the continent; for I once saw a very celebrated French surgeon, in an operation for popliteal aneurism, place a double ligature, with a considerable space between the threads, upon the femoral artery—followed, as might be expected, and as commonly happened, by the death of the patient. Even in England, so late as 1814, we find that excellent surgeon, Hey *primus*, writing: "I have been accustomed, in amputations, to tie the femoral artery twice, leaving a small space between the ligatures; and this method has been constantly used in the Leeds Infirmary since its establishment."†

The ligature, as employed for many years past, is so simple, so easy of application, and in the majority of cases so satisfactory, that many surgeons are still quite contented with it; yet that it has grave defects is undeniable. Its immediate action in arresting the flow of blood is certain, and is probably as satisfactory as anything that can be suggested; but that its after-effects are not unfrequently injurious and productive of mischief, no one can deny. For the permanent sealing of a blood-vessel, when it has been tied by a ligature, two dissimilar actions are required. The adhesive inflammation is essential for the closing of the vessel; and the ulcerative, that the thread may be liberated. Now this latter action may take place too quickly, before the adhesive has sealed the vessel, or sloughing may follow, and that, which not very aptly is called secondary hæmorrhage, may occur. Besides this, the mere presence of the ligature must necessarily prevent the entire closure of the wound by primary union; and suppuration, to a greater or less extent, must ensue. Suppuration, having once been set up, may, and often does, cause much mischief. Thus, without endorsing all that has been lately written against the introduction of fibrous material into the living body, every surgeon must admit that there are valid reasons against the presence of any foreign body. Whatever it may be composed of, it must *per se* be more or less an evil. Accordingly, a means for obtaining a certain and secure closure of a bleeding artery, in which no foreign substance shall remain, or, if remaining, shall be innocuous, has been a grand desideratum with all practical surgeons. Cold, exposure to the air, styptics of various kinds, and cauteries, actual and potential, are all useful when the bleeding vessel is of small size; but, as every surgeon knows, are not to be depended upon when the vessels are of more than a moderate calibre.

M. Thierry, reflecting upon the fact that it commonly happens that arteries of a large size, even the femoral, do not bleed when the limb has been torn or twisted off, ingeniously conceived that, if in all cases the divided arteries could be brought into the same condition as they are found in these cases, a like condition of closure would occur. Many experiments were made by him, MM. Carron du Villard, Maunoir, and Amussat in France, Lieben and others in Germany and elsewhere, upon the blood-vessels of living and dead animals of various kinds, as dogs, donkeys, horses, and smaller creatures, for the most part with such success as to justify the application of the plan of isolating blood-vessels,

drawing them out of their sheaths, and so twisting their coats that these shall be torn through, to operations upon the human subject. Accordingly, many surgeons upon the continent tried torsion in a considerable number of cases, in many instances with success; but in many others, where the vessel was beyond a moderate size, the hæmorrhage was not permanently arrested. In England, Mr. Aston Key (with whom, at that time, I had the advantage of being on terms of the closest intimacy) was perhaps the one who was most sanguine in his expectations, and who gave the method the fairest trial; but he soon abandoned it. In France, where the plan took its rise and was more practised than elsewhere, the advantage or not of torsion was very warmly debated. While some surgeons reported great success, others of the most undoubted skill and reliableness, as Delpech of Montpellier, were unfortunate in their results; and in the Hôpital St. Louis in Paris, out of six amputations where the blood-vessels were twisted, the torsion failed in five, and only succeeded in one case. Dupuytren, who was requested by the Institute to report upon the proceeding, made many experiments at the Hôtel Dieu, and arrived at the definite conclusion, "that in man, though torsion may be applied with security to arteries of a small size, it cannot be trusted to without imprudence in those which are at all voluminous . . . that a great many failures must be placed by the side of successes; that, according to the observations of many practitioners of experience and incontestable skill, sometimes owing to inflammation and abundant suppuration, extending along the sheaths of the vessels in consequence of their torsion; sometimes from its failing to arrest the hæmorrhage; sometimes, owing to many circumstances, it being impracticable; so that, after many attempts, it has been found necessary to have recourse to the ligature. So far as union by the first intention is concerned, favourable as at first sight it appears to be, torsion has not proved to possess any marked advantage over the ligature."* Though this conclusion could not then have been known to Mr. Key, he independently arrived at a similar estimate of torsion, as it is evident most other surgeons did. Since then, except for small vessels, where it continued to be successfully employed, torsion has been wholly abandoned for those of larger calibre, until the last three years, when attention has again been much directed so it. In December 1867, I saw in the Edinburgh Infirmary a case where Mr. Syme had successfully used torsion to the popliteal artery. The interesting papers of Professor Humphry and Mr. Bryant on Torsion will be in the recollection of all those who were present in the Surgical Section at our meeting in Oxford last year. I am not aware that the recent revival of torsion in the living human body, or the experiments made on animals, have added anything to the knowledge or conclusions of those older eminent surgeons I have referred to, who practised and abandoned it nearly forty years ago. I apprehend I am not far wrong in stating that the opinion of most of the few surgeons of the present day who have been induced to practise it, is much the same as that I have quoted from Dupuytren. For small vessels, it may well enough be employed; but, for myself, I must say I could not twist a large artery and lie comfortably in bed the next night, lest, while I slept, the elastic artery should untwist itself, and my patient bleed until he slept never to wake again. Besides which, the after anxiety as to suppuration along the vascular sheath, and its consequences, is not to be ignored.†

To our learned associate, Sir J. Simpson—to whom the world is so much indebted, that had he been half as successful in destroying and making miserable human life in warfare, as he has been in saving suffering, and conferring blessings upon distressed humanity, would have been amongst those whom the State delights to enrich and ennoble—our profession owes a most ingenious method of arresting bleeding from divided blood-vessels without the use of ligatures. He suggested the plan of closing the open vessel by pressing it against bone by a long steel pin carried through the soft tissues on each side of it, or by carrying the pin under the vessel, and twisting a loop of wire over its two ends in such a way as to allow of its being easily removed when desired without disturbing the parts. So much has of late been said for and against acupressure, that I need do no more than refer those who desire to know all that can be said in favour of acupressure to the work of the two Aberdeen surgeons, Pirrie and Keith,‡ who, at the hospital there, have devised modifications in the method of using the compressing power, and have followed out the plan with an enthusiasm and perseverance that only those who were fully impressed with the great value they believed it to possess could have done, and which they be-

* *Leçons Orales*, vol. iv, p. 212; Velpeau's *Nouveaux Elements de Médecine Opératoire*. Art. "Torsion."

† See an interesting paper in the *Lancet*, April 17th, 1869, by Dr. Ogston of Aberdeen, "On the Comparative Strength of Arteries secured by the Methods of Ligature, Acupressure, and Torsion."

‡ *A Practical Treatise on Acupressure*. By W. Pirrie and W. Keith. 8vo. 1867.

* *The Principles of Surgery*, vol. i, p. 142. By John Bell, Surgeon. 4to. Edinburgh: 1801.

† Hey's *Practical Observations in Surgery*. Third edition, 1814. The old Leeds Infirmary was opened in the year 1766.

lieve their success fully justifies. On the other hand, many most excellent surgeons, whose skill, candour, and experience are beyond all question, have never felt themselves justified in having recourse to acupressure; while many of those who have tried it, from one cause or another, have ceased to employ it. For myself, I must candidly confess I have never felt sanguine that it possessed all the advantages its advocates claimed for it; nor could I shut my eyes to its disadvantages. True it is, that the presence of a fibrous material is avoided; which, however, can be easily got rid of by the use of a metallic thread, as I have frequently done, and have twice successfully secured the femoral artery by an iron wire in thigh-amputations. But there is substituted for the ligatures the presence of the needles and the compressing wires, by which necessarily, according as one or other method is employed, more or less of the soft tissues are subjected to as great a pressure as is sufficient to close the arteries, be they ever so numerous. This, to my mind, is equivalent in mischief, and, though different in kind, yet possibly as great as the presence of the fibrous material in the wound. Moreover, the difficulty of effectually closing the open mouths of large arteries, when much retracted and deeply imbedded in soft yielding tissues of considerable thickness, is so great that I cannot believe it to be in all cases possible, without the employment of very considerable force. Besides which, the tension of a stump often varies much on the day following an amputation from what it was at the time of the operation; so that the force which might then be just sufficient to press together the sides of the cut vessels, may, within less than twenty-four hours, amount to a strangulating pressure, or the limb may have so shrunk in size that what was due pressure then may the next day be too little for security. Thus, as I said with torsion, so I say with acupressure—and, if reports as to hæmorrhage are to be believed, with equal justice—I could not feel satisfied as to the safety of my patient, had I left a recently divided large artery only secured by the quarter or half twist of a needle. Though I know the femoral artery has several times been thus closed, the practical question is, not whether such can be effected on some occasions, but whether it can be done as an every-day working operation, and our patient be left as secure from hæmorrhage as he is by any other applicable means, or, if the plan possesses any other such great advantages over them as shall justify the exposure to an increased risk of bleeding. I think it does not. I have purposely visited more than one hospital where acupressure has been in vogue; and in our own Infirmary I have carefully watched many cases in which it has been employed with the full intention of adopting it, had I found it possessed advantages over ligatures; but attentive observation of these cases, and a comparison of them with those of my own in the hospital at the same time in which it was not used, have shown that the latter recovered in every respect as well as where it had been used; while I find my colleagues, who at first eagerly adopted the plan, have quietly abandoned it, which, had marked success attended its use, they certainly would not have done. For upwards of eighteen months, I believe, acupressure has not been used in the Leeds Infirmary.

Long ago tying a vessel with fine silk, and cutting the ends close off, was tried; but the irritation, and consequent suppuration set up, led to the abandonment of the plan. I have frequently substituted annealed iron wire, which can be made as flexible as silk or hempen thread for fibrous material; but I have found a new difficulty. So tolerant is the animal economy of the presence of this metal that, in many cases, only the adhesive inflammation has been set up, and the ligatures have not been separated for many weeks. Though, doubtless, if the ends were cut close off and the wound closed, in many cases, the wire would be encased in lymph and lie quiet, or, in time, be absorbed, still this quiescence cannot always be secured. Suppuration may be set up, and hæmorrhage occur when not expected. Hunter was well acquainted with this tolerance of the presence of metals, and also with the fact, that foreign bodies which are deeply imbedded are not so liable to excite inflammation as when they are near to the surface.* Now, as most of the arteries which are tied are not very far removed from the skin, this tendency to suppuration may exist when they are so tied, and thus lessen the chance of the compressing material remaining quiet.

How far the method of soaking a fibrous material in carbolic acid,

as suggested by Professor Lister, and the still more recent one of employing catgut so treated, with the ends cut close off, will accomplish all that he anticipates, time alone will show. If I might presume to venture on an opinion, it would not be one of very confident success. That a ligature composed of animal tissue may occasionally undergo absorption without exciting suppuration or ulcerative action is very possible; but whether other, and quite as important, practical difficulties may not accompany its use is, I suspect, altogether unproved.

Doubtless, these and like considerations have presented themselves to many minds, and have led to many suggestions. The idea of employing moveable forceps, of varying length and strength, according to the size and depth of the vessels, occurred to me, as it did to other surgeons; but whether they contrived such forceps, and actually used them, I am unable to say. I have now closed the arteries with such forceps in so many operations of magnitude, that I can speak with confidence as to their efficacy and security, and also, I believe, of their advantage. Though I think it better to place the forceps upon the bare arterial coats, yet, in many cases, where the vessel has been surrounded by tendinous fibres, or where it has been retracted and could not be withdrawn from the surrounding muscular fibres, I have not hesitated to include some of this tissue in the blades, and no hæmorrhage has occurred. Upon the larger vessels, as the femoral, I allow the forceps to remain four days, though I believe they might safely be withdrawn at an earlier period. Upon the brachial and tibials, two or three days is sufficient. The forceps should be long enough to project from the wound, to allow of their easy removal, and yet not to be in the way; they are brought out between the flaps, which are closed in the ordinary manner; they do not interfere with any kind of dressing which may be used; and, as the pressure is obtained by a cross-spring just external to the wound, this is not interfered with by their removal. In no one instance has suppuration been set up in their track; nor have I seen an instance of pyæmia follow their use. They must be made of good steel, and may be electro-plated or not. They completely meet the objection raised against the use of fibrous material—they do not excite ulceration, they press no tissue but the artery itself; and, by greatly lessening the duration of the presence of a foreign body in the wound, they meet that objection, so far as at present can be with safety effected.*

There remains but one other subject to which I propose to allude. It is, however, an important one. I own to approaching it with some hesitation and reluctance. Hitherto what I have glanced at has afforded me pleasure and satisfaction. There has been shown progress towards that scientific precision which we all so much desire to attain. In what I am about to speak of, I have to encounter that which I believe to be a professional error, founded on false facts, and supported by plausible assumptions, rather than by accurate observation and true deductions. I refer to the recent—shall I venture to say fashionable?—method of treating wounds by what has been called “antiseptic treatment,” by the advocates of which, it is to be feared, the sound physiological and pathological doctrines and practice of the last generation of British surgeons are unheeded, and in danger of being temporarily forgotten for what seem to me unsupported fancies, which have little other existence than what is found in the imagination of those who believe in them. Had the works of John Hunter been now so generally studied as they once were, and the doctrines which he enunciated been carefully kept in mind, this fallacy could hardly have obtained the temporary currency it has done.† “THE ANTISEPTIC TREATMENT OF WOUNDS” ignores those truths which formed the life-long labour of our great physiologist to establish, and for which the world has been taught to regard him as not the least of its benefactors. The theory and reasoning by which the antiseptic treatment of wounds is supported, appear to overlook facts open to all the world, and to disregard observations familiar to every person, through all ages, from the earliest period to the present day. If the antiseptic theory be true, no wound ought ever to have healed until carbolic acid, or some like substance, had been discovered and applied. A simple abrasion ought to have been regarded as a death-warrant, without hope of reprieve; a burn or a scald could not have been recovered from; and vesications, of which all physicians, for thousands of years, have known full well the value, by affording an extensive nidus for deadly monads to revel in, should only have de-

* “This circumstance, of the deeper seated parts not so readily taking on the suppurative inflammation as those which are superficial, is shown in cases where extraneous bodies irritate any parts; for we find that extraneous bodies are in general capable of producing inflammation; but, if these extraneous bodies are deeply seated, they remain for years without doing more than producing the adhesive inflammation, by which means they are enclosed in a cyst, and only give some uneasiness but if the same body was nearer the skin it would produce suppuration. It is probable that these cases of pins, etc., owe their want of power in producing suppuration not entirely to situation, but in some degree to the nature of the substance, metals, perhaps, not having the power of irritation beyond the adhesive, for when the adhesive has taken place the part appears to be satisfied.”—Hunter’s Works, by Palmer, vol. III, p. 287.

* “On a New Mode of Closing Blood-vessels by Moveable Forceps.” By the Writer. *British Medical Journal*, 1867, vol. II, p. 310.

In the first suitable case of aneurism, I intend to cut down upon the artery, and place upon it a pair of forceps so as to close its calibre for a short time, and then remove them without disturbing the wound. This plan I hope to find more effectual and less severe than pressure, either by the fingers or the tourniquet.

† See the *Treatises on the Blood, Inflammation, and Gun-shot Wounds*, by Hunter, *passim*. Also James and Thompson on *Inflammation*; Travers on *Constitutional Irritation*; and the works of Sir A. Cooper, Abernethy, Dupuytren, Velpeau, and other surgical writers.

stroyed the patient by pyæmia; and a simple issue or seton, which used to be regarded, and probably ere long will again be so esteemed, as a valuable outlet for morbid material, would simply be an easy inlet for septic organisms, and infallible death to the sufferer. Again, a parturient creature, human or animal, ought never to have survived to have nourished her offspring; for if, to guard against the ingress of these organisms, it be necessary to keep an abscess covered with a carbolic screen, while it is pricked in the dark with a bistoury dipped in carbolic acid, guided by surgical fingers similarly imbrued, and to use a probe smeared with the like, when introduced into a small sinus, so that those ever present, ever active germs, which must surreptitiously dart in, may at once be killed as they do so,* how much more surely must they find ready entrance and tempting food by the way, through the dilated vagina, into the patulous uterus, with its rugose surface, as it were, expressly prepared and ready for them to generate and multiply in, and cause immediate putrefaction and inevitable destruction to the female? How could the obstetric hand avoid carrying them in shoals, without number, into the vagina? No account is taken of the constitution of the patient, his habits of life, his strength or his weakness, the condition of his digestive organs, the state of his blood, his temperament, diathesis, hereditary disposition, age or sex, his state of mind, the nature of the parts injured, the extent of the mischief inflicted, the manner in which it has been caused by sharp or by blunt instruments, the force employed, the presence or not of foreign substances, the effusion of blood into the parts, the possibility or not of bringing them together, the prevalent diseases, the condition of the air, temperature, moisture, climate, electrical and other physical and moral circumstances by which he is surrounded; nor of his food, clothing, and lodgment, which up to now have been considered as having a not unimportant influence over the progress of a wound towards healing, whether it should grow together by the first intention, heal by the effusion of lymph, the second intention, or should suppurate kindly and granulate healthily; or whether ill-conditioned pus should be formed, irritative fever be set up, absorption of pus take place, and death by pyæmia follow. Surgical science and medical knowledge are reduced to the one plain rule of, *in full faith*—for that is as essential as the acid itself—plentifully imbruing the part with carbolic acid; when, to a true disciple, all wounds, whatsoever and wheresoever they may be, and whatever tissues or cavities be implicated, become as nothing, or, still better, the *débris* may, likely enough, so it is asserted, become valuable pabulum for the growth of new normal tissues.†

Ever since Hunter proved the vitality of the blood, and pointed out the circumstances under which this could be maintained, the process by which wounds heal by the first intention, or without suppuration, has been thought to be well understood, as also the means which should be adopted to secure this result. Suppuration, *per se*, is not an unhealthy action, nor is pus itself always an injurious substance; but when the process can be prevented by union by the first intention, so much the better for the patient; for, wherever pus or effused blood exist, there is more or less danger of their becoming decomposed, absorption taking place, and the system being poisoned by them; or, it may be, of surgical fever supervening, and, through the constitutional affection, of the wound taking on unhealthy action. That this happens by no means very rarely, even when there is no external opening, I think every surgeon must know full well. That a cavity containing broken-down grumous blood, a large abscess filled with ill-conditioned pus, or a suppurating joint, without an external aperture or with a very small one, and giving rise to dangerous constitutional mischief, will not unfrequently, on being laid freely open, so as to afford ready outlet to their contents, and expose their cavities to the atmosphere, immediately assume a healthy condition, while the constitutional amendment is as marked and contemporaneous with the local improvement, is an undoubted fact. Occurrences of this kind are easily explained by the chemical theory of decomposition of animal matters, but how they can be explained on the germ-theory of putrefaction, when, in the one case, there has been no exposure to the external air, and in the other, a free exposure to it is immediately beneficial, I am at a loss to comprehend. In the three former cases, germs cannot possibly have induced the mischief, inasmuch as there have been no openings by which they could have entered, supposing them actually to have been present in the assumed myriads in the atmosphere—for, as yet, no one has ventured to assert they can penetrate the unbroken

skin; and, in the latter, if any had entered by the small and imperfect aperture, an immensely increased number ought to have found ingress by the greatly enlarged opening. To expose any of the normally protected membranes, even the dermis itself, to the air, has always been known to be prejudicial; and to keep a raw or suppurating surface protected from it has as long been known to be important for obtaining a speedy cure. It is a method which Nature constantly employs in the scabbing over of grazed or wounded parts, and it is a method which surgeons, time out of mind, have practised. It is, however, not the simple exposure of such parts to the atmosphere which causes the mischief, as, on the germ-theory of septic putrefaction, it should be; for keeping them in an irritable condition is quite as often the cause. An irritable sore, causing constitutional fever while the part is exercised or in a depending position, will, other circumstances being precisely the same, on being kept quiet in a horizontal position, often at once heal, and the fever cease. A raw or wounded surface, if ever so protected from the atmosphere by a stimulating resinous plaster, will not unfrequently soon become inflamed and suppurating; whereas, if covered with a simple, bland, albuminous, or mucilaginous substance, it will at once cease to be so. Now the former resinous material would repel or destroy the germs, while the latter should tempt their presence and nourish them. Yet, with that, ill-conditioned septic suppuration takes place; with these, it does not. A piece of common adhesive plaster, friction with a turpentine liniment, a scratch with a rusty nail or a fish-bone, or even a common pin, a leech-bite, or the sting of a bee, will, in some persons, cause as much suppurative mischief, absorption of pus, sloughing of tissues, purulent deposits, septic poisoning, and the death of the person, as will any compound fracture, dissecting wound, inoculation with inflammatory serous effusion, puerperal fever, idiopathic cellular erysipelas, or even the bite of a venomous snake, in others, or, perhaps, the same person, at a different time and under different circumstances; the symptoms, like the result, being identical in all these forms, however originating. These effects may be constitutional, but they cannot be germ-poisoning. Some of them may even be the direct effects of an actual poison inserted at the time the wound has been made; but what reason exists for imagining that septic germs are introduced by the sting of a wasp or the bite of a cobra, rather than by the prick of a needle or the tooth of a healthy animal? In the former, the presence of a virulent poison is well known to exist. In the latter, if there be germs, we might expect them to be carried into the wound. Yet the formation of pus is the exception and not the rule. That septic effects take place in the animal body by the decomposition of either the fluids or the solids themselves, or by the exposure of them to the air, is, and for long has been, believed in as a medical doctrine, which also has had the almost, if not altogether, unanimous support of chemists. Upon it much medical and surgical reasoning and practice for generations have been based, until the present day, as those who refer to the works of the great practitioners of the last and early part of the present century well know. Hence the constant employment of septic and antiseptic terms and remedies, as applied to the constitutional condition, and not to extrinsic circumstances as now.

John Hunter taught, and Sir A. Cooper and many other surgeons practised it, that, when a wound can be sealed with its own blood, provided the quantity be not too great, so that it decomposes and acts as a foreign substance, and yet enough to desiccate and form a cement which excludes the air, no better can be found. I very often successfully employ it in compound fractures. Liston and many others adopted isinglass, which for generations before as goldbeaters' skin, court-plaster, or white of egg and other gelatinous and albuminous forms, have been in popular use. More recently, Dr. Richardson has suggested a compound of tannic acid and collodion, which he calls styptic colloid, and declares superior to every other. All these appear to act in a like manner, by affording an unirritating cover to the raw surface. Possibly, if there be much blood effused, the styptic colloid, by the tannic acid which it contains securing the certain coagulation of this, may possess some merit over the simple dried blood itself.

For some years past, there has been a growing tendency to attribute various diseases in man to microscopic organic bodies; and, since the proof that some of the diseased conditions in grasses, tubers, plants, and trees, may be traced to such sources, this belief has grown stronger. Analogy has shewn that some human cutaneous affections may have their origin in this way; and, as it appears certain that some of these minute bodies are active agents in assisting, or, at least, are always present in, diastatic action, such as fermentation, it has been thought not improbable some of the widely spreading epidemic diseases—zymotic, as it has become the fashion to call them—may have their origin in the atmospheric diffusion of various species of organisms. This hypothesis, which, as yet, is a mere speculation, very insufficiently

* See Lister *passim*. BRITISH MEDICAL JOURNAL and *Lancet*.

† "And now, before speaking of some cases treated with carbolic acid on the antiseptic system, I wish to direct your attention to an experiment illustrating the germ-theory of putrefaction. It is upon this theory the antiseptic treatment is based, and I venture to say that, without a belief in the truth of that theory, no man can be thoroughly successful in the treatment."—Lister, in BRITISH MEDICAL JOURNAL, July 18th, 1868.

supported by facts, has had an undue prominence given to it by some of the more active public hygienists, and, not very remotely, has biased men's minds towards the adoption of the germ-theory of surgical diseases resulting from wounds.

The germ-theory of putrefaction appears to rest upon the assumptions—

1. That the air is filled with minute living organisms, which are so numerous that they freely pervade every atom of it:

2. That these organisms are the sole and true cause of decomposition, and of the putrefaction of every thing and everywhere:

3. That these minute creatures are as active as they are ubiquitous, continually going to and fro, seeking whom they may devour, so that upon whatever raw surface they are allowed to settle or to enter, putrefaction and destruction follow; where they are excluded, no supuration takes place, or if it do occur (which, indeed, it is impossible to deny) it becomes innocuous:

4. That the true remedy against them is carbolic acid; for, though other things may be useful against them, none are so effectual as this, which not only has the power of destroying them, but is able to convert dead and foreign matters into material for the production of healthy normal tissues. Dead bones, which heretofore commonly required to be taken away mechanically, are said, under its influence, to become absorbed and quickly to disappear; even fibrous material being afterwards unheard of.

As to the existence of these living organisms upon which the antiseptic treatment is based, I cannot enter at length. It would be altogether beyond the scope of the present address to enter fully upon the disputed question, whether homogenesis—generation from parents—or heterogenesis—spontaneous generation—is the true mode of the creation and multiplication of sperms. That question must be determined by each member for himself consulting the many works and papers recently published on the subject, which will be found principally in the *Comptes Rendus* of the French Academy, and more especially the writings of M. Pasteur on the former side, and M. Pouchet on the latter.* It is to M. Pasteur and his disciples, the Panspermatists, who also maintain the doctrine that all decomposition and putrefaction are physiological phenomena, depending upon living germs derived from the atmosphere, that the modern antiseptic school of surgeons look for the *rationale* of their treatment of wounds. Now, though many of the experiments of Pasteur and his followers are very ingenious and, to some scientific persons, satisfactory, on the other hand, Pouchet and many other most reliable observers have altogether failed to realise the same results when repeating them, and, in many instances, have obtained exactly the opposite. They have also instituted other experiments and observations, which appear to completely negative those of Pasteur. Amongst the most recent and able of these, is our well known associate, Professor Hughes Bennett, who, in an admirable lecture delivered at the Edinburgh College of Surgeons, in January 1868, has given the result of his elaborate and careful experiments and reasonings upon them, in which he altogether denies the correctness of Pasteur's conclusions;† and, I think, proves that some fatal fallacy

pervades those of Professor Lister, made with urine placed in jars fitted with small contorted tubes, which he supposed to be sufficient to exclude the ingress of germs. Satisfactory as these experiments of Mr. Lister appear to have been to some of our associates, I confess they never carried conviction to my mind, even before their fallacy was demonstrated. We may then, I think, at the very least, say the presence of these germs is not proved; and probably, with safety, we may go much further, and deny their existence in the number and universality maintained by Pasteur and Lister. That not unfrequently some minute organisms, vegetable as well as animal, may be wafted in the air, and float about, as microscopic particles of organic and inorganic matter do, is certain; but this is a very different thing from what is meant by the Panspermatists. It is, moreover, greatly to be doubted if these low organisms are of such varied genera and species as many suppose. It is far more probable that many which are so considered are but different stages of the same monad. I believe, when such bodies are formed in putrescent substances, they are commonly the result, and not the cause of the putrefaction (the *sarcina ventriculi* vomited with the fermenting fluid in diseased conditions of the pylorus, for instance); that they are formed by the interchange of the elements of the nidus in which they are placed, or with those of the surrounding air; and that the change in it is not caused by them: in other words, that the chemical theory of decomposition, as of material out of the body, so of effused fluids and secretions in the human being, is correct. That these changes result from, and are greatly controlled by, the vital conditions of our bodies, as was maintained by Hunter, and believed in by the ablest men before and since his time, chemists as well as physiologists and pathologists, is certainly true.

That suppuration does occur, even when the antiseptic treatment has been managed and manipulated by the most reverent worshippers of the hypothesis, is undoubtedly true; but then, it is said, the pus becomes innocuous because of the treatment. Now this is simply to beg the question, and is a mere assertion which altogether ignores the millions of cases, throughout all ages and under all circumstances, where suppuration has taken place in every variety of wound with as little ill effect as it has ever done in the best selected cases where the antiseptic treatment has been controlled by the chiefs of the hypothesis. Such instances must occur to the mind of every surgeon now present. There is no one who cannot call to recollection cases of marvellous recovery from such shocking mutilations as, according to all surgical rules, ought to have been followed by the most disastrous results, and yet have recovered in spite of nothing having been done. It is not upon exceptional cases that scientific surgery will be built.

That carbolic acid is a specific against purulent infection, or that it acts by destroying septic germs, I believe to be a fallacy, an *Idolon Theatri*; but that it is an useful agent, among many others which have a like effect with it, in coagulating animal matters, in accordance with its strength stimulating the parts and contracting the smaller vessels, so as to arrest the oozing of blood and serum, I readily admit, and, if the claim for it were limited to this action, I believe no one would feel inclined to doubt its value. The practice of applying analogous substances to wounded parts, more especially when lacerated and contused, is a very ancient popular one, as every reader of sacred and profane

* *L'Origine de Vie*. Par Georges Penetier. Avec une Préface par F. A. Pouchet. Paris: 1868.

† "This" (*i.e.*, the composition of dust) "has been tested in various ways. The dust has been ransacked to discover organic germs; collected and carefully examined with the microscope, near the soil and on the summits of the highest buildings; not only in frequented, but in desert places; in crowded assemblies, as well as in Gothic cathedrals and ancient vaults; in the ancient palace of Karnak, on the banks of the Nile; in the tomb of Rhamesis II, at the extremity of the Desert, as well as in the central chambers of the great pyramid of Ghizeh. The chief element of the dust collected in these places has been found to be starch-corpuscles. Large quantities of air have been drawn through tubes by aspirators, and collected on cotton, in distilled water, or projected on glass. The feathery snow which, falling through the atmosphere, may be well supposed to collect its contents, has been melted and the precipitate carefully collected. The emanations of marshy places, such as those of the Maremma, in Tuscany, have been specially investigated. The larynges and mucous pulmonary surfaces of numerous animals have been explored, even to the innermost bone-cavities of birds. On the summit of Mont Blanc, amidst eternal snow, on the glaciers of the Jura and of the Pyrenees, and in the deep crevasse, on the burning plains of Egypt and in the markets of Constantinople, the dust of the atmosphere has been microscopically examined—and in all with a like negative result as to the existence of germs. Nowhere could they be seen; or if a few, in the opinion of some, were visible, could they in any way account for the multitude of minute infusoria, which, in all these localities, not only readily spring up in putrid fluids, but in every instance are identically the same."—Bennett, *On the Atmospheric Germ Theory*, 1868, p. 14-15.

"The only conclusion I can draw from the numerous contradictory and ingenious communications presented to the Academy of Sciences during the last eight years on this matter is, that not the slightest proof is given by the chemists, with M. Pasteur at their head, that fermentation and putrefaction are necessarily dependent on living germs existing in the atmosphere. They rather tend to show that these are phenomena of a chemical nature, as was ably maintained by Liebig. Did we, indeed, confine our reading to the papers of M. Pasteur—that is, to one side of the case—we could easily persuade ourselves of his correctness; but every one of his experiments has been repeated by several independent investigators, who have

shown his imagined proofs as to the existence of atmospheric germs to be altogether erroneous. We may conclude, therefore, that living germs are not necessarily the cause of putrefaction and fermentation; neither is it necessary to believe that ferments are living at all—they may be dead. This, if not admitted, seems to be implied by Pasteur himself, who tells us he can now excite these processes, not by fresh yeast, but by the ashes of yeast. That they may be induced by the dead organic matter, which has been subjected to a direct temperature of 150 or 200 deg. centigrade—a heat utterly incompatible with the existence of life—we have seen to have been proved by Pouchet, Musset, Solly, and others.

"The idea that these imaginary germs were the cause of putrefaction, of disease, of blights among vegetables, and other evils, originated with Kircher and the pathologists of the seventeenth century. It has been frequently revived, but always shown to be erroneous. In 1852, cholera was supposed to be occasioned by a fungus that really existed in the dejections; but which Mr. Busk pointed out was the *uredo segetum* of diseased wheat, which entered the body in the form of bread. Certain well known parasitic diseases are spread by contact, such as scabies, which, as it depends upon an insect burrowing in the skin, may be understood to crawl from one person to another. Favus, also, I succeeded, in 1841, in proving might be made to grow on diseased surfaces of otherwise healthy persons; but many of our unquestionably infectious diseases, such as small-pox, scarlatina, measles, and typhus, have no such origin. It has been attempted to be proved, indeed, by Lemaire that, in the condensed vapours of hospitals and other putrid localities, vibrios may be found; but that vibrios are the cause of these various diseases is not only not proved, but, from what has been stated, is highly improbable. What then, it may be asked, is the origin of the infusoria, vegetable and animal, that we find in organic fluids during fermentation and putrefaction? In answer to the question, I say they originate in olio-albuminous molecules, which are formed in organic fluids, and which, floating to the surface, form the pellicle or proligerous matter. There, under the influence of certain conditions, such as temperature, light, chemical exchanges, density, pressure, and composition of atmospheric air and of the fluid, etc., the molecules, by their coalescence, produce the lower forms of vegetable and animal life."—*Idem*, pages 23, 24.

history well knows.* One or other of such substances, more especially the resins, balsams, camphor, musk, and various alcoholic preparations, alone or combined, enter into all the more celebrated vulnerary preparations of former surgery, and for generations out of mind have formed the bases for the nostrums of the village doctress and skilful horse-leech, into whose hands they doubtless descended from earlier authorised practitioners. In the hands of an old lady, who I know inherited the practice from her grandmother, in my boyhood, well bathing a wound or bruise with old rum was a sovereign remedy, which I have many time seen applied to others and smarted under myself, and to its efficacy I can even now bear testimony. I have always taught my pupils, where parts have been seriously injured and had their vitality lessened in a great degree, as smashed fingers and other badly contused wounds, that one of the best applications to them is thin linen lint well saturated with some balsamic tincture, as benzoin, which, uniting with the blood, forms a hard sheath, often only to be removed when cicatrization is complete. Doubtless scores of surgeons have realised like results. This I have always attributed, as Hunter (who was well aware of the effect of the application of spirit to a wound) did, to the coagulation of the albumen, and its forming, with the blood, an impervious cover, by which the air is excluded and decomposition prevented, and not to the exclusion of septic germs. The albuminous compound, if in the wound, is innocuous and is capable of being absorbed. Even where there is a mere abrasion, and only a little oozing of serum or liquor sanguinis, a fast impervious glaze—an artificial epidermis—is formed, and thus an anæsthetic effect is produced, and the desiccating influence of the air prevented.

In large wounds, as amputations, this same effect has, in one form or other, been long sought for. It forms one of the most essential conditions for union by the first or the second intention. If bleeding in the flaps at once ceases, they may be brought together without delay, for the intervening layer of blood, coagulable lymph, or liquor sanguinis, will be so thin that its vitality will be maintained, and direct union will take place; but, if the oozing do not cease, the effused mass is too considerable, its vitality is not maintained, the flaps are too widely separated to influence it, and decomposition of it occurs. It is to obtain this arrest and "glazing of the flaps" that these have been, and still are by many surgeons, exposed to the action of the air for three or four hours before being adjusted to each other. Yet how can this long exposure of such large tempting surfaces to the myriads of craving septic germs be reconciled with their refusal of the inviting offer? for such exposed surfaces often neither suppurate nor furnish foetid pus; indeed, some good surgeons declare it to be the best mode of treating flaps so as to secure primary adhesion of them. Such, also, is doubtless the explanation of the action of a solution of the chloride of zinc, reported so favourably of by Mr. De Morgan, Mr. Moore, and other surgeons, and of the perchloride of iron as long used and preferred by myself and others. The simple washing of the flaps with rum or alcohol, simple, or holding in solution some of the balsamic gum-resins, has the same effect; and such, I believe, is the identical action of a solution of carbolic acid. If it be applied as a wash, as the other agents have been, to two clean raw surfaces, no impediment is presented by the interposition of a bulky foreign substance to their direct and immediate union; and, like them, if sufficiently diluted, not being noxious, its absorption is not injurious. If it be mingled with effused blood in a cavity, coagulation takes place: a solid, unirritating, not easily decomposed substance is formed, which, like many other organic compounds, undergoes absorption, and a cure is the result.†

* "Is there no balm in Gilead? is there no physician there? Why, then, is not the health of the daughter of my people recovered?"—Jeremiah, chap. viii, v. 22.
 "Go up into Gilead and take balm, O virgin, the daughter of Egypt; in vain shalt thou use many medicines, for thou shalt not be cured."—Jeremiah, chap. xlv, v. 2.

† And he went to him and bound up his wounds, pouring in oil and wine, and set him on his own beast, and brought him to an inn and took care of him."—Luke, chap. x, v. 34.

"The very word balsam seems in all ages to have had an idea of excellence and efficacy affixed to it above any other branch of the materia medica; for the ancient physician by this word meant any species of medicine which powerfully recommended itself by a grateful and delicious fragrance, and whose use, both internal and external, was of singular efficacy in preventing putrefaction and resisting corruption."—See the very learned and elaborate article Balsams, in James's *Medicinal Dictionary*.

† I have instituted numerous experiments by adding various substances to blood just drawn and still fluid, to coagulated blood, and to the serum alone; also, I have applied several of these, as pure alcohol, perchloride of iron, chloride of zinc, tannic acid, tincture of benzoin, sulphate of alumina, etc., to wounded and lacerated parts, for the purpose of ascertaining their effect, and the power which the resulting compound has of resisting decomposition and of being absorbed. Some of these, as the strong mineral acids, rather change and decompose the blood than simply coagulate it. Though the resulting compound, even when freely exposed to the air, will remain for many months unchanged, they are unsuited for employment; for, if strong, they destroy the tissues, and, if weak, are not effectual. Chloride of zinc forms with

In this sense, carbolic acid is an antiseptic, and the treatment is antiseptic; and so it is, just in the same manner, with the other substances I have named, and also many others, but it is not antiseptic in the sense in which it has recently been so prominently spoken of. It does not destroy putrescent producing germs; for, as I believe, they have little or no influence. This speculation of organic germs is, I fear, far more than an innocent fallacy; it is a positive injury, for, teaching, as it does, that those desperate consequences which so often follow wounds result from one cause alone, and are to be prevented by attending to it alone, and that in a very simple manner, it leads to the ignoring of those many and often complicated causes, which I have indicated as influencing, for good or evil, the progress of a wounded person, attention to which has hitherto been considered to be one of the most essential parts of a surgeon's duty, and, as achieved or not, in a great degree to distinguish the able and skilful practitioner from the inexperience and unskilful man.*

The advocates of the antiseptic theory, however, triumphantly bring forward successful cases in support of their hypothesis, and declare that the efficacy of the treatment indubitably proves the truth of their theory. We may readily admit the truth of many of their facts without believing their premises. Every one of the reported cases may possibly be true, but they may be mere sequents, and by no means necessary consequences. Nothing is more fallacious than such a mode of reasoning. It is very easy and very captivating, but most erroneous. It has been too frequently practised, not only by medical men, but by all classes. The *post hoc* is constantly confounded with the *propter hoc*, yet it often happens that they have no necessary connection with each other. The one follows; the other has merely gone before. They do not stand in the relation of cause and effect. No cognisance is taken of any but one favoured antecedent, whereas there may be many others inseparably connected with the result. Look at the false theories, on every imaginable topic, supported by this kind of evidence, which have inundated the world. Every medical man cannot but recollect how such fallacies have retarded scientific medicine in all generations. There has hardly been a single disease, or the treatment of it, which, at one time or other, has not been subjected to this process. Thousands of remedies of every kind, which we now know to be absolutely useless, if not worse, have been vaunted as the true cause of cures. Never was such loose and inconsequent reasoning more prevalent than at the

the blood a solid mass, which is not so dense or resisting as that formed by carbolic acid or perchloride of iron, and a greater proportion of the substance is required to produce a corresponding effect. Alcohol forms a dense coagulum; tincture of benzoin answers still better, forming an odorous, solid, moderately unchangeable mass, and, I believe, deserves much of the credit so long attributed to the balsams; carbolic acid at once coagulates the blood, and forms a dense leathery mass, which decomposes very slowly; with the serum it forms a similar, but, as might be supposed, a less dense mass, from which fluid exudes. Perchloride of iron, of all these substances, appears to answer best. It acts promptly, a small quantity only is requisite, not more than one-sixth of the quantity of pure carbolic acid being required; it does not destroy or injure the bed-linen, as the acid does. The compound is dense, adherent, very unchangeable, and, being composed of only those substances which normally enter into the composition of the animal body, is more adapted for innocuous absorption, if not for actual assimilation and incorporation with it. Alum forms firm coagulum, and tannic acid answers admirably, forming a soft leathery mass, which is very unchangeable. Though the compound of blood and iron will remain without decomposition for months, a white mould forms in it much sooner than in the compound of blood and carbolic acid. It is also more soluble in water than is the latter. A small portion of a solid mass of three ounces of blood, with which two scruples of perchloride of iron had been mixed two months before, and exposed to the air with only a paper covering, was put into water, in which it became partially dissolved. A like portion of a compound of three ounces of blood, with two drachms of pure carbolic acid, was similarly placed in water, and, after a month's exposure, hardly any, if any, was dissolved. If solution be necessary for absorption, this experiment would lead us to infer that the iron compound is more readily absorbable than the carbolic acid compound.

* To show how theory influences practice, and how readily even able men are liable to be led away by hasty conclusions, it is worth calling attention to the extension of the putrefactive germ theory to the existence of pus in the urine. It has been alleged by learned and well known professors, in more than one of our universities, that the alkalinity of, and pus in, the urine arises from the presence of these septic germs, vibrios, and such like organisms, which have been introduced into the bladder by badly washed catheters, and the cure is asserted to be "carbolicised catheters" to kill them. This idea is so opposed to all that is known of such affections as only to require being mentioned to be thereby refuted, and wondered at ever being adopted. What surgeon or physician has not frequently seen persons with alkaline urine containing pus, who have never had a catheter passed in their lives? Who has not seen such a condition improve at once, and in the end disappear altogether, by the use of frequent daily catheterism? Who has not known scores of cases where persons are going about their daily avocations, and introducing for themselves catheters, which are carried about loosely in the pocket, where they cannot be clean, and yet with the urine perfectly free from pus? Who does not know the frequent consequence of nephritis, cystitis, enlargement of the prostate gland, injury to, or disease of, the medulla spinalis, and stone in the bladder? How are vibrios to get into the bladder in such cases, where no instrument has been used? and if not in them, why in others? Is calculus or abscess in the kidneys, or a rugous mucous membrane in the bladder, to be ignored as the origin of pus in the urine? If such condition were the result of septic germs, why, having once entered the bladder, and lived there, do they not seize upon the whole system and destroy it, as they are alleged to do when they enter by a wound

present day. Look alone at the assertions within the last few years as to the cause and proper treatment of plague, cholera, yellow, typhus, and typhoid fevers, and other epidemics affecting man and animal. See even how it has influenced, and not unfrequently led to hasty and injurious legislation on such subjects. It is the foundation for most of the evidence upon which every empiric relies, and vaunts and parades his success as infallible. He has done a certain thing to a certain part; it has become well; *ergo*, his remedy has cured the disease. If such be correct, every homœopath has good ground for his assumed success. Recollect the evidence and cases of success which lately were brought forward in support of the asserted cure of cancerous tumours by the injection of acetic acid. Yet who now believes in the truth of the doctrine? Sir J. Simpson, Drs. Pirrie, Keith, Fiddes, and others, have brought forward cases quite as numerous, and undoubtedly quite as true, in proof of their declaration that the use of fibrous material as ligatures upon arteries is the true cause of all those disastrous consequences which so often follow operations, as have Mr. Lister and others in proof of their assertion, that it is the introduction of septic germs which does all the mischief. They have performed large, important, and dangerous operations of all kinds, merely substituting acupressure in closing the arteries for threads. They have never dreamed of applying antiseptic treatment for the destruction of septic germs, to which, by discarding all dressings, they allow the freest entrance to the wounded part, yet they have reported such a succession of marvellous cures as have fallen to the lot of few surgeons. Now, will Mr. Lister allow that their success was dependent upon acupressure alone? Setons have been used in surgery from time immemorial, and rowels still are employed in veterinary surgery, not only in the cure of abscesses, sinuses, and fistulæ, but to establish a drain in many external and internal complaints. M. Chassaignac has found many followers all the world over, in the use of drainage-tubes, made of vulcanised India-rubber, having plenty of holes stamped in them to render them still more patulous, in the treatment of recent abscesses, suppurating joints, and even effusions into the thoracic cavities; cures without number being reported as the happy result of thus affording a broad, direct, and easy road, with food by the way, for the free ingress of septic germs into all these varied cavities. Yet, surely, it can hardly be affirmed, if this treatment and the cures, as is stoutly declared, stand in the relation of cause and effect, that the antiseptic treatment and its cures also do so. If the one which acts by keeping the discharge in, and the exclusion and destruction of the germs, be true; the other, which acts by not only letting the discharges out, but the germs freely in, cannot also be true. Taken as sequents, the reported cures in both may be true, but regarded as consequences this is impossible.

That wounds, whether simply incised or lacerated and contused, often do well when dressed with carbolic acid, is perfectly true; but that they do better than wounds differently treated, I deny. It is useless to bring forward cases, and compare them with other cases, where the circumstances are altogether different. In private practice, as well as in large hospitals, especially in the latter, circumstances so vary, that to decide by a name alone is worse than useless. Every surgeon knows that, besides the individual varieties of age, constitution, condition, habits of life, the mode of receiving the injury or disease, there is a general law affecting all. At one time, all his operations do well; he hardly loses a case, whatever the operation may be; and at the same time all wounds heal quickly and well, without suppuration; or, if pus do form, it is limited, and is laudable: while, at another time, precisely similar cases do as badly, so that even very trivial wounds and operations are followed by death.* In our infirmary, a reference to the records of operations will show this difference in a striking manner; and everybody also knows quite well that at such times certain erysipeloid diseases are prevalent in the district, and that patients without wounds will fall into a bad condition, and not unfrequently exhibit

similar constitutional symptoms. There are undoubtedly phases of unhealthy atmospheric (or, I would rather suppose, telluric) influences, which, in spite of every known hygienic precaution, will make their influence most grievously felt. Hospitals have not unfrequently had to be wholly or in part temporarily closed from this cause. Therefore, to get at a fair comparison of the results of any particular treatment, the same class of cases should be treated at the same time and place. This I have carried out. During the last three years, since "the antiseptic treatment" has been in vogue, I have not allowed one of my patients to be treated with carbolic acid; while my colleagues have very extensively employed it, and I may say, at least at one time, possessing the full amount of faith necessary for securing success, fairly tried it. The result is, that my cases without it are as good as theirs with it. They have had some capital cases with it; but I am confident I am not in the least overstating facts, when I declare that for every successful case with it I can show one as good without it. This I consider to be a fair comparison, as the class of cases and other circumstances have been identical. Had I during this time found their success with the antiseptic treatment was greater than mine without it, I should gladly have availed myself of it; but I did not. On the other hand, as an additional proof that it has not been so, it may be mentioned that lately the omission of it, even in large operations, has been more and more frequent, until now its employment has become the exception, instead of the rule; which, had any marked benefit resulted from its use, most certainly would not have happened. Had carefully covering the cut surfaces with carbolic acid yielded great benefit, we should not have witnessed many large stumps left entirely exposed to the air, without any covering whatever upon them. That the two plans are wide as the poles asunder, is obvious to every one. If freely exposed stumps heal up readily and well, it must be at once apparent that those which do so when most elaborately swathed in carbolised wrappings, do so rather in spite of, than as a consequence of, the treatment.

One word more, and I have done. I have spoken plainly on the antiseptic treatment, because I have felt decidedly. Let me, however, not be misunderstood. I have no other object in view than the advance of our profession. I willingly pay deference to, and acknowledge with thanks as warm and as cordial as those who have believed and adopted the antiseptic treatment, what good has been done, and I trust will still be done, by some of those who have been the most decided advocates of the method. To them I would say, in the words which Shakespeare puts into the mouth of Brutus, when speaking in the Capitol to the Roman people over the dead body of Cæsar, "If there be any in this assembly, any dear friend of Cæsar's, to him I say that Brutus's love to Cæsar was no less than his. If then that friend demand why Brutus rose against Cæsar, this is my answer: Not that I loved Cæsar less, but that I loved Rome more." So would I say, not that I value their works and labours less, but that I value surgical science more. When I believe doctrines and practice to be true, I venture to acknowledge their value; but when I am convinced that they are wrong and injurious, I presume to say so.

[Since the reading of this Address, Mr. A. Prichard of Bristol has informed me that the operation of removing the entire eye-ball, instead of the anterior half of it, only originated with him, and not with Dr. O'Ferrall, to whom it is so often attributed.—T. N.]

A CASE OF EPITHELIOMA OF THE LARYNX.

By THOMAS COLE, M.D. Lond., Bath.

A FINE boy, aged 5, was placed under my care in January 1869, for laryngeal dyspnoea and a spasmodic barking cough. Otherwise, he was in good health, and seemed remarkably strong. He had no pain, nor expectoration. At one year of age, the breathing was observed to be rather difficult; and it became more and more so till I saw him. At four years of age, he fell into the river, and shortly afterwards the cough commenced. This, I think, was merely a coincidence. I was suspicious of some kind of growth in the larynx, and cautioned the parents that the poor child might die suddenly. He would submit to no examination. Bromide of potassium was given for a month, with marked relief from the dyspnoea. On March 3rd, the boy died almost instantaneously. The larynx, on *post mortem* examination, was found to contain two large yellowish-white growths, each occupying one of the ventricles, and obscuring the vocal cords. The right tumour was as large as a horse-bean; the left, as a hazel-nut. The latter was somewhat hollowed out by the pressure of the former. There was a third smaller growth behind the left one. It seemed that no air could have entered the trachea, except by a very small passage left between the anterior surfaces of the tumours and the *pomum Adami*. Microscopically, the tumours proved to be good examples of epithelioma. Dr. Martyn of Clifton, who

* In the General Infirmary at Leeds, from May 1st to October 31st, 1865, out of 100 recorded operations, there were 21 deaths. In the following six months, Nov. 1865 to May 1866, out of 118 operations, there were 23 deaths. From June to end of Nov. 1866, there were only 10 deaths out of 115 operations; while from October 1st, 1868, to end of March, 1869, out of 140 operations of all kinds, not, however, including the trivial, there were only six deaths; and, in the last three months of the period, only one death is recorded. In each of the periods, there was no material variation in the number of operations, and none, so far as I can ascertain, in the nature or gravity of the cases, and yet in the last six months the deaths are not quite 1 in every 23 operations, while in the first the deaths amounted to over 1 in every 5; in the next six months to nearly as many; and in the six months from June to November 1866, the rate sunk to 1 in 12. Seeing the number of patients in the hospital was the same in each period, there surely must have been some potent unseen cause influencing the result; mere "hospitalism" will not account for it. In the last period, when there was the largest number of operations and the greatest crowding, the fatality was the least. Moreover, the last months of the hospital, which had been above a hundred years in use, were far more healthy than many periods which had occurred during its long occupation. Only operations of some magnitude are included in this record.

kindly confirmed my opinion as to their nature, said they were "a development of a heterologous variety of epithelium, and free from the more prolific and malignant forms of cell-growth." There was no history of any irritating cause.

BRITISH MEDICAL JOURNAL.

SATURDAY, AUGUST 7TH, 1869.

NOTE FROM DR. CHADWICK.

THE President of the British Medical Association desires to express to the members present at the Leeds meeting, his heartfelt thanks for the cordial vote of sympathy and condolence, forwarded to him by their Secretary, on the loss sustained by himself and his family.

The kind forbearance exercised towards him in his compelled absence from the duties of his office, and the numerous expressions of sympathy in his sad bereavement which he has on every hand received, will never be effaced from his memory. He trusts this general recognition will be accepted, as a reply to each one would be impossible.

He is gratified to find that the success of the meeting was so complete, and that the comfort of the assembled Associates and friends was not materially interfered with through the untoward circumstances specially affecting himself.

Leeds, August 3rd, 1869.

The following is a copy of the vote of condolence with Dr. Chadwick, which was passed on the last day of the meeting.

"That the members of the British Medical Association cannot separate without expressing their condolence with their President, Dr. Chadwick, on the severe bereavement which he and his family have recently sustained, and which has deprived the Association of his valuable services in presiding over this meeting."

THE AMERICAN GOVERNMENT AND THE ASSOCIATION.

DR. PINKNEY, of the United States Navy, arrived in Leeds on Tuesday last, bearing a special commission from his Government, and also credentials as the representative of the American Medical Association. The delay in his arrival has been caused by a mistake as to the date of our meeting. He is ordered by his Government to give a report of the proceedings of the Leeds meeting, and of the International Medical Congress at Florence, to his department. This recognition, for the first time, of the British Medical Association by the United States Government, is an interesting fact, which we record with much satisfaction, as one additional proof of the importance to which the Association has attained not only at home, but in distant countries.

THE ORIGIN OF LIFE.

III.

WHEN a fluid containing an organic substance in solution is allowed to remain in contact with air, under the conditions already stated, phenomena of fermentation, or incipient putrefaction, are soon established. A slight evolution of gas takes place, and after a variable time—hours or days, according to the temperature, nature of the solution, etc.—a slight whitish cloud or pellicle, which soon thickens into a membrane, makes its appearance on the surface of the fluid. This constitutes the "primordial mucous layer" of Burdach and the "proliferous pellicle" of Pouchet. On microscopical examination by the highest

powers, it is found to consist of a dense aggregation of the most elementary organic particles, or spheroidal molecules, known by the name of monads; of short staff-like bodies, or bacteria; and of large-jointed filaments, or vibrios. The largest of the monads, which are mere actively moving granules, being only about 1-30,000th of an inch in diameter. Bacteria are supposed to result from the fusion and coalescence of monads; and vibrios from the union of bacteria—at least, this is the view of Dumas, though it is doubted by Pouchet and others. It is also possible that both bacteria and vibrios may be only later stages in the growth and development of certain primary nomad forms. Different kinds of pellicles are described by Pouchet, according to the different proportions of these three ingredients entering into their composition. Mantegazza and Jolly have watched the appearance of monads and bacteria under the microscope: after continuously observing for hours, they have seen previously clear organic solutions become quite clouded from the appearance of myriads of these rapidly moving organic particles. But the life of these molecules is of brief duration: after twenty-four hours, or less, they all die, and then the pellicle on the surface is found to be composed of a densely aggregated but uniform layer of granules, composed of monads and bacteria, embedded in a thin, pellucid, and almost invisible jelly-like stratum. The changes which are said to ensue in this granular membrane, constituted by the mere dense aggregation of the dead—or, at all events, motionless—monads, bacteria, and vibrios, are marvellous indeed; changes which have been watched and described, more or less fully, by Pineau, Nicolet, Wymann, Schaaffhausen, Mantegazza, Pouchet, Jolly, Musset, and others. These observers affirm that, from this mass of mere granular *débris*, the higher ciliated infusoria (*Paramecium*, *Kolpoda*, etc.) are evolved in some cases, and the lower microscopic fungi (*Aspergillus*, *Penicillium*, etc.) in others. Pouchet describes the series of changes which take place in the proligerous pellicle from which infusorial animalcules are to be developed, as follows.

After a short time, the membrane, at first uniform and evenly granular, changes in aspect here and there, owing to a concentration of the granules at tolerably equal distances, into more densely aggregated spherical masses, which at last become limited by a more or less clear border, suggestive of a resemblance to the *zona pellucida* of the egg of higher animals. This mass does constitute, in fact, according to Pouchet, the egg of the future ciliated infusorial animalcule. The next change which takes place is, that the granules, which had been at first more densely aggregated towards the centre, then disseminate themselves uniformly through the ovum, whilst, at the same time, the simple clear zone thickens into a distinct membrane. A short time after this, differentiation still proceeding, the mass of enclosed granules gradually becomes converted into a real embryo, which manifests its existence by slow movements—at first, by simple oscillations in the mass of granules, and then by regular, uniform movements of revolution of the whole contents within its enveloping membrane. The slightest shock, at this stage, immediately arrests the gyration. Then, after a time, a pale spot appears in a certain part amongst the granules, and soon the alternate contraction and dilatation of this show that it is the rudiment of the future heart, or contractile space, of the infusorial animalcule. As other parts become differentiated, and the proper structure of the animal is attained, it begins to exhibit movements of quite a different kind—sudden and irregular, no longer checked, but rather increased, by slight shocks from without. In one of these sudden plunges, the enveloping membrane is ruptured, and there enters into the world of waters a free swimming and perfectly formed infusorial animalcule—the offspring of Death, the embodiment of Life.

Such is the marvellous story, told in substantially similar terms by all the observers before named. It should be distinctly understood, that monads, bacteria, and vibrios, do invariably precede the higher

infusorial animalcules in organic solutions : this is a rule to which there are no exceptions. But, after some of the latter have formed, the process of development may cease, the proligerous pellicle falling to the bottom of the fluid and disintegrating; then another pellicle may gradually form on the surface, owing to a new birth of monads, bacteria, and vibrios, resulting in the production of a new proligerous pellicle, out of which other free swimming infusorial animalcules are evolved. Pineau has followed all the stages in the evolution of a tailed infusorial animalcule, known by the name of *Monas lens*, and also that of specimens of the genus *Oxytrycha*; Nicolet, that of *Amœba*; whilst Pouchet, Jolly, Musset, Wymann, Mantegazza, and Schaaffhausen, declare they have watched the evolution, not only of specimens of *Monas lens*, but of individuals of the genera *Paramecium* and *Kolpoda*. But Dr. Bennett says: "At other times, it happens that the molecular mass, instead of being transformed into animalcules, gives origin to minute fungi. In this case, the molecules form small masses, which soon melt together to constitute a globular body, from which a process juts out on one side. These are *Torulae*, which give off buds, which are soon transformed into jointed tubes of various diameters, terminating in rows of sporules (*Penicillium*), or capsules containing numerous globular seeds (*Aspergillus*). Occasionally filaments are formed from the direct melting together of molecules arranged longways (*Leptothrix*)." Dr. Bennett, therefore, thinks that the elementary vegetable organisms have no specific constancy; but that they readily pass from one form into another, under the influence of some slight change in their external conditions. He believes, also, that the same mutability characterises the low animal types of which we have previously spoken.

Now we would say, concerning these statements of the heterogenists, that, if they are true and correct, so that any other microscopist, with the exercise of ordinary care, can verify them, then the establishment of the truth of these statements concerning the mode of evolution of specimens of *Paramecium*, *Kolpoda*, and other low organisms, whether animal or vegetable, does practically afford an abundant proof of their main position. They say that new organisms may arise by "spontaneous" generation in organic fluids. The terminology, of course, is bad; and, as Mr. Herbert Spencer maintains, the use of the word "spontaneous" tends to convey an entirely erroneous conception—one quite adverse to the general doctrines of evolution, which he, for one, has so admirably expounded. But the essential idea which they wish to convey is, that an organism may come into existence without that parentage and derivation from a similar organism of like kind, which has been hitherto, by most biologists, regarded as invariable and essential. Dismissing for a moment our consideration of the mode of origin of those minute organic particles, known as monads, bacteria, and vibrios, which would seem to form a sort of neutral starting point, both for the animal and the vegetable kingdoms, let us concentrate our attention upon the mode of evolution of the higher ciliated infusoria. Now, as we maintain, if it can be shown that ciliated infusoria do in reality arise from differentiations taking place in a granular pellicle, formed by the aggregation of motionless monads, bacteria, and vibrios, whether dead or living, then the heterogenists have, so far as these ciliated infusoria are concerned, proved their case. They would then have established the truth and reality of phenomena so marvellous and so different from what have been hitherto conceived possible by the majority of biologists—so subversive of our ordinary notions—that it would seem scarcely worth while after this to quarrel so pertinaciously about the mode of origin of the monads, bacteria, and vibrios. We do not mean to say that it is not a question of the most fundamental importance as to how these bodies originate; but we do say that it should be really almost less startling to us to be asked to believe that these minute organic particles can separate from fluids containing formless organic matter in solution, than for us to believe that out of the heaped-up dead corpses of these organic units, there can deve-

lope, under the influence of certain conditions, beings so totally different as the comparatively highly organised ciliated *Paramecium* or *Kolpoda*. What possible relation of parentage, in its old sense, could exist between the monads, bacteria, and vibrios, on the one hand, and the ciliated infusorium on the other? Why, it would be somewhat comparable—so far as the question of parentage is concerned, and the relative complexities of parent and offspring—to saying that a human being might be evolved out of an aggregation of dead, or apparently dead, sprats. If it be a fact that ciliated infusorial animalcules may originate in the way described by the heterogenists, then this will undoubtedly prove one, if not the most fundamentally important discovery ever made in biology, and all honour should be meted out to those by whom it has been ascertained.

It will, of course, be easily seen that the phenomena described as taking place in the proligerous pellicle may be watched by all who are conversant with such methods of investigation. We do not require to call in the aid of the chemist, we need exercise no special precautions; the changes in the proligerous membrane are of such a kind that they could be readily appreciated by any skilled microscopist; and it would not seem possible that he should be unable to decide whether such a body as a *Paramecium* did or did not originate out of gradual differentiations, such as have been described, taking place in this membrane. This part of the question, therefore, seems to us a simple matter of observation; and all interested in the question, and competent for the investigation, should satisfy themselves whether it be true or false. But the problem is quite a different one when we come to consider the mode of origin of the most simple organic forms—the monads, bacteria, and vibrios. If we set ourselves to inquire how these arise, we certainly propose a problem of a much more difficult nature—one whose solution cannot possibly be achieved without the aid of numerous precautions, whilst the results of experimentators may even then be questioned, be they ever so conclusive.

But, if the heterogenists can show, and have demonstrated how the higher ciliated infusorial animalcules are evolved out of pre-existing monads, bacteria, and vibrios, then they have, in fact, now only to prove that these latter may originate *de novo* in organic solutions, in order completely to substantiate their position. And we think they would have made their case clearer throughout, if they had reduced the question to these distinct issues. They should have said to their opponents: "The mode of origin of infusoria and of fungi out of aggregations of monads, bacteria, and vibrios, is a simple matter for observation, about which it is mere idleness to waste words. It is useless, therefore, to endeavour to impress us with the truth of your panspermic doctrines. Suppose it granted for a moment (which we do not) that the air is so full of germs of infusoria, etc., as you represent, this does not in the least affect the essentials of our position, that some ciliated infusorial animalcules have such an origin as we describe, even though the occurrence of others in solutions may be accounted for in the manner you propose, by means of germs conveyed by the atmosphere." They might also have added: "The only question, therefore, worth our while to dispute about is as to the origin of these primary organic forms; and, to establish the truth of what we believe, we are willing to abide by all the precautions in our experiments which you yourselves would prescribe."

We will now summarise the statements which have been made on each side concerning this part of the question.

DR. THOMAS SKINNER of Liverpool has been elected a member of the Gynæcological Society of Boston, United States.

CHOLERA and small-pox have been raging very severely in the Jubulpore district in India. In the week ending June 12th, there were 381 cases of small-pox, and 37 deaths; 811 cases of cholera, and 578 deaths. A cattle-plague was prevailing in some districts.

WE understand that Mr. Cowell is the successful candidate for the Assistant-Surgeoncy at the Westminster Hospital.

THE Edinburgh Medico-Chirurgical Society has conferred the honorary diploma of corresponding membership on Dr. John William Ogle.

BENGAL SANITARY COMMISSION.

COLONEL MALLESON, Sanitary Commissioner for Bengal, has just been promoted to a superior appointment in the Civil Department; and Dr. Cuninghame, for some time Secretary to the Sanitary Commission, succeeds him as Commissioner. This is as it should be.

POOR-LAW MEDICAL QUALIFICATIONS.

THE President of the Royal College of Surgeons, Edinburgh, has received a letter from the Secretary of the Poor-law Board, dated 10th July, 1869, stating, in reply to a communication addressed to them by Drs. Andrew Wood and J. G. Fleming, that the diplomas of the Royal College of Surgeons of Edinburgh and of the Faculty of Physicians and Surgeons of Glasgow, are recognised by the Board as conferring surgical qualifications upon those medical gentlemen who possess them.

ROYAL COLLEGE OF PHYSICIANS.

THE following officers were elected by the College on July 29th, 1869. *Censors*: E. L. Birkett, M.D.; H. W. Fuller, M.D.; A. W. Barclay, M.D.; E. H. Sieveking, M.D. *Treasurer*: F. J. Farre, M.D. *Registrar*: H. A. Pitman, M.D. *Librarian*: W. Munk, M.D. *Examiners*: *Anatomy and Physiology*: H. H. Salter, M.D.; J. S. Bristowe, M.D. *Chemistry, Materia Medica, and Practical Pharmacy*: S. O. Habershon, M.D.; W. Odling, M.B. *Medical Anatomy and the Principles and Practice of Medicine*: G. Owen Rees, M.D.; P. Black, M.D. *Midwifery and the Diseases peculiar to Women*: R. Barnes, M.D.; W. O. Priestley, M.D. *Surgical Anatomy and the Principles and Practice of Surgery*: T. B. Curling, F.R.C.S.; T. Holmes, F.R.C.S. *Curators of the Museum*: F. J. Farre, M.D.; T. B. Peacock, M.D.; W. Wegg, M.D.; F. Sibson, M.D.

THE BRITISH ARMY AND THE KNAPSACK.

THE knapsack, that has been so long a source of mischief in the British army, is at last done away with, and the new valise equipment adopted in its stead. A Supplement to the 4th Report of the Knapsack Committee has just been issued, containing some further reports upon trials with the valise, and announcing the final decision of the Secretary of State for War and the Duke of Cambridge on the subject. Ten regiments are to be supplied annually with the valise equipment, until the whole army is furnished with it. This supplement contains a very interesting report from Colonel Walker, the Military Attaché at Berlin, to which city two patterns of the new kit-bags were sent some months ago for trial in the Prussian army. The Prussian military authorities under whom the trials have been conducted express themselves strongly in favour of the new equipment. Colonel Walker mentions that the general commanding the 11th Brigade of the 3rd Army Corps kept him for half-an-hour while he spoke in unmitigated praise of the new invention; and that Prince Frederick Charles, after having subjected the kits to a rigid inspection, told him that a great and difficult question had been solved, and that he was indebted to this invention for carrying out an idea he had had for ten years without succeeding in bringing it to perfection. There appears to be a hearty desire on the part of the Prussian infantry, Colonel Walker says, to get rid of the knapsack, which, however practical in shape and well-fitting, always interferes with respiration; indeed, the name the Prussian soldiers give it, "*der Affe*," the monkey, is very characteristic of it as an incubus on the back. Not long since, a soldier was asked whether the new Prussian knapsack, which is far superior in many respects to the present English knapsack, was not a great improvement? To which the man replied, "Oh yes, sir; but it's monkey all the same—*Affe bleibt immer Affe*." The history of the knapsack in the British army, and of the difficulties which have

been encountered in the attempts to improve it, if it should ever be written, will form an entertaining though from some points of view a painful record. We congratulate the Knapsack Committee on the successful termination of their labours.

SCOTLAND.

WATSON'S HOSPITAL AND THE ROYAL INFIRMARY.

AT a meeting of the Governors of Watson's Hospital, it was resolved not to part with the building for a sum less than £43,000. This resolution is subject, of course, to the approval of the Merchants' Company."

MR. SYME'S CLASS IN THE UNIVERSITY OF EDINBURGH.

THE pupils of the class of Clinical Surgery in the Edinburgh University have presented to Dr. Joseph Bell an address expressive of their appreciation of the manner in which that class has been conducted by him during the illness of Professor Syme. In it, they state that they have been mindful of the peculiarly difficult position which he was called upon to occupy, as the substitute of one whose world-wide reputation is indissolubly associated with his position as a teacher of clinical surgery. They assure Dr. Bell that he has obtained their admiration and esteem, as possessing in an eminent degree those qualities which are essential in a teacher of clinical surgery; and that, while by the clear and forcible way in which his lectures were delivered, their subject-matter was impressed upon the memories of his pupils, the hours spent in his class-room were rendered equally pleasant and profitable. Forty-three names are appended to the address.

UNIVERSITY OF EDINBURGH.

THE ceremonial of graduation of students in medicine took place on Monday in the General Assembly Hall, which was filled by a gay assemblage of ladies and gentlemen. Vice-Chancellor and Principal Sir Alexander Grant presided. A large number of members of the Senatus were present, and amongst them Mr. Syme. At the commencement of the ceremony, the degree of Doctor of Laws was conferred on Sir Roderick Murchison. There were twenty-six candidates who received the degree of Doctor of Medicine under the new statutes, and five under the old statutes. Thirty-nine candidates received the degree of Bachelor of Medicine and Master in Surgery, and five received the degree of Bachelor of Medicine only. Two gold medals were awarded for distinguished theses—one to Dr. John Haddon, for a most original thesis on "The Sphygmograph and Thermometer in Health and Disease", and the other to Dr. John Miller Strachan, for an equally able thesis on "The Histology and Functions of the Cerebellum." The Ettles Medical Scholarship, which is annually awarded to the most distinguished graduate in medicine of the year, was conferred on Dr. Henry Alleyne Nicholson. Short addresses were afterwards given by Professor Balfour and Sir Roderick Murchison.

IRELAND.

THE RECENT DEBATE ON LYING-IN HOSPITALS AT THE DUBLIN OBSTETRICAL SOCIETY.

IN the August number of the *Dublin Quarterly Journal* there appear, *in extenso*, the speeches or essays of those who took part in the recent debate on lying-in hospitals which occupied the attention of the Obstetrical Society during so many nights. The report occupies no less than 205 pages of the *Journal*; and we think that we do better to draw the attention of our readers to the report itself, rather than attempt an abstract, which could not be long enough to please either our readers or the authors. The subject is one which should receive the most earnest attention of all philanthropists; and it is especially necessary that on such a subject, involving such momentous interests, the unbiassed judgment of the entire profession should find expression.

THIRTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in LEEDS, July 27th, 28th, 29th, and 30th, 1869.

THE Thirty-seventh Annual Meeting of the British Medical Association was held in Leeds, on Tuesday, Wednesday, Thursday, and Friday, the 27th, 28th, 29th, and 30th days of July.

TUESDAY, JULY 27th.

The first General Meeting of the members of the Association was held in the Lecture Theatre at the Philosophical Hall, and was very largely attended.

Dr. ACLAND, the retiring President, opened the proceedings with the following address.

GENTLEMEN, MEMBERS OF THE BRITISH MEDICAL ASSOCIATION,—The period for which you were pleased to appoint me your President has now come to a close. It remains for me only most gratefully to resign into the hands of that most esteemed gentleman, Dr. Chadwick, the presidency of this Association. I only trust you will permit me to say a few words, expressing a hope that nothing on my part in the year that has gone has checked your high and useful aspirations; and that, as the meeting at Oxford did not fail in the great objects, both social and scientific, of the Association, so the meeting in Leeds will far outstrip in its results that and all other previous gatherings of this institution. I believe—I do not know it—but I believe some of our brethren from the other side of the Atlantic are present. I have, at all events, a pleasing letter, informing me that that would be the fact, from Professor Gross, and wishing you all success at Leeds, and that letter I shall place in the hands of the President-elect in a few minutes. Before, however, I retire, I feel that I owe it as a matter of respect and duty to you, to allude to one or two circumstances in the previous year which, although not affecting directly medical science, still affect medical administration in this country; and these are the appointment of a commission to consider the laws which affect the public health, and the promise of the Government to reconsider very fully the provisions of our Medical Act; and, bearing in mind the deep interest which the Association has taken in both these questions, and considering that I was for the time your President, I thought it my duty to do the best I could under the circumstances of the case, and I do not think you will hereafter have reason to consider that this present year has been unfruitful of means likely to be useful to us as taking part in the social administration of the country. I am not aware that anything of special moment has occurred during the year of my office. I do not know that any great change has taken place which should be recorded in the course of our medical literature which would have turned our thoughts into any greatly new channels, or given to us any new special powers for observation, and I do not think, in the present state of knowledge, it is necessary. It is not in every epoch that great discoveries like those of Bell, or Swan, or Barry, or great gifts like those of chloroform or quinine, are vouchsafed to mankind, or that any exceeding great steps are taken in modern hospital administration. But it may be said that every year—now such is the state of our knowledge—that every year, in this age of honest as well as reckless criticism, some errors are exposed, some fallacies are detected, and some principles are reinvestigated; and thus, by this process of mingled construction and repair, that the whole edifice of pathological knowledge is silently under our hands, building up like the first temple of Palestine—

“No workman’s steel or ponderous hatchet rings;
Like some tall palm the noiseless fabric springs.”

[*Applause.*] Therefore, gentlemen, it is not the duty of a retiring President to chronicle in detail that which he leaves for the higher and fuller elucidation of his successor. Associations such as ours do great good, or may do great harm, in the direction of the progress of knowledge. They may advance it by concentrating our powers and attention on objects of utility, and in the pure search after truth; they may retard it if they diverge to more evanescent topics. May this never be the case with an association whose brotherhood is in the wide world—whose sympathies are those of our common nature—who have a common language and a common literature, and a common bond of union, wherever culture and civilisation are known—and who know no other aim than the common welfare of the human race. [*Applause.*] And now it remains for me only, after thanking you with a deep sense of gratitude for the honour which you bestowed upon me most unworthily

more than two years ago, in appointing me to succeed our eminent colleague, Professor Stokes—(*hear, hear*)—it remains for me only to resign the chair to our common friend Dr. Chadwick. And in doing so we cannot but remember that we are strangers come from all parts of the kingdom, and I have no doubt from other countries besides. Some of us may have come from places redolent with abstract questions and ancient controversies, and, as many in this age are wont to think, of by-gone prejudices, but, as I would rather say, of a place not willing to throw aside the light which has heretofore lighted the world. But be these opinions what they may—and I shall be pardoned for holding my own—we come to one of the great world centres of industry and activity—one of those centres which some persons think to be too much given over to material progress and commercial enterprise. I will detain you only to enter my protest against any such opinion, and to say that in centres of mental activity and material progress, such as that in the midst of which we are now situated, I, as a stranger, can at once appeal to this hall as evidence of the interest, of the world-acknowledged interest, of this hall as a centre of scientific progress and instruction. I can farther, before I sit down, appeal to that æsthetic taste residing in this place, and carried out in the selection of the mediæval architect Scott to decorate for it the new, well-considered, hygienic hospital—[*applause*]—and thereby to set an example of appreciation of culture in works of manifest utility, which I believe has not yet been followed, and will not soon be imitated in other towns of the country. And if I turn to another question, which I, as a stranger, may refer to before Dr. Chadwick, if I wanted in Great Britain an instance of advanced philanthropy on the part of a merchant prince, I should send a stranger to examine the small village, in your neighbourhood, of Saltaire. [*Applause.*] Therefore, I resign with the utmost anticipations of increased success on the part of the Association, and of greater lustre than it was in my power in a smaller place to impart to it, I resign the chair in confidence and in hope of your esteemed, and I believe here I may say your beloved, friend, Dr. Chadwick—in whom I feel assured we shall find a respected and worthy successor to the names of Smith, of Hey, and of Teale. Thanking you for your kindness, I now resign to Dr. Chadwick the future conduct of the chair. [*Applause.*]

Dr. CHADWICK, who was received with loud cheers, then took the Chair, and delivered an address, which was published at page 107 of last week’s JOURNAL.

Vote of Thanks to Dr. Acland.—Dr. BEATTY (Dublin) moved—“That the cordial thanks of this Association be given to Dr. Acland for his valuable services as President of the Association during the past year; and that he be elected a perpetual Vice-President.” A resolution like this required no force of eloquence to recommend it; but he could not propose it without adding a few words in expression of his own feelings. All of them who had had the good fortune to be present at the Oxford meeting would admit that it was a gathering that was not likely to be soon forgotten. [*Hear, hear.*] There was, in the first place, the antiquity of the town itself, with its venerable and famous buildings; then there were the series of peculiarly valuable papers read at the meeting, the generous manner in which the members were received, and the grand address which Dr. Acland delivered at the commencement. [*Applause.*] The address of Dr. Acland was worthy of the position he held, and was worthy of himself; and he was sure that no man had ever filled the position of President with greater honour and dignity. When he recollected the extraordinary amount of labour that devolved upon Dr. Acland at Oxford, because of a deficiency of help, it was marvellous to him, who knew something of the work that was necessary, to consider how admirably everything was arranged, and how great was the satisfaction that was given. Nothing but extraordinary zeal, and that kindness with which Dr. Acland was endowed, could have enabled him to achieve what he did. The Association had indeed been fortunate in having such a President, and could not but agree most cordially to the resolution which had been read. [*Applause.*]

Dr. T. SMITH (Cheltenham) thought it his duty, without being asked to do so, to speak as an independent member on behalf of the motion just presented. He recollected well the reception which the Association obtained at Oxford in 1842, when there was received from Dr. Acland greater kindness than he could well express. At the last visit, Dr. Acland had given to the whole Association the most hearty welcome that it was possible to give. He had himself not only delivered a magnificent address, but had drawn to his aid an array of lecturers such as to astonish, he would not say England, but Europe. [*Hear, hear.*] He seconded the motion with the full belief that the meeting would feel, in passing it, that they were only paying a well deserved compliment in doing honour to one of the brightest ornaments of the profession. [*Applause.*]

Mr. WILLIAM HEY (Leeds) said he had been asked to second the resolution; but it had been done better than he could have done. He

just wished to add, that he was one of those to whom Dr. Beatty had alluded, as having been fortunate enough to attend the Oxford meeting, under the presidency of Dr. Acland. The gathering was a delightful and successful one, and he sympathised with every word that had been said in its praise. [*Applause.*]

The PRESIDENT put the resolution, and it was unanimously and enthusiastically carried.

Dr. ACLAND said, in reply: I am sure, gentlemen, you would not desire that at this hour I should say many words, if I could, in answer to what has just been said and done. Of course, there are certain periods in a man's life which are very telling to him. Every man knows that; and the only answer, therefore, which I shall make for the thanks which my professional brethren have so generously and so largely accorded to me is this: that every year since I have been a medical student—and these years are beginning now to be numbered—have I respected and loved my profession the more. [*Applause.*] I will further say that, having had little intercourse, up to the last few years, with the Association, I am now convinced of what I was not convinced before the meetings at Dublin and Oxford—that these meetings have had an effect upon us, and have conferred an advantage upon us, and through us on our fellow-citizens, whatever may be said to the contrary, such as nothing else could have produced. [*Cheers.*] With these sentiments, therefore, they being the sentiments of my heart, and those which I shall carry to the grave, I heartily thank you for the exceeding pleasure, as well as honour, which you have conferred upon me. [*Cheers.*]

The PRESIDENT here stated that he would be obliged to leave the hall, and he feared he would not be able to be with the Association again during the present meeting. A message had come requiring that he should go to a distance immediately; and it had come from one who was very near and dear to him. He trusted that he would be able to join them before the meetings were over; but he feared, from what he had known before, added to the message he had received, that this would not be his happiness. Dr. Sibson, the President of Council, would kindly take the chair.

The President, for whom much sympathy was expressed, then left the hall; and, Dr. Sibson having taken his place, the business was proceeded with.

Report of Council.—Mr. WATKIN WILLIAMS, General Secretary, read the following Report.

"The Council look forward with pleasure to the assembling, at Leeds, of the thirty-seventh annual meeting of the Association, under the Presidency of Dr. Chadwick.

"The great meetings of Dublin and Oxford, presided over respectively by Dr. Stokes and Dr. Acland, taken together, form an important epoch in the history of the Association.

"The Council feel that the transition from these seats of learning to Leeds, the great centre of one of the largest fields of industry in England, will lead to results not less important to the vital growth of the Association. That meeting, to which so many are looking forward with interest, will bring the Association again into contact with the most active forms of human life; and present to them, on the spot, the effects upon health of a large assemblage of men, engaged in manual pursuits requiring both skill and exhausting labour.

"The Council have taken advantage of the opportunity afforded by the erection and recent occupation of the new Infirmary at Leeds, to bring before the Association, at its annual meeting, the question of Hospital Construction, which will be introduced, more especially in its medical aspects, by the future President, Dr. Chadwick, in his opening address. Captain Douglas Galton, C.B., on the invitation of the President-elect and Council, has undertaken to give an address, with a view to a subsequent discussion, on the proper construction of hospitals. Captain Galton is peculiarly fitted to occupy this position, for he was a member of the Barrack and Hospital Improvement Committee; and to him the country is indebted for the plans of the Herbert Hospital, which has served as a model for many similar institutions of more recent erection.

"The Council are able again to report a considerable increase in the number of members of the Association. In the year 1868 there were 3,702 members, of whom 73 have died and 104 resigned, and 39 have been removed for non-payment of subscriptions. At the present time the number of members amounts to 4,095.

"The Treasurer's statement, audited by Mr. Church, of Bath, and Dr. E. L. Fox, of Clifton, which has been published in the JOURNAL, is appended to this Report.

"*Hastings Prize.*—Your Council regret to have to report that there are no competitors for the Hastings Prize this year.

"The Committee of Council have held their usual quarterly meet-

ings, and one additional. It will be the duty of the new Council to elect a successor to Dr. Sibson, whose Presidency of the Council expires at this meeting.

"The Committee appointed at the last annual meeting for the purpose of promoting the Direct Representation of the Profession in the Medical Council, have issued an address to members of the Legislature and the general public, which has appeared in the JOURNAL, and been circulated among the several Branches of the Association, along with the form of petition to the House of Commons. On the 12th of July, a deputation, accompanied by a large number of members of Parliament, and consisting of many members of the Association from various parts of the kingdom, was received by the Earl de Grey and Ripon, the Lord-President of the Council, with whom was associated the Right Hon. William Edward Forster, Vice-President of the Privy Council. The views of the Association with regard to this important question, and the advantages that may be looked for from its adoption, were explained and illustrated by the Chairman of the Committee, Dr. Edward Waters, by the President of the Council, Dr. Sibson, and by the President-elect, Dr. Chadwick. The Deputation was courteously received, and the arguments put forward in favour of the direct representation of the profession in the Medical Council were listened to by the Lord-President and the Vice-President with marked attention, and the assurance was given by his Lordship that the statements submitted to them should receive every consideration. Your Council have viewed with satisfaction the adoption by the Medical Council of the principle of direct representation of the profession in that Council, by the following resolution passed at their last session: 'That the Council are of opinion that, if the Legislature should think proper to invest the Council with extended powers and fresh duties, by which the profession at large would be brought more under the direct influence of the Council, then, in that case, the profession at large should have a more direct influence in the appointment of members of the Council.'

"Your Council are disposed to believe that this interview will not be without its fruits, and they trust that the Medical Council will be remodelled so as to embrace within itself members sent by the profession, as well as those elected by the Corporations and Universities and those nominated by the Crown.

"The Council look forward with confidence to the speedy attainment of a high standard of preliminary education; of one Examining Board for the admission of members into the medical profession in each part of the kingdom and of thoroughly practical and clinical examinations.

"These examinations can be properly conducted only under the eye of a body composed of medical men, who are familiar with every want of the medical profession.

"There is reason to surmise that a serious proposal is about to be made to do away with the present Medical Council, and to substitute for it a Government Council, constituted mainly of men who are not members of the medical profession; and a Government Board of Examiners.

"The Council affirm with confidence that members of our great profession will never permit medical education to be withdrawn from their own supervision, and given over to a body of men exclusively appointed by the Government. Medicine, like the Law and the Church, will ever retain the direction of its own education, and the control of its own education, and the control of its own examinations.

"The Committee on the Direct Representation of the Profession in the Medical Council will present a full report of their proceedings. Reports also will be presented by the Committee on State Medicine, the Committee for Registration of Disease, and by the Parliamentary Committee, which will doubtless obtain the careful consideration of the Association.

"The Council have to regret the resignation of the very able editor of the JOURNAL. Arrangements have been made for carrying on the business of the JOURNAL until the appointment of his successor, which it will be the duty of the new Committee of Council to decide on at their first meeting.

"The Sectional Meetings have become an integral and well-organised part of the General Meetings, the scientific character of which they have unquestionably raised. The various Sections draw men together who are interested in a common pursuit; give an impulse to enquiries into the many imperfectly explored fields of medical knowledge; and tend to advance medical science. The Council are persuaded that the members will distribute themselves freely among the different sections, and convey there to each other that precious knowledge acquired at the bedside, which so many observant and able men carry about with them untold, for want of the opportunity of mutual cultivation.

"The Branches are in a flourishing condition; and have been active

in discussing scientific subjects, as well as matters connected with the general welfare of the profession.

"During the past year, a new Branch has been established for that portion of Gloucestershire not included in the Bath and Bristol Branch.

"The Council desire to offer to the Secretaries and the various Officers of the branches their warm thanks, since to them is due very much of the success of the Association.

"Your Council cannot allow their President to retire from the office which he has filled for the last three years, without expressing their sense of the invaluable services which he has rendered to the Association by a rare devotion of time, zeal, and ability.

"Your Council recommend for election as Honorary Members, Captain Galton, R.E., C.B., and C. E. Brown-Séquard, M.D., F.R.S."

Dr. DAVEY (Bristol) said he should like to hear some statement as to the financial condition of the Society. He had no doubt that other members would be anxious to have information on that point. [*Hear, hear.*]

The GENERAL SECRETARY read the financial statement.

The Treasurer of the British Medical Association in account with the Association for 1868.

Receipts.

Subscriptions.....	3310	17	6
Subscriptions, arrears	183	15	0
	<hr/>		
	3494	12	6
Advertisements and sales	2065	19	1
Sundry other receipts.....	11	5	0
	<hr/>		
	£5571	16	7

JOURNAL EXPENSES: Payments.

Mr. Richards, printing, stamps, postages, sundry printing, etc.	3264	4	2
Mr. Davidson, commission on advertisements	92	5	5
Mr. Butcher, commission on advertisements	163	10	0
Mr. Orrin Smith, engraver	25	15	0
Editor of JOURNAL	250	0	0
Sub-editor	50	0	0
Contributors	802	8	1
Dr. Henry, salary for office-work	50	0	0
	<hr/>		
	4698	2	8

EXECUTIVE EXPENSES:

Secretary.....	370	0	0
Secretary's petty cash, Branch Secretaries, and Collectors.....	78	4	0
Clerk's Salary.....	62	10	0
Reporting proceedings at Oxford and Anniversary expenses.....	32	7	0
Stationery	16	15	0
Sundry other expenses	18	13	5
	<hr/>		
	578	9	5

SCIENTIFIC AND OTHER GRANTS:

Public Health Committee.....	43	13	0
Parliamentary Committee	10	0	0
	<hr/>		
	53	13	0
Balance due to Treasurer (last year)	41	10	7
Balance in Treasurer's hands (this year).....	201	0	9
	<hr/>		
	5571	16	7

R. WILBRAHAM FALCONER, M.D., Treasurer.

WILLIAM J. CHURCH, }
EDWARD LONG FOX, M.D., } Auditors.

April 1869.

Assets estimated, Dec. 31st, 1868	1672	0	0
Liabilities	1506	0	0
	<hr/>		
Excess of estimated assets beyond amount of liabilities ...	£166	0	0

Dr. RUMSEY (Cheltenham), in moving the adoption of the Report, congratulated the Association heartily upon the announcement it contained as to the continued progress of the Association in numbers, in influence, and in general usefulness. [*Applause.*] He was quite sure that the progress made during the last two years was far in excess of the progress made in any former equal period since he had been connected with the Association. It was a rate of progress which, if continued, would make the Association really and truly a faithful representation of the profession in the United Kingdom. [*Hear, hear, and applause.*] He could also congratulate the Association upon the adop-

tion of a department in which he took a special interest. It was two years ago since he mentioned to the President of the Council the desirableness of establishing a department of Public or State Medicine; when Dr. Sibson, with his keen perception of what was expedient and advantageous, at once agreed to it. [*Cheers.*] It was satisfactory to know that, since it had been created, the department had obtained valuable aid and direction from two of the greatest sanitary authorities of the day in State Medicine. One of these, Mr. Simon, took the chair at the last meeting; and his old and honoured friend, Dr. Farr, was present in the same capacity at Leeds. [*Applause.*] The Report touched also on the constitution of the Medical Council—a question in which, as one of Her Majesty's nominees on the Council, he naturally took some interest. Whilst approaching the question with all proper caution, he thought he might be allowed to say that he had always considered the constitution of the Medical Council as defective. [*Hear, hear, and applause.*] And his only wonder was that, with a constitution so theoretically defective, that Council should have done so much good work as it had accomplished. Not only had the Council been instrumental in preparing a *British Pharmacopœia*, considered to be the finest in Europe; but it had established the important principle of preliminary education, and had thus recognised the necessity of making a man a scholar, and therefore something of a gentleman, before he entered the profession. [*Hear, hear.*] Then, with regard to professional education. [*"Question, question."*] All he wished to express on this point was, that the Council had accomplished some important work [*Hear, hear, and applause*]; and, having said so, he had much pleasure in seconding the adoption of the Report. [*Applause.*]

Mr. GRIFFITH (Wrexham) seconded the motion.

The CHAIRMAN invited discussion on the Report, but trusted that gentlemen would adhere to the rule which limited all speeches to ten minutes.

Dr. DAVEY (Northwoods) said it gave him great satisfaction to know that there was a balance in hand; but it gave him a small amount of dissatisfaction to be informed that one hundred and four members had withdrawn from the Association during the past year. Now there must be some cause for that retirement. There was one item in the financial statement which required explanation, and that was the expenditure of £802 for contributions to the JOURNAL. He knew many able writers in the provinces who had frequently sent contributions to the JOURNAL; but, as they were not inserted, the writers not only became disgusted with the JOURNAL, but were in danger of losing all interest in the Association. He thought it was not fair or right that paid metropolitan contributions alone should appear in the JOURNAL, and that those sent free from the provinces should be ignored. All were equally interested in the success, not only of the JOURNAL, but of the Association itself; and, that being the case, he did not see why so much secrecy should be exercised with regard to the contributions, and to the manner in which the money was disposed of.

Dr. SEATON (Sunbury) asked whether the auditors were aware of the manner in which this £800 was disposed of; and appealed to the Treasurer for information on the point.

Dr. FALCONER stated that the practice had been, that the editor of the BRITISH MEDICAL JOURNAL had the command of a certain sum of money, to be expended on contributions, the names of the writers of which were not disclosed. Some years ago, he asked the late Sir Charles Hastings regarding the names of the contributors who received payment, and was told that they were kept secret. The practice followed during the time he had acted as treasurer, had been something like this. The editor had what money he required placed at his disposal, and had furnished a list of the number of columns contributed and the amount paid; but the names of the contributors had never been disclosed. Arrangements, however, were now in process by which nothing would be paid to contributors except by check paid by him to the individual contributors [*hear*]; so that, if such a question were put on a future occasion, he would be in a better position to answer it, provided it were not made compulsory on him that the name of any contributor should be divulged if he had expressly desired that it should be kept secret. [*Applause.*]

Dr. LINGEN (Hereford) had been struck by the item of £800 for contributions to the JOURNAL, which placed the editor in a very delicate position. He maintained, however, that trust and confidence must be reposed in the editor. It was very important that the greatest care should be exercised in appointing such an official; but after the selection was made, he ought to be treated with all due respect and confidence. [*Hear, hear.*] As to the complaint that had been made that provincial contributors were ignored, he begged members to recollect that, although their writings might appear very clever and interesting to themselves and to their neighbours, the editor might view them in a very different light. It was, after all, to London that the editor

must look for a regular supply of articles from practised writers. [*Hear, hear.*]

Dr. STEWART (London) said the question now under discussion was a very old one. It had often been agitated, and as often the agitation had ended in smoke. If they appointed an editor, they must trust him. [*Hear, hear.*] No doubt a good deal of money had been expended on contributions for the JOURNAL, but the question was whether the interests of the JOURNAL demanded that expenditure. He and many members of the Association held that, in order to bring up the JOURNAL to its present position, a large expenditure was necessary; but it did not follow, now that the position of the JOURNAL had been accomplished, that such an expenditure should be maintained. [*Hear, hear.*] The editor of the JOURNAL, instead of getting a large income, had rather lost money. With regard to making known the names of the contributors, he did not think any one conversant with the principle on which journalism was conducted would insist upon such a course. There were many writers who would not consent to have their names made known; and there were others who made it an absolute condition of becoming contributors that their names should not even be confidentially mentioned by the editor. Under these circumstances, the editor must be allowed to choose his contributors, and to conduct the JOURNAL in the manner which he thought most conducive to the interests of the Association and of the profession generally. [*Applause.*]

Dr. WEBSTER (Dulwich) thought neither Dr. Davey nor Dr. Seaton had any wish that the names of the contributors should be made public. All they were anxious about was, that the treasurer and auditors should have some control over the expenditure of such a large sum of money. [*Hear, hear.*] If they went on spending money in such a reckless manner, the Association would soon be in the *Gazette*. He was of opinion that more might be made of the commercial department of the JOURNAL, and that the advertising portion of it might be pushed with advantage. [*Hear, hear.*]

Mr. NUNNELEY (Leeds) sympathised to a great extent with the questions asked as to the expenditure of the £800. At the same time, it must be remembered that there were secrets connected with journalism which it would not be wise or prudent to divulge. [*Hear, hear.*] No doubt it was very desirable that some means should be adopted for controlling the expenditure; and he felt satisfied after the explanation given by the Treasurer, that the meeting, after the discussion which had taken place, would be disposed to proceed with the next business on the programme. [*Applause.*]

Dr. FALCONER asked leave to add to his former explanation that the sum of £255 for commission on advertisements would no longer appear in the balance-sheet. A clerk had been engaged to do the work at £150 a year, and by this means a considerable saving—about one hundred guineas—would be effected. [*Applause.*]

The motion for the adoption of the report was then put to the meeting, and carried.

Honorary Members.—Dr. FALCONER moved “that Capt. Galton, C.B., R.N., and Dr. Brown-Séquard be elected honorary members of the Association.” The motion was seconded by Mr. C. G. WHEELHOUSE (Leeds), and was carried unanimously.

Election of General Secretary.—Mr. HUSBAND (York), moved the re-election of Mr. T. W. Williams, the General Secretary. He had known many of the Secretaries of the Association, but he had never known one who had thrown more energy into its affairs, or was more thoroughly deserving of being continued in office.

Dr. FALCONER, as one who was perfectly acquainted with the ability and zeal of Mr. Williams, had much pleasure in seconding the resolution.

The Rev. Dr. BELL (Goole) objected to the motion being put to the meeting until certain explanations had been made, and after he had been subjected to a good deal of interruption—there being a misunderstanding as to whether or not he intended to move an amendment—he went on to ask, if it was not the custom to fix the stipend or income of a person before moving his appointment. Were they about to re-appoint a Secretary, and be told nothing as to what was to be his remuneration? He wanted an answer to this question, and he would abide by that answer.

Dr. FALCONER explained that the Subcommittee of Finance had had a meeting that morning, and had come to a decision that the remuneration of the Secretary should be £300 per annum. That decision had been confirmed by the Committee of Council that afternoon.

The Rev. Dr. BELL said, that this resolution having been read, he wanted to know if he was not in order in speaking in regard to the Secretary's stipend.

The CHAIRMAN said it was not a meeting for minute business, and it would never do to take up at the general meeting matters that were left in the hands of the Committee of Council.

The Rev. Dr. BELL thought that at the first general meeting he was

perfectly in order in moving that the stipend of the Secretary be fixed at the time of his appointment, so that the members might know the terms upon which he was engaged, and feel that they had assented to those terms. This was what he meant to move, and he wished to know if he was in order in bringing it forward at this stage as an amendment.

The CHAIRMAN—No, it is not in order.

The Rev. Dr. BELL—Then I bow to that opinion.

Mr. CLAYTON (Birmingham) said the question as to the salary of the Secretary had engaged the attention of the Committee of Council for some time back. It had given rise to some earnest deliberations, and it was only to-day that a satisfactory conclusion had been arrived at. The Secretary had devoted a great deal of time to the work of the Association; he was a valuable servant; and surely the members would support the Committee of Council, who had no private ends to serve, in doing what was just and honourable between man and man. [*Applause.*]

The CHAIRMAN said that, having been President of the Council, he would state that the question had been under consideration for at least six months.

Dr. GIBBON (London) said he liked good work and good pay. They had been talking about an editor's salary—about a paltry £250—and about contributions to the JOURNAL, the whole management of which did not exceed £1,000 a year; while it brought them in something like £5,000. He did not grudge this expenditure; he was only anxious to be informed as to what was being done; and this he supposed was the reason which induced Dr. Bell to essay an amendment which he was not allowed to bring forward, but which seemed to have had the desired effect.

The CHAIRMAN said he could not permit that which was not the fact to be stated at the meeting. Long before Dr. Bell's motion was put upon the paper, the Committee of Council had been considering the question.

Dr. GIBBON said they might have been considering it, but it had only been heard that they had come to a conclusion on Dr. Bell bringing forward his motion.

Mr. NUNNELEY (Leeds) expressed his surprise how gentlemen, such as Dr. Webster and Dr. Gibbon, who were present at the conferences held on the question that morning, could take that part in the discussion which they had done. To his knowledge, Mr. Williams had made great sacrifices in his private affairs for the purpose of better discharging his duties as Secretary of the Association. He became their officer when the Association was a much smaller one; and now that it had become prosperous, it would ill become the members to pass Mr. Williams over. [*Hear.*] He would not say that the Secretary had hard task-masters, but he was controlled by those who kept a sharp look-out on the expenditure and on the general management of the Society. After the explanations given, he trusted that no further opposition would be offered to the motion. [*Hear, hear.*]

Dr. WEBSTER insisted upon explaining that not one word was said at the meeting of General Council regarding the salary of the Secretary. He had no objection to Mr. Williams getting £300 a year, but he did object being charged with misrepresentation in the manner he had been.

The CHAIRMAN remarked that certainly Mr. Nunneley had fallen into a slight mistake. Neither Dr. Webster nor Dr. Gibbon were members of the Committee of Council at which the question of salary had been debated so long that morning.

Mr. NUNNELEY expressed his regret that he had fallen into an error. The resolution was then adopted.

Auditors.—On the motion of Mr. CLAYTON, seconded by Mr. NUNNELEY, the auditors—Mr. Church, of Bath, and Dr. E. L. Fox, of Clifton—were re-elected.

Medical Benevolent Fund.—The GENERAL SECRETARY read the following Report.

“The operations of this Fund during the past year have fully reached the average attained in previous years in extent, and have been of the usual character. One hundred and six cases of distress have been relieved by grants varying from £5 to £20, the total amount thus expended being £855. In several instances the grants from the Fund have been made conditional upon a certain sum being raised by the friends of the applicant, who have thus been stimulated to subscribe an amount which might be of permanent benefit to the recipient.

“The number of annuitants at present is twenty-seven, seven having died during the year. Two new ones only have been elected, the present rate of interest on Bank Stock in which the Annuity Fund is invested being low. It is hoped, however, that the Committee will soon be able to proceed to the election of others, as the candidates are numerous, and many of them are in most distressed circumstances.

“During the year, a legacy bequeathed by the late Mr. Terratt, of Tewkesbury, amounting to £489 : 1 : 3, has been received, and £100,

part of a general charitable bequest by the late Felix Slade, Esq., has been secured for the Fund through Charles Collambell, Esq., one of the executors. The Committee have also had occasion to pass special votes of thanks for the following donations: to Dr. Page, Carlisle, for £48:10; to T. H. Hills, Esq., and R. Lee Holland, Esq., for £55, from the Society for the Relief of Small Debtors; and to T. H. Hills, Esq., for a special donation of £10:10, to be expended in obtaining increased publicity.

"Dr. Broadbent, who has held the office of Honorary Secretary since 1864, has resigned, and the Committee recommend, as his successor, Stamford Felce, Esq., who has kindly offered his services.

"In conclusion, the Committee beg to thank the Lady Collectors and the Honorary Local Secretaries, to whom the success of the Fund is so largely due, and hope that, by a continuance of their efforts, and those of all friends of the Charity, its usefulness will be still further extended."

Dr. HARE (London) moved that the report be adopted. He observed that the members of the Association knew little, far too little, about this Medical Benevolent Fund, which was a great and integral part of the Association. Hitherto the officers of the Fund, he thought, had failed in their duty in not coming down to these meetings and speaking to those present as to the results of the working of the Fund, and in not bringing its claims from time to time more prominently under the notice of the members of the Association. He was quite sure that there were many members who scarcely knew of its existence. He hoped, in bringing its claims to their attention, he was doing good not only to the fund but to a large number of their poorer medical brethren. There were many such who had real claims upon the members of the Association. There were not only decayed medical men, but widows and children, who had full claims upon the benevolence of their countrymen. There were persons not only in England, but in Scotland and Ireland also, who had received during the past year, and received every year, support from the Fund. The Fund had special claims on three grounds in particular. First, there was the privacy with which the donations were made; secondly, there was no canvassing on the part of those who were claimants; and there was no expense to those who were candidates. Generally, in such cases it was necessary that those who desired to be recipients must parade their wants, and expend a large amount of time and money, in getting their claims attended to; but it was not so in this case; and, again, the relief was immediate. The Committee met month by month, and distributed as much as they were able to do. With regard to the working of the Fund, the expenses were reduced to a minimum. Nothing was paid for a place of meeting, thanks to Mr. Churchill, whom they all knew as the publisher of many of the works they desired to read. There was no paid officer except a collector, whose percentage was very small; and the entire working expenses, including printing, postage, etc., only amounted to £61, or three per cent. of the entire income. There was no charity whatever in which so much of the funds subscribed went to the real objects for which the money was provided. Subscriptions were raised from various parts of the country. The Medical Benevolent Fund was ubiquitous in its operations; but there were many large towns in which little or nothing was done for relieving these cases; and he wished it was in his power to portray, as he knew to be the truth, the wants of many of the poorer members of the profession. Month by month the Committee sat, and they had appeals from persons in necessity for £5 or £10 to save them from utter and sheer want, and to enable them to get clothing or a place to cover their heads with; and recently he had seen a poor man with a head that resembled that of Cuvier, with tears in his eyes, receiving £10 and the use of one of the houses provided by the Fund. They had heart-rending appeals from the widow, the orphan, and the decayed medical man, who had been in affluence, but now were the victims of poverty, and compelled to ask for a dole of £5 or £10 to save them from utter destitution. The Fund did a vast deal of good, but it could do very much more. While some of the large towns did absolutely nothing, through the energy of some of the local supporters of it large subscriptions were raised in other places. From Brighton £500 was sent; Hastings contributed a large amount; Edinburgh sent a handsome sum; and Liverpool also extended its liberality; but Leeds, which was his native town, he regretted to say, sent almost nothing; and he knew that Manchester also sent but little. They ought to have two or three gentlemen coming forward as local secretaries; and, if that were done in some localities, in twelve months the funds would be doubled, and the charity dispensed would be doubled also; while at the same time tears of thankfulness, flowing from the eyes of the widow and the orphan, would fully reward those who in their mercy had responded to a sense of duty too long neglected. [*Applause.*]

Mr. BARTLETT (Birmingham) having been connected with the management of a similar institution at Birmingham, was able to testify to the advantages of an institution like that advocated by Dr. Hare. He hoped

that at no very distant time every member of this Association would contribute, if ever so small a sum, to this Fund, and the result would be that this fund would then become a really magnificent, beneficent, philanthropic, institution.

Mr. NUNNELEY said he should not have risen, but that Leeds had been mentioned as one of the places which had not sufficiently contributed. He therefore wished to mention that, at a meeting of medical men held last week in Leeds, nearly £500 was distributed among necessitous members of the profession and their families. There was £10,000 of funded property which had been given by members of the West Riding Medical Association; and while they did not contribute to the general wants of the country, many of his (Mr. Nunneley's) brethren believed that they distributed their charity far more economically and beneficially than by giving to those whom they were not acquainted with.

The motion for the adoption of the Report was then carried.

The Composition of the Committee of Council.—Dr. DAVEY said he was very sorry that it fell to his lot, at that late hour of the night, to propose a resolution of so much importance as that of which he had given notice. He should have preferred that the attendance of members, too, had been much larger than it was at that moment, because the proposition he had to make deserved—he could say conscientiously—the best attention of a large meeting; but the character of it, he thought, would recommend itself to the attention of those who remained. He based the propriety of bringing this resolution before the meeting upon the fact that there had been an increase of so many as 400 members in the Association during the past year. If that were so, it followed that the representative principle should be extended in a much larger degree than now obtained among them. He had to move "to alter Law VIII by substituting the word 'twenty' for 'ten' members, to be elected members of the Committee of Council." By this resolution there would be an addition of ten members, thereby making a total of twenty, besides the Vice-Presidents and other office-bearers now not elected, but forming a large portion of the said Committee of Council. He justified his bringing forward this motion by the fact that five thousand gentlemen, members of the British Medical Association, were represented by only ten elected members. He was told, and properly told, that there were forty-nine members of Council, but it was understood that of those only ten were elected, and the larger number was made up by the vice-presidents, the local secretaries, and two or three officials. Now this was a very important feature of the case. If the members of the Association increased in numbers as they had been doing, his resolution must be well worthy of attention, for it was quite impossible that ten elected members could represent so many as five thousand, that number being increased year by year. There should be some proportion or adaptation between the represented and those who represented them; but that was not the case at present. Let twenty be elected on the Committee of Council, and they would more fully and fairly bring out the representative principle. He had been told by Mr. Watkin Williams that the local secretaries were virtually elected year by year, but he begged leave to offer his dissent from that assertion. It was well known that the local secretaries were sought after and solicited in the warmest terms to take upon themselves the duties of the office; and their duties drew very largely upon their industry (for which the Association was greatly indebted to them), but the presence of those gentlemen on the Committee of Council did not realise the representative principle. He thought that, if his resolution were adopted, it would be more likely than anything else to realise that condition of progress and prosperity of the Association which they all desired, and which would redound much to their honour collectively. An addition of ten to the Committee of Council would most surely add to the peace and good feeling which ought to prevail; and as he hoped there was but one bond of union among all present, he trusted they would accept his solicitation so to alter the rule that a fuller and more adequate recognition of the representative principle would be secured.

Dr. SEATON seconded the motion, because there were only the same number elected on the Committee of Council as when the Association numbered only one-third as many as there were now in its ranks. That was one reason for bringing forward this proposition. Another was, that there were nineteen secretaries of branches, who virtually were permanent members of the Executive Council.

Dr. RICHARDSON (London) expressed the great respect he had for Dr. Davey, but said he should move as an amendment a resolution more comprehensive than Dr. Davey's. It was to this effect "That a Committee be formed to consider whether the laws relating to the constitution and powers of the Committee of Council, or any of the other laws of the Association, admit of amendment; that the Committee do consist of the President of the Council, the Treasurer, the General

Secretary, the Editor of the JOURNAL, Mr. Heckstall Smith, Mr. Nunneley, Dr. R. Hall, Dr. Stewart, Mr. May, Mr. Fowler, Dr. Holman, Dr. W. Roberts, Dr. Chevalier, Dr. Procter, Dr. Davey, Rev. Dr. Bell, Mr. Gamage, and Dr. Leared; and that it report to the next general meeting of the Association, or to a special general meeting convened according to law." He did not place the President of the Association on the Committee, as he would have to preside when the report was brought up. He alluded to the discussion which took place in Birmingham in 1856 upon this question, because it was found that the General Council, meeting only once a year, had little to do with the management of the Association. Some of those who at that time were more advanced than others, sought to make the Committee of Council *de facto* what it was in name. He did propose at that time that the affairs of the Association should be placed in the hands of the Council altogether, and that the Committee of Council should cease. He looked upon it that a great Association like theirs should be governed in a parliamentary way, and that they should choose those who were to carry out its orders. But there was this difficulty before them, that already there was a Committee of Council; and, as a compromise, for the purpose of introducing the liberal element into the Association, it was arranged that the Branch Secretaries should be added to the Committee of Council. But they all knew that that was an *imperium in imperio*, and that it was not a thing to go on; but at that moment there was a schism in the Association, and great differences of opinion as to whether the Committee should be altered. Dr. Stewart at that time protested against the decision that the Committee of Council should appoint the editor of the JOURNAL. He maintained that the appointment should not be in the hands of the Committee while the secretary was appointed by the Association. It was said, too, that the laws then existing would not be permanent, and in a few years they could be changed. He thought the time had come when this great Association required to be placed on a different footing; and he thought powers for that purpose should really be delegated to the Council, and that the Council should be assembled four times a year and discuss with open doors, and the press present, all matters appertaining to the general welfare. All, however, that he desired at present was, that inquiry should be made as to whether the laws admitted of amendment—that a committee should meet and consider Dr. Davey's proposition in connexion with the whole question of the constitution of the Committee of Council, and report to the next general meeting. He had no object but to help the Association. As an Association, it was a vast body, and at its annual meeting its proceedings filled four days wonderfully, and created quite an effect in the country; but there were 361 days of the year in which the Association did not do so. During the four days every year, it was a massive structure standing on its base, and having a real effect upon the public mind; but for the remaining 361 days it was like a pyramid reversed, whereas it was necessary for its interests that it should stand upon its bottom at all times, and display the power by which it was kept in existence.

Dr. GIBBON seconded Dr. Richardson's amendment, grounding his doing so principally upon the fact that there was never any report from the Committee of Council, unless it were dragged from them, as it had been that night.

Mr. HUSBAND (York) said it seemed to be the desire of certain gentlemen that they should have a representative body. How could they have a better representative body than the one that already existed? He would ask any man conversant with business whether it was possible for a large body of men so well to consider details, and to perform the duties allotted to them, as the executive of an Association like this. How could they have a better Committee of Council than the present one, where thirty-six of the members were elected? Ten were elected annually, and the Branch Secretaries were elected year by year, because they were thoroughly conversant with the requirements of the Branches: they were not all old stagers, but year after year brought new blood into the Executive, and imparted a certain weight to the deliberations of the Executive which was of the greatest value. [*Cries of "No."*] The members of the various Branches knew whether he (Mr. Husband) was speaking the truth or not. He had been many years a member of the Committee of Council, and he was so constantly seeing fresh faces that he often had to ask "Who is that?" and the reply was continually, "That is a secretary for such a branch." To add still further to the representative system would, in his opinion, make the Executive cumbersome. That night there had been a report from the Committee. Gentlemen had a right to come there and ask for information; and there had been no hesitation in giving them all the details necessary to enable them thoroughly to understand the business; and there had been no concealment, except of the names of gentlemen who were contributors to the JOURNAL, and who had made it a point of agreement that their names should not be given. That

was all the information which had been concealed. He contended that there was already sufficient of the representative element; and as to Dr. Richardson's motion, it was so important that it ought not to have been submitted without notice. The Association had flourished under the present system; it had increased greatly its influence with the Government; it had elevated the character of the profession; and there had been great improvement in the management of the JOURNAL; and unless it were shown that it had failed in its mission, he should refuse to be one to throw a stigma upon it. He hoped the meeting would not hastily or rashly adopt either of the resolutions before it, because at all events due notice had not been given of one of them; and in any change which might be made, there would be the risk of decreasing the influence of the Executive, and of turning the character of the Council into that of a mere debating society.

Dr. STEWART said Dr. Richardson was mistaken if he supposed that he (Dr. Stewart) had objected to the appointment of the Editor of the JOURNAL being placed in the hands of the Committee of Council. That was not the point to which he directed his protest. What he had objected to was, that the Editor might be dismissed without appeal either to the Council or to the body of the Association. That he said still was, in his opinion, an improper provision; but, as to the appointment of Editor, he thought it was best in the hands of the Committee of Council, who were essentially a representative body; and if they could only get the secretaries of branches to attend much more constantly than they did, it would be manifestly what it was in fact—a thoroughly representative body.

Dr. HESLOP (Birmingham) said if there was to be any ratio between the executive body and the constituency, and yet twenty members would be enough, while ten were too few in an Association so numerous as this, it was a dogma he was quite unable to comprehend. And if it were supposed that ten were too few as representing 4,000 persons, how frightfully few in comparison must the 650 gentlemen in the House of Commons be to represent the interests and welfare of twenty-eight millions of people. [*Applause.*] The principle of numerical ratio, therefore, he took to be entirely unworthy of consideration. What they had to consider was whether there was already efficiency; whether the executive performed their duty; and would twenty be likely to do the work better than ten? He had for years, as they knew, been engaged in administrative matters, and his own experience was that a small executive board was far better than a large one. He thought also that the argument of Dr. Davey, that an increase in the number of the executive would conduce to the harmony and efficiency of the Association, was so exceedingly strange, that he would not reply to it. As to the secretaries not being elected, to his mind, in them the principle of representation was as thorough as possible, because they had the best knowledge of the wishes of those of whom the Association consisted; they were, in fact, the very quintessence of the Association, appointed to make known the wishes of the various component bodies. As to Dr. Richardson's proposal, it was of such a magnitude that it could not receive proper consideration at that meeting. He would have had a better claim, too, to the attention of those present, if he had got the concurrence of his own and other branches in saying that the constitution of the Association was wrong. If he could have said that he had submitted his proposal to five or six of the branches, and they had agreed to it, he would have had a *prima facie* case and a basis of argument of some weight to rest upon. He (Dr. Heslop) also took objection to the time of the meetings being taken up with technical objections which never came before the whole body in any shape or form; and he feared that, if that course were persisted in, it would not only be subversive of harmony, but obstructive of the whole business of the Association.

Sir WILLIAM JENNER (London) said that the resolution of Dr. Richardson was calculated to upset the constitution of the Association. No notice had been given of it; no one had had the opportunity of giving it the least reflection; and at half-past eleven at night it was impossible for any one to undertake, for the first time, to give proper consideration to so large a subject. He and others had come a great distance that day, and to be called upon at half-past eleven at night to consider the reconstitution of the Society was out of question entirely. He (Sir William) did not think the Association was going to the bad. If it were, there might be some reason for such abrupt proceedings; but as it was going on very well, the question might very well be left over a little longer. He would, therefore, ask Dr. Richardson not to press his proposition.

Dr. RICHARDSON said there were no opinions to which he attached more deference than to those of Sir William Jenner, but he must be permitted to say that his was not a proposal to remodel the constitution, but a proposal for a committee to take the matter into consideration.

The CHAIRMAN ruled that Dr. Richardson had no right to reply, though Dr. Davey had if he had been present.

Dr. RICHARDSON's amendment was then put to the vote and lost.

Dr. DAVEY's original motion was also lost by a large majority.

Other Motions.—The Rev. Dr. BELL, who had several notices on the paper, complained that he had not been allowed at ten o'clock to bring on a motion for an adjournment at that hour. He admitted that the proceedings of that night had to some extent answered his wishes. With regard to other points, he contented himself with merely referring to them. He observed that it had oozed out that the Committee of Council were beginning to feel the pressure from without, and he had no doubt that it would tell upon them in such a way that they would give way on other points before long.

Dr. LEARED had a notice on the paper with reference to the leading articles in the JOURNAL; but as he was not prepared to speak on the subject, though he had a paper which he was ready to read relating to it, the Chairman ruled that he would not be in order, and the proceedings of the meeting were brought to a close at midnight.

WEDNESDAY, JULY 28th.

The Public Breakfast of the Association took place this morning in the Victoria Hall.

Meeting of New Council.—At 9.30 A.M. a meeting of the new Council took place in the Council Chamber at the Town Hall. The Council unanimously elected W. D. Husband, Esq., of York, as President for the next three years. Ten gentlemen were elected members of Committee of Council for the ensuing year.

At 10.30 A.M. there was a meeting of the Committee for Registration of Disease in the Town Hall.

At 11 A.M. the second General Meeting was held in the Lecture Room at the Philosophical Hall.

Dr. SIBSON, the retiring President of the Council, said: Gentlemen,—It is with very great regret that I have to announce to you that Dr. Chadwick, the President, is still absent from Leeds, upon an errand which we are afraid will bring great affliction on him and his family. In his absence, the chair will be taken by the President of the Council; and I have now the honour to introduce to you the new President of the Council, Mr. Husband, of York, one of the oldest and most valued and most respected members of the Association. [*Applause.*]

Mr. HUSBAND—Gentlemen, I am sure you will all, with ourselves, deeply regret that Dr. Chadwick is not able to preside over us. I must now throw myself entirely upon your indulgence. I must ask you to remember that it is my duty here to support those courtesies of debate and those kindly feelings among us which are not at all inconsistent with our anxiety for the welfare of this Association. I ask you to support me in doing that; and I would ask all to remember that the eyes of England are upon us, and that anything discordant occurring here will be noticed out of doors. [*Hear, hear.*] I therefore throw myself upon your indulgence, and ask you to support me in conducting our proceedings. Your first duty will be to appoint the place for the meeting of the Association next year.

Place of Meeting in 1870.—Dr. EMBLETON (Newcastle-on-Tyne): I have to propose, on behalf of the towns of Newcastle and Gateshead, that the British Medical Association hold its next annual meeting in Newcastle. At the meeting of the Council to-day, petitions have been handed in from the different medical, educational, and other bodies of Newcastle and Gateshead, in support of this proposition. I can assure the Association, on the part of the town and on behalf of the profession in those towns, that they will have a hearty and sincere welcome; and I hope that, if the Association does go thither, the meeting will, in all respects, be as fully successful as this which is being held in Leeds. [*Applause.*]

Dr. FALCONER: In the absence of Dr. Stewart, who was originally asked to second this proposition, I have much pleasure in seconding that the next annual meeting be held at Newcastle.

The motion was carried by acclamation.

Election of President.—Dr. EMBLETON moved that Edward Charlton, M.D., of Newcastle, be President-elect for the ensuing year.

Dr. SIBSON seconded the motion, which was carried unanimously.

Dr. CHARLTON, who was received with applause, said: I assure you that it was with no small anxiety that we resolved to invite the British Medical Association to come to Newcastle. We have not had you there before. We remembered that it was breaking new ground; but we also were well aware that that ground had been already gone over by other large associations—twice by the British Association for the Advancement of Science, and on both those occasions I had the pleasure myself of meeting that Association in Newcastle. I therefore felt perfectly certain that we possessed the means of receiving the British Medical Association, large as it is, at Newcastle; and I trust we possess the means, too, of giving them a hearty welcome. [*Applause.*] It is

true we should have preferred perhaps a year later for your visit, in consequence of some new buildings going on, which would have been peculiarly suitable for the reception of the Association, where we could have received you, as Leeds has received you so splendidly here, under one roof. We cannot do that at the present time in Newcastle; but still the distance between the two towns is very small, and we shall almost get all the sections under one roof, if not entirely; and I trust that under the circumstances you will accept what we can give; and depend upon it that we shall spare no exertion to render the meeting as happy and as successful as the meetings have lately been. [*Applause.*] Some have spoken of Newcastle as being a smoky town. It will not do for me to say anything about this; but the transition from the pure air of Dublin and Oxford, through Leeds, to Newcastle, appears to be a very appropriate one; and perhaps you will survive the clouds of smoke and darkness there, and emerge into a brighter atmosphere afterwards. [*Laughter and applause.*] However murky the atmosphere may be—and we acknowledge it—we trust that, though under a cloud, we shall give as hearty a welcome, whether by day or night, as shall be possible, to the British Medical Association. [*Applause.*]

Honorary Member.—Mr. WATKIN WILLIAMS (General Secretary) announced that the Council had recommended that T. W. George, Esq., Mayor of Leeds, be elected an honorary member of the Association.

Dr. SIBSON: I have great pleasure in moving that the recommendation of the Council be immediately put into effect, and that the Mayor of Leeds be elected an honorary member of this Association. [*Applause.*] This is not a compliment of course, but one only paid to those who do honour to the Association, or for great works, or to those who have been of signal service to the Association; and it must be felt by every one who sees what has been placed at our command in this town for the purposes of this meeting, and the splendid hospitality bestowed upon us, that if any man be, the Mayor of Leeds is the one most fitted at this time to be made an honorary member. Whether there should be any others made honorary members, it is for the Leeds Committee to say; but I have great pleasure in moving that Mr. George, Mayor of Leeds, be appointed an honorary member. [*Applause.*]

Dr. LINGEN (Hereford) seconded the motion, which was carried with applause.

Committee of Council.—The SECRETARY announced that the following gentlemen had been elected to serve on the Committee of Council for the ensuing year: M. H. Clayton, Esq. (Birmingham); D. Embleton, M.D. (Newcastle); T. P. Heslop, M.D. (Birmingham); T. Nunneley, Esq. (Leeds); F. Sibson, M.D., F.R.S. (London); T. H. Smith, Esq. (St. Mary Cray); G. Southam, Esq. (Manchester); A. T. H. Waters, M.D. (Liverpool); C. G. Wheelhouse, Esq. (Leeds); M. A. E. Wilkinson, M.D. (Manchester).

Report of Committee on Registration of Disease.—Dr. RANSOME (Manchester) read the following report.

"In the last report of this Committee it was stated that, in January 1868, an uniform system of registration of cases of disease occurring in public practice was commenced at Manchester and Salford, St. Marylebone (London), Birmingham, Newcastle-upon-Tyne, and Gateshead. Although reports of a similar nature had been previously made at all these places for several years, they were then for the first time returned according to the same plan, and with the same schedule of diseases as that recommended by this Association. These returns have been steadily continued ever since; monthly at St. Marylebone, and weekly at all the other places.

"In Manchester and Salford, reports are collected by the Sanitary Association from twenty-eight contributors, medical officers to hospitals, or parochial institutions; and the average number of cases thus recorded every week has been from 1,200 to 1,300.

"In St. Marylebone, eleven charitable institutions supply the returns to Dr. Whitmore, Medical Officer of Health. Each month, about 5,000 cases are reported from these sources.

"In Birmingham, Dr. Alfred Hill obtains reports from four hospitals, and from parochial sources. The average weekly number of cases recorded is nearly 1,000.

"In Newcastle-on-Tyne and Gateshead, the returns are made by twenty-two contributors, through Dr. Philipson, to the Northumberland and Durham Medical Society. Every week about 400 cases are thus registered.

"It must be observed that the returns from these different places are not strictly comparable, in consequence of slight differences in the quality of the institutions from which the reports are made. When carefully analysed, however, they give much useful general information as to the spread of epidemic diseases—from which, in course of time, important conclusions may be drawn respecting the nature and progress of these disorders.

"For local purposes, also, they are invaluable, since they afford a

ready means of warning the different communities of the presence and rate of increase of epidemics in their neighbourhood.

"It is much to be regretted that during the past year no fresh centres of registration have been formed.

"The Committee suggest to the Association that it is desirable to urge upon the Legislature the importance of establishing a National Registration of all cases of disease coming under treatment in public institutions—adopting, for the purpose, the existing districts for the registration of deaths, aided by a Registration Medical Officer, according to the plan already approved of by this Association, at their Meeting in Dublin, in 1867."

The following extract, from the report of the Committee for the year 1867, was also read to the meeting.

"The Committee desire to call the attention of the Association to a proposal made by Dr. Farr, in the last report to the Registrar General, for the appointment of a Registration Medical Officer in each Superintendent Registrar's district. The appointment of this officer would greatly improve the existing machinery for mortuary registration. His chief duties would be to verify the fact of death—identify the person of the deceased—to register still-births, and, in certain cases, to investigate and record the cause of death. He would also be available as a medical witness or assessor, and might act as a medical officer of health in certain districts. The Committee consider that such an officer would not only greatly promote the correct registration of deaths, and improve other public medical services, but that he would also be the suitable authority for collecting and publishing the returns of disease obtained by local associations; and, in order to facilitate this arrangement, they propose that the districts for the registration of disease shall be based upon those for the registration of births, deaths, and marriages. The Committee trust that the British Medical Association will support Dr. Farr in his design, and that steps will be taken by its members to urge its importance upon the Secretary of State."

Dr. CHARLTON moved that the report be adopted. He said: This is a most valuable commencement—a commencement of a more accurate registration of disease even than that inaugurated by Dr. Farr. It is assisting that admirable register; and I am not certain that until this time we have had registration of disease so complete that we could judge of the ravages disease committed in the various towns throughout the kingdom.

Mr. BALDING (Royston) seconded the motion, and it was carried.

Dr. RUMSEY said that, as bearing upon this subject, he had to move the following resolution, which to members of the Association would speak for itself. "That it is desirable that the report of the Committee be forwarded to the Right Hon. the Chairman of the Royal Sanitary Commission, accompanied by a request that the Commission will be pleased to examine a member of this Committee, Dr. Sibson, F.R.S., or some other, on the subject, with a view to pointing out to the said Commission the great importance to the public and to science of the registration of diseases."

Dr. OGLE (Derby) seconded the motion, and it was agreed to.

Address in Medicine.—At twelve o'clock, Sir WILLIAM JENNER, Bart., delivered an Address in Medicine, at the Philosophical Hall, to a crowded audience. [The address was published at page 114 of last week's JOURNAL.] Sir William was frequently applauded throughout his address, and at the close resumed his seat amidst loud and continued cheering.

Dr. HEATON (Leeds) said he felt it a very distinguished honour and privilege to be entrusted with the motion which had been committed to his charge. It was the more gratifying to himself, inasmuch as he had the honour of recognising in Sir William Jenner a brother-student of the same College, and a brother-graduate of the same University. Sir William Jenner was one in honouring whom the Sovereign had honoured the whole profession to which he belonged. [*Hear, hear.*] The eloquence with which he had spoken that day, the precision with which he had expressed scientific truths, and the remarkable manner in which, in the short time placed at his disposal, he had given a summary of medical science down to its very latest discoveries, was something which he was sure they could all appreciate, and could only appreciate by having heard. [*Hear, hear, and applause.*] Those who had listened to the address must, he was sure, feel that all doubt as to the practical value of the medical department of their profession, both in its curative and in its preventive action, and the benefit which it confers upon the public at large, by promoting health, by relieving suffering, by prolonging life—all doubt, he said, must be dispelled from every one who had listened to what had been so eloquently and carefully laid before them. [*Hear, hear.*] He considered that Sir William Jenner's address would be looked upon as one of the principal features of this meeting of the Association; and he was sure they would all carry away a most favourable recollection of the hour which had just ex-

pired. He moved "That the cordial thanks of this meeting be given to Sir William Jenner for his very excellent address." [*Cheers.*]

Dr. RADCLIFFE HALL (Torquay), in seconding the motion, said that nearly a quarter of a century ago, when the name of Sir William Jenner was somewhat less a household word than it was at present, Professor Sharpey said, "If I were ill, the man who should attend me would be Jenner; he goes to the bottom of a subject; he will be content with nothing short of truth, and he will take nothing upon trust." [*Hear, hear.*] Professor Parkes, on another occasion, happened to say something very similar, and followed it up by the same expression—"If I were ill", he said, "my friend Jenner is the man who should attend me, if I could get him." They could judge for themselves, from what they had heard that day, whether the character given by Professor Sharpey was not the character which Sir William Jenner now sustained.

The motion, on being put, was carried, amidst loud cheers.

Sir WILLIAM JENNER, in reply, said: I have to thank you very much indeed for the cordial way in which you have rendered this vote of thanks. All I have, I feel I owe to the profession; and therefore all that is in me I feel I ought to give to the profession. [*Cheers.*]

The meeting then adjourned at 1 P.M.

At 2 P.M., the business of the Sections commenced. The following papers were read.

Section A.—*Medicine.* President—W. T. GAIRDNER, M.D.

Sanderson, J. B., M.D., F.R.S. On the Practical and Pathological Bearing of Recent Researches as to the Artificial Production of Tubercle.

Reynolds, J. R., M.D., F.R.S. Treatment of Rheumatic Fever by Perchloride of Iron.

Fox, C. B., M.D. Remarks on Clinical Thermometers.

Fothergill, J. M., M.D. On Uræmic Diarrhoea.

Section B.—*Surgery.* President—WILLIAM HEY, F.R.C.S.

Southam, G., F.R.C.S. On some of the Advantages of Tapping in the Treatment of Ovarian Tumours.

Hey, S., F.R.C.S. On the Beneficial Results of Undesigned and Accidental Hæmorrhage in certain cases.

Teevan, W. F., B.A., F.R.C.S. On the Early Detection and Treatment of Stricture of the Urethra.

Macleod, G. H. B., M.D. On the Immediate Treatment of Stricture.

Wheelhouse, C. G., F.R.C.S. On the Use of the Probe Dilator in Operations involving the Posterior Portion of the Urethra.

Stokes, W., Jun., M.D. On Temporary Deligation of the Abdominal Aorta.

Stokes, W., Jun., M.D. On a New Operation for Hare-Lip.

Bennett, W., M.D. On the Therapeutical Application of Steam under High Pressure.

Section C.—*Midwifery.* President—ARTHUR FARRE, M.D., F.R.S.

Playfair, W. S., M.D. On the Treatment of Chronic Uterine Catarrh.

Wallace, J., M.D. On Hydrothorax and Empyema; Thoracentesis and forcible extraction of the Fluid by Suction; with cases.

Routh, C. H. F., M.D. On the Treatment of certain forms of Uterine Cancer.

Braithwaite, James, M.D. On a mode of applying the Midwifery Forceps productive of less pain to, and disturbance of, the Patient, than that usually adopted.

Section D.—*Physiology.* President—J. H. BENNETT, M.D., F.R.S.E.

Bennett, J. Hughes, M.D. On experiments to determine the effects of Mercurial Preparations and various Irritants to the origin of the Gallduct in the Duodenum.

Bennett, J. Hughes, M.D. On the Historical Argument opposed to the existence of Atmospheric Germs.

Fox, C. B., M.D. Remarks on Ear-cough, and its mode of production.

Sect. E.—*State Medicine.* President—W. FARR, M.D., D.C.L., F.R.S.

Blanc, H., M.D. On Animal Vaccination.

Braidwood, P. M., M.D. On Animal Vaccination.

Steele, A. B., L.K. & Q.C.P.I. On the Comparative Protective Powers of Animal and Human Vaccine Lymph.

Philipson, G. H., M.D. On the Registration of Diseases.

Oliver, G., M.B. The Atmosphere of Towns in its Sanitary Aspect.

Procter, W. B., F.R.C.S. On the Infant Mortality of Bradford.

Allbutt, T. Clifford, M.A., M.D. On the Propagation of Enteric Fever.

President's Soirée.—In the evening, the President's soirée took place in the Victoria Hall. There was a large company, including many ladies. There was no attempt to decorate the hall, but a number of

choice plants had been placed with great taste at different parts of the room, and added to the general attractiveness of the scene. A number of microscopes had been sent in by various gentlemen, and the selection of specimens was unusually good and valuable. In addition to the microscopes several articles of interest were displayed, and the company were shown in the Civil Court Room, by Mr. J. Holroyd, Professor Tyndall's experiments on sensitive and singing flames; and Mr. Scroah exhibited stratified discharges of coloured light in Geissler's tubes. Dr. Spark performed at intervals of half-an-hour selections on the grand organ; so that, apart from its conversational character, there was much at the soirée to afford amusement and instruction. The only drawback was the absence of the President.

Visit to the West Riding Asylum.—In the afternoon, about one hundred of the members of the Association paid a visit to the West Riding Asylum. They were met by Dr. Crichton Browne, the medical director, and were taken through the various departments. At three o'clock they repaired to the dining hall, in which a cold collation was served. After luncheon, Sir William Jenner proposed the health of Dr. Browne, which was enthusiastically drunk. Dr. Browne responded, and the party adjourned to the lawn, where about 700 or 800 of the patients and a number of visitors had assembled. A promenade concert was given by the Asylum Church choir, under the conductorship of Mr. F. K. Perkin.

THURSDAY, JULY 29th.

The third General Meeting was held in the Philosophical Hall, at 10 A.M.; C. RADCLYFFE HALL, M.D., Vice-President, in the Chair.

The CHAIRMAN read a resolution to the effect that, at a meeting of the Local Committee in the Town Hall on July 28th, it was resolved that Dr. Heaton should act as Dr. Chadwick's representative at the public dinner. At the request of the Committee, Dr. Heaton had consented to accept the discharge of the duty. He also mentioned that Dr. Spark had consented to play for an hour on Friday on the Town Hall organ, for the purpose of exhibiting its qualities to the meeting.

Representation of the Profession in the Medical Council.—Dr. E. WATERS presented the Report of the Committee, who, he said, had now been working for upwards of two years. In the year 1867, the present President of Council, Mr. Husband, suggested in Committee of Council that a Subcommittee should be formed with the view of ascertaining how far it was desirable that the profession generally should be directly represented in the General Medical Council. The Subcommittee was formed, consisting of Mr. Husband, Mr. Nunneley, and others, with himself as chairman, to examine the point; and the Committee made a report at Dublin, and submitted that the profession should have in the General Medical Council eight representatives, being a fourth of its number—four for England, two for Scotland, and two for Ireland. The report was discussed in Dublin, first in Council, and carried; and next in the general meeting of the Association, where it was carried, he might almost say, unanimously. He believed that there were a mover and seconder to a modification of it, but their hands only were held up in support of the proposition. The Committee then continued its labours, and had a meeting with the General Medical Council; and simply requested, at the interview, that, in any amended Acts Bill, they would agree to the admission of direct representatives on the Council. The Committee wished to be at one with the General Medical Council on the point, and believed that, if they went with one opinion before Government, the request would inevitably be granted. The General Medical Council did not think it right to grant the prayer. They did not actually discuss the question; but they declared that the time was inopportune to consider it; and in that position the Committee remained till the meeting at Oxford. The matter was again brought forward, and the views unanimously approved by the Association; so that, in two succeeding anniversaries, this object had been favoured by the Association. At Oxford, the Committee was increased in number, by the addition of gentlemen who were not on the Committee of Council; such gentlemen being Dr. Heslop, Dr. Russell, Dr. H. Simpson, Mr. Gamgee, Mr. Cordy Burrows, and Dr. Davey. These gentlemen, with himself as chairman, still constituted the Committee; and it was in their name that he had now to present the following report of their labours.

"Your Committee, appointed at the Annual Meeting of the Association held at Oxford in August 1867, in order to obtain Direct Representation of the Profession in the General Medical Council, are happy in being able to report a material advance in the direction of attaining this object of the Association during the past year.

"Your Committee held a special meeting in October 1868, at which an address to the Members of the British Medical Association and the Profession was agreed to; it was subsequently approved of at a very

full meeting of the Committee of Council, and then published in the *Lancet*, the *Medical Times and Gazette*, and the *JOURNAL* of the Association. They have reason to believe that this address had a good effect in keeping before the profession the importance of continued action. The Lancashire and Cheshire Branch of the Association held a special meeting, at which it was unanimously decided to petition the legislature to support the movement; and other Branches adopted the same course.

"Your Committee held a second special meeting in March 1869, at which a second address was agreed to. The previous one was intended solely for the profession; this was addressed to Members of the Legislature and the General Public, and comprised an explanation of the origin and constitution of the General Medical Council, and contained an exposition of the grounds which rendered it necessary to modify its composition and increase its powers. This address has been studied by many members of the legislature, and has met with general support; and, since its publication, the action of the Committee has been much strengthened by the memorial to the General Medical Council, which originated in a meeting held at Birmingham, under the presidency of Dr. Bell Fletcher, and which has received upwards of eight thousand signatures, being about one-half of all the members of the profession. This memorial aims at the same object as that which has been entrusted to your Committee by the Association.

"Your Committee, on the 12th of the present month, were granted an interview with Earl de Grey and Ripon, the Lord President of the Privy Council, and the Right Hon. W. E. Forster, Vice-President of the Privy Council, in order to lay before them the views of the Association. The Committee were supported by a large number of members from all parts of the kingdom, and by a considerable number of members of Parliament. They were courteously received, and their statements listened to with marked attention; and they have good reason to believe that their representations will have effect, and that no further Medical Council will be formed without the introduction of direct representatives of the profession in the proportion of at least one-fourth of its members.

"EDWARD WATERS,

Chairman of the Committee."

Dr. WATERS then moved the adoption of the Report.

Dr. BATEMAN (Norwich) seconded the motion.

The Rev. Dr. HAUGHTON (Dublin) expressed his entire concurrence with the report, and his thanks for the zeal and diligence with which the Committee had carried out the instructions given to them. But as he believed no human work was absolutely perfect, he, exercising his own private judgment on the matter, thought they might make the work of the Committee still more perfect than it was at present. It was his intention to support completely, and in its integrity, the adoption of the Report; but he took the liberty of suggesting that the meeting should adopt the Report with a slight addition to it, which he thought would improve it; and, whilst falling in with the views, at least with the principles, of the Committee, would, he trusted, meet with the almost unanimous concurrence of the members of the Association generally. The Medical Council, as they all knew, at present consisted of six twenty-fourths nominated by the Crown; eight twenty-fourths nominated by the Universities; nine twenty-fourths nominated by the Medical Corporations; and the President, one twenty-fourth, who was selected by the Council at large. He used the term "nominate" advisedly, because the governing bodies of the various universities and corporations practically nominated their representatives on this Council. The Council was therefore homogeneous in its composition. All the members were nominated and not elected, and were only in a very vague sense representatives. Now, he felt that, if they confined their action on the present occasion to the representation sought for in the Report, supposing they succeeded in the object of the Report, with which he concurred as far as it went, they would fall short of what should be attained. It was quite unnecessary to say to members of the Association that bodies were to be weighed as well as counted; but, if the object sought were conceded, the fourth of the representation would be swamped by the others, and their representatives would run the risk of being out-voted on every great question where the interests of the profession were intimately concerned. They were now striving to convert the Council into a representative assembly, and he thought they made a mistake in asking only one-fourth of the representation. He should therefore take the opportunity of suggesting that they add a friendly rider to the Report, which would practically give the profession at large a working majority on the future Council. There were seventeen corporations, including the universities, who now sent forward representatives. No doubt, when the amended Bill came before the House of Commons, each of these corporations would have to fight its individual battle in securing representation. He did not see why, in the university and corporation elections, the profession at large, and the interests of the practi-

tioners in the country, should not be represented indirectly. He believed that, if they proposed as a principle, in addition to the recommendation of the report, that the elections of the universities and the corporations should be made by the graduates, and the licentiates, and others, they would introduce into the Medical Council, at the back of their direct representatives, a body of men who would be as much the representatives of the profession as those specially elected by the profession. [*Hear, hear.*] It was quite right that private interests should be respected and represented; but they should not be represented in a selfish manner, to the detriment of the education and advancement of the profession generally. Dr. Haughton enlarged on the importance of taking the step he advocated, and contended that it would be beneficial to the corporations represented, and that the graduates and licentiates were fully qualified to discharge the duties which would be required of them. He also pointed out that the governing bodies of the corporations, although no doubt they did their best to select proper representatives for the Medical Council, yet did not, he felt, select the representatives that would be chosen by the graduates. In conclusion, he said he would only add the words of a man who, as long as the world lasted, would be respected. Aristotle was once asked who was the best shoemaker. He thought for a moment, and was at first disposed to say that the best shoemaker was the man who made the best shoes; but, reflecting, he saw that that would be a wrong answer, and he immediately replied: "No, the best shoemaker is not the man who makes the best shoes, but the man that makes the best shoes with the leather placed at his disposal." [*Hear, hear, and applause.*] Now, they were not considering what was the best constitution that they could adopt, but what was the best constitution of the Council that was practicable. They had in the old corporations some excellent leather, but some very tough, and very bad to stretch [*Laughter*], and it would defy all their cobbling skill unless they introduced a large amount of new leather; otherwise it would be impossible to make shoes to fit the profession. [*Laughter.*] He believed that he spoke the practical opinion of leading men in the House of Commons, when he said it would be as easy to carry the whole reform as it would the half. No matter what came of the amendment he was about to propose, he would support the adoption of the Report as far as it went. He proposed: "That the Report of the Representation Committee be adopted, with the following addition—'That the British Medical Association are of opinion that the graduates and licentiates of the universities and medical corporations should have the power of electing their own representatives on the Medical Council.'"

Dr. ROBERT MARTIN (Warrington) seconded the amendment.

Dr. E. WATERS (Chester), before the Chairman put the motion for the adoption of the report, wished to say a few words. He thanked Dr. Haughton for the manner in which he had brought forward his resolution; but it was most desirable that the object which the Committee of the Association had worked hard at should not be placed in danger by the course which Dr. Haughton had taken.

The Rev. Dr. HAUGHTON said he wished to make a suggestion. If it met the wishes of the Committee, he was perfectly willing to let the report pass, so as to avoid the appearance of an amendment upon it, and then have his amendment put as a substantive amendment.

Dr. WATERS said that was precisely what he aimed at, because they had had a very simple object in view; and, by not attempting too many things at once, they were the more likely to succeed in their aim. They had brought before the Medical Council and before the Privy Council a reasonable proposition, and he believed they were on the point of triumph in a battle which at one time was uncertain. He was therefore very anxious that the action of the Committee should not be trammelled by such resolutions. [*Hear, hear.*]

Dr. BATEMAN (Norwich) said that, as the seconder of the resolution, he wished to say that it appeared to him that their body should be represented in the House of Commons. [*"Question."*] He thought the President of the Medical Council ought to have a seat in the House.

Dr. SIBSON (London) had worked with his colleagues on the Council for the last two years with regard to this matter. There was one argument to which he wished to give utterance. He had heard several times in London, even from men who were connected with the Council itself, that on the Medical Council there was a great deal more said than done; that the speaking power of the Council was a great deal ahead of its working power. [*Hear, hear.*] The argument used in conversation by members of the Council was that, if they be invited or compelled to admit upon the Council an additional number of members, sent in by the body of the profession, they would not add to the working power, but to the talking power, of the Council. Now he would say that, intimately associated as he had been with the Council of the Association for three years, he could declare that at no one of their meetings was anything but work done. [*Hear, hear.*] Arguments were cogently put, waste language was never employed, verbose

language and mere adornment were never made use of, and so the work was got through; and he must say that a more useful and hardworking body of men than that representing the Association and the profession at large it was impossible to sit with. He wished it well put forth that the profession as a body would be certain not to choose talkers, but workers, to represent them. He felt sure that the profession would always choose workers on the Council; and they might depend upon it that the profession would send up men of the class of the late Mr. Teale—one of the noblest of men—and Mr. Paget of Leicester, to look after the interests of the profession. [*Hear, hear.*]

Dr. NANKIVELL (Torquay) would object to any increase of numbers in the Council.

Dr. WATERS said the whole composition of the Medical Council would be reconsidered in connection with the Medical Act. They contemplated that one-fourth of the Council should be directly representative of the profession, for they thought the profession, as a body, should elect their own representatives; but if they failed in securing that, then the representative principle must be regarded as having gone to the wall.

The motion for the adoption of the Report was then put and carried.

Dr. HAUGHTON's amendment was then put as a substantive motion.

Mr. HECKSTALL SMITH (St. Mary Cray) said, from the eloquent manner in which Dr. Haughton had brought forward his motion, it was difficult to avoid being carried away by that eloquence, and acting in a manner contrary to the opinion he had formed: and at that moment it would be inadvisable, without very much more consideration, to give assent to the proposition. He was glad to hear a previous speaker so sanguine on this question; but he (Mr. Smith) had taken some interest in the matter himself, and he feared that some people were almost too sanguine as to carrying the proposition brought forward. If Dr. Haughton's proposition were to be admitted, in addition to that of the Committee, it would be eventually a double representation of the profession; and they would readily be met by the Government with difficulties they would be unwilling to take; and he was sure [the attempt would only secure the postponement of the success of this great movement. They would be told at once, "You are seeking for a representation of individuals twice over; you are all members of some corporation or public body; you could not be registered as members of the profession without it; what we have created is a representation of your nominees, but what you ask for is that you may individually have representation." Now, that was so. They requested not merely representation in addition to the nominees of the great bodies, but a double representation. Very many belonged either to two or three bodies; and the meaning of Dr. Haughton's proposal was, that while a man had one vote for the representative of the body to which he belonged, he sought to have another vote for an independent representative. He would not say he did not consider that might be desirable, but he feared it would lead to complication, and this action would only lead to delay in the very promising aspect which affairs had assumed just now.

Dr. SIBSON said he had not the opportunity before of directing his attention to the observations of Dr. Haughton. It should be borne in mind that they were now maturing a great work, after nearly three years of labour. If another element, such as that at present under consideration, were to take its place, and if it were considered by the Government and the Legislature that it was to be a permanent thing, might it not be the means of injuring their position? He believed the word "licentiate" was used in Dr. Haughton's resolution. He would take the case of his own College. The Licentiates of the College of Physicians were merely an addendum in the College; they were not component parts of it. And, taking another body of which he was a member, should the new representation merely apply to the whole of the graduates or to the Doctors of Medicine only? There were also the Masters of Arts; but if it applied to the graduates in general, it showed that this was a question far beyond the control of any body, except there had been something like two or three meetings of each body, in order that they might put forth their views and advise what was the best plan for each. Another observation he would make before he sat down. Sometimes gentlemen were members of the College of Surgeons, and of the Society of Apothecaries, and also of the Universities of London, Dublin, St. Andrew's, Aberdeen, or some other. Those gentlemen had each three or four votes, and they would also have votes for representatives. That would be a very complex plan. He (Dr. Sibson) hoped the Association would take care now not to mar the work which had been so well begun. He did not oppose Dr. Haughton's proposal. There were elements of right about it, but they were not to be decided upon by any simple proposition brought forward under the circumstances of the present motion.

Dr. HESLOP (Birmingham) approved of Dr. Sibson's reasons for the exercise of great caution on this subject. He took credit to himself,

however, for being more advanced on this subject than Dr. Haughton, and referred to an article published by him lately in the *Lancet*. But what did this resolution mean? It was pledging this Association to a principle, namely, that it was the right thing for the future that the members of Corporations and Universities should be represented in the Council. Perhaps the majority thought so, but were they prepared to follow out that principle? Dr. Haughton appeared to doubt that that was the average conclusion, but he (Dr. Heslop) asked the meeting not to pledge themselves without full consideration of this point. Would it be for the improvement of the Medical Council? Were they to pass a resolution which would necessitate an Act of Parliament to change the condition of Corporations? In conclusion, he called upon every gentleman who had a real and hearty desire for reform to reject this motion on the single ground that it would be doing by a side-wind what could be done in a certain other way, and that they were already on the eve of great improvements.

Dr. LEES (Ashton-under-Lyne) considered that the proposal would be remarkable, as with the 20,000 registered practitioners in the United Kingdom there must be a great agitation in carrying out the election, just as in the election of members of Parliament for an University a great commotion was caused. There would also be very great expense involved. An immense amount of correspondence would be required through the post to ascertain the votes of the registered practitioners, because it was not every one that took in a medical journal. There were plenty of medical men who did not do that, and they could not be reached except through the post. The result of the plan would be that a clique would be formed to push one man to the front, and the really dignified and deserving men of the profession—those who had been devoting themselves to the improvement of the profession—would retire in disgust; because they would not go to the constituencies to canvass the electors.

The Rev. Dr. HAUGHTON, in reply, said his resolution had been so attacked that it became his duty to try to put it upon its legs again. He had the common object in view of endeavouring to transform the Medical Council into a representative body. With regard to whether the addition of the resolution would promote the success of the Report of the Committee or injure it, his opinion was that it was extremely likely to carry support along with it. He remembered the great Daniel O'Connell making a speech. He had been consulted by a client who had the right to a bushel of apples from a tree in an orchard, but could not get the bushel; and O'Connell said to him, "My good man, go in and cut down the tree." The man acted upon the advice, and the owner came to him and said: "Stop, stop, are you going to cut down the tree?" and, seeing that that was his intention, he told him "There are your apples." [Laughter.] Well, he was proposing that they should go before the House of Commons with large demands; and he affirmed that all the resolutions that they could pass would only have an indirect and slight effect upon what they would get. Their scheme must go before that very remarkable and most jealous body the House of Commons. The House of Commons believed in its own sagacity; and if they sent up the most perfect measure that the wit of man could conceive, in the House of Commons there would be found men who would pick out objections and make alterations. They should remember that they were not discussing as if engaged in legislating on the question; the details would be elsewhere considered, and this, he believed, formed a complete reply to Dr. Sibson's otherwise weighty remarks. Dr. Sibson had said he had put in licentiates. Now he had done so deliberately, not that he meant to say that every licentiate of a Corporation should have a vote, or that every medical graduate should have a vote. All this would be settled in the House of Commons. The Corporations would have to appear before the House, and each one would have to fight its own battle; and he had taken the course which he had with the view of covering the whole ground, and of leaving it to the House of Commons and the Corporations to say what classes of graduates or licentiates should have votes. He had purposely made use of the lowest grade, so that the most democratic vote might be got if it were thought desirable. Dr. Heslop's observation was a very weighty one, and it would completely destroy his resolution if the supposition on which it was founded were correct. Dr. Heslop supposed that the resolution implied the continued perpetual existence to the end of time of representatives of Universities and Corporations; but, read in its natural sense, the resolution did not do that. The natural interpretation was that, as long as such representatives existed, they ought to be elected so and so; and nothing was implied as to their continued existence. With regard to Dr. Lees' objection, he felt that the little half of the two minutes he had left would be sufficient to dispose of it. [Laughter.] Dr. Lees spoke at the wrong time, as his speech should have been directed against the adoption of the report; and, in reference to great expense and much agitation, he supposed the candi-

dates would consider their position when brought forward, and if any one had a plan to save expense, it would be adopted. He was simply urging the adoption of a principle. They had no power to consider details; the details would be laid down by a more powerful body; but he did press upon the meeting the wisdom of passing the resolution as an addendum to the report. [Applause.]

The resolution was then put to the vote, and was carried by a large majority.

Hospital Construction.—Captain GALTON, R.E., C.B., read a paper on this subject. A discussion followed, in which Dr. Evory Kennedy, Mr. J. Hutchinson, Sir James Simpson, Dr. Rumsey, Dr. Stewart, Dr. Hughes Bennett, and Dr. Macleod, took part.

On the motion of Sir JAMES SIMPSON, seconded by Dr. ALBUTT, a vote of thanks was given to Captain Galton. [A report of the paper and discussion will be published next week.]

The Fourth Annual Meeting was held at 2 P.M.; Dr. RADCLYFFE HALL in the Chair.

The Address in Midwifery was delivered by T. E. BEATTY, M.D. [It is published at page 137.]

Dr. ARTHUR FARRE (London) moved, Mr. BERRY (Birmingham) seconded, and it was unanimously carried—"That the cordial thanks of the meeting be given to Dr. Beatty for his able address."

At 3.30 P.M. the business of the Sections commenced, when the following papers were read.

Section A.—*Medicine*. President—W. T. GAIRDNER, M.D.

Reynolds, J. R., M.D., F.R.S. Certain forms of Paralysis, depending on Idea.

Anderson, M'Call, M.D. On some of the more recent Methods of Treating certain Diseases of the Skin.

Myrtle, A. S., M.D. On Hydro-therapeutics; the resources of Harrogate specially considered.

Cuming, James, M.D. On some points in the Pathology of Delirium Tremens.

Section B.—*Surgery*. President—WILLIAM HEY, F.R.C.S.

Teale, T. Pridgin, M.A., F.R.C.S. A demonstration of Rectangular Stumps.

Macleod, G. H. B., M.D. On Amputation at the Ankle-joint.

Richardson, B. W., M.D., F.R.S. Note on a new method of Painless Cutting in Surgery.

Taylor, C. B., M.D. Brief Notes (on Cataract Extraction) from Berlin, Wiesbaden, and Utrecht.

De Meric, Victor, F.R.C.S. On cases of Syphilitic Affection of the Third Nerve, producing Mydriasis with and without Ptosis.

Lund, Edward, F.R.C.S. On the Use of Antiseptic Cere-Cloth for Covering Wounds.

Section C.—*Midwifery*. President—ARTHUR FARRE, M.D., F.R.S.

Simpson, Sir James Y., Bart. Remarks on a Cephalotribe.

Hicks, J. B., M.D., F.R.S. On the Use of the Intra-uterine Douche in Offensive Lochia, as a rule of Practice.

Barnes, R., M.D. On the Use of Perchloride of Iron in Uterine Hæmorrhage.

Hicks, J. B., M.D., F.R.S. Cases showing the use of Perchloride of Iron in Flooding.

Squire, Wm., L.R.C.P., On the Temperature variations occasioned by Vaccination, and its Effects on the Health of Infants.

Smith, Protheroe, M.D. An Aid to Parturition, and to the Treatment of Displacement of the Uterus by a new Mechanical Appliance.

Section D.—*Physiology*. President—J. HUGHES BENNETT, M.D., F.R.S.E.

Brown-Séquard, Dr. C. E., M.D., F.R.S. Remarks on Epilepsy.

Broadbent, W. H., M.D. A brief account of a recent Investigation of the Structure of the Cerebral Hemisphere, with remarks.

Elliot, R., M.D. Does the Adjustment of the Eye, to vision at different distances, depend on temporary changes in the magnifying power of the eye, either by alterations in the form or position of the lens, or other parts in the dioptric system of the eye?

Elliot, R., M.D. Do the movements of the Iris, by permitting only the more central and practically parallel rays of the optic cone or pencil of light, to reach the fovea centralis, on the anterior surface of the sensitive layer of rods and bulbs—and by thus affording a sharp and well defined image of an object, whether near or far off—not perfectly explain the voluntary power of adjusting the eye to the distinct vision of objects at various distances?

Tait, Lawson, L.R.C.P., Ed. On Idio-Muscular Contraction.

Section E.—*State Medicine*. President—W. FARR, M.D., D.C.L., F.R.S. [This meeting was a special one, for papers and discussions on the Sanitary Administration of the United Kingdom.]

Ballard, E., M.D. The Defects of the Sanitary Acts.

Davies, T., M.R.C.S. Four Years' Experience as a Health Officer in Bristol.

Dyke, T. J., F.R.C.S. On the Practical Working of the Sanitary Act of 1866, and the Diseases Prevention Act of 1865.

Ballard, Edward, M.D. On the evils arising from the present mode of taking Medical and Scientific Evidence in our Courts of Justice.

Bateman, F., M.D. Is it proper that Medical Men should be compelled to divulge in Courts of Justice facts of a criminal nature which may have become known to them in answer to strictly professional questions?

The Public Dinner of the Association was held in the Town Hall at six P.M., when about 200 members and visitors dined together. The chair was occupied, in the absence of the President, by Dr. Heaton; who was supported on his right by the Mayor, and on his left by the Vicar, of Leeds.

The report of the proceedings of the meeting will be continued in the next number.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS.—List of members nominated by the Council for election as Fellows, and elected by the College, on July 29th, 1869.

Alexander, William, M.D. Edin., Halifax
Arlidge, John Thomas, M.B. Lond., Newcastle-under-Lyme
Blandford, George Fielding, M.B. Oxford, Clarges Street
Broadbent, William Henry, M.D. Lond., Upper Seymour Street
Cockle, John, M.D. Aberd., Brook Street
Daly, Owen, M.D. Dubl., Hull
Day, Henry, M.D. St. And., Stafford
Down, John Langdon Haydon, M.D. Lond., Welbeck Street
Maudsley, Henry, M.D. Lond., Queen Anne Street
Ransom, William Henry, M.D. Lond., Nottingham
Wilkinson, Matthew Alexander Eason, M.D. Edin., Manchester

Licences to practise physic were presented by the College to the following gentlemen, on July 29th.

Hendley, Thomas Holbein, Charlton, Kent
Pritchard, Urban, St. Paul's Road, Highbury
Sandiland, Arthur H., Bicester

Names of candidates who, having conformed to the bye-laws and regulations, and passed the required examinations, were proposed to the College, and admitted members, on July 29th.

Black, James Watt, M.D. Edin., Clarges Street
Cooke, Francis, M.D. Edin., Cheltenham
Trollope, Thomas, M.D. Camb., St. Leonard's-on-Sea

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, July 29th, 1869.

Deshon, Frederick Peter, East Coulston, Wiltshire
Gaitskill, Edward Forbes, Streatham
Purcell, Edward Godfrey, Holloway Road
Roberts, William Lloyd, Festiniog, North Wales
Saunders, Henry William, Oxford Street
Taylor, Frederic Eyres, Norwich
Thompson, William George Washington, Ballymoney, Ireland

At the same Court, the following passed the first examination.

Carter, A. H., University College	Newton, C. J., St. Bartholomew's
Duke, David, Guy's Hospital	Nicholls, H. H. J., Guy's Hospital
Evans, Alfred H., Guy's Hospital	Stedman, Fredk., University College
Fendick, H. R., St. Bartholomew's	Turner, H. C., Guy's Hospital
Herman, G. E., London Hospital	Vickers, C. W., London Hospital
Johnson, C. H., Hull Hospital	Warburton, E. S., Liverpool Hospital
Kay, T. V., Liverpool Hospital	Wilson, George, University College

As Assistants in compounding and dispensing medicines.

Hemingway, Walter, Portman Street, W.
Rooke, James Henry, Swansea

MEDICAL VACANCIES.

THE following vacancies are declared:—

ABERDEEN, St. NICHOLAS PAROCHIAL BOARD—Medical Officer: 17th.
BOURNEMOUTH GENERAL DISPENSARY—Resident Surgeon (£100 per annum, with furnished apartments, coal, gas, and attendance): applications, 9th September.

BRAINTREE UNION, Essex—Medical Officer and Public Vaccinator for the Parish of Finchingfield (£50 per annum, and extra fees).

CASTLECOMER UNION, co. Kilkenny—Medical Officer for the Workhouse (£70 per annum): 16th.

CHESTERTON UNION, Cambridgeshire—Medical Officer and Public Vaccinator for District No. 3 (£50 per annum, and extra fees): 12th.

CLIFDEN UNION, co. Galway—Medical Officer for the Islands of Innisboffin and Shark in the Clifden Dispensary District.

GLASGOW ROYAL INFIRMARY—An extra Surgeon to the Dispensary: election, 2nd September.

HUNSLET UNION, Yorkshire—Five District Medical Officers (£50, £60, £30, £15, £15 per annum); Medical Officer for the Workhouse (£30 per annum); Public Vaccinator for the whole Union: 11th.

ISLE OF MAN HOSPITAL AND DISPENSARY—Resident Medical Officer (£75 per annum, with rooms, attendance, cooking, coal, and gas, and an additional £10 per ann. for visiting the House of Industry): applications, 11th.

KINGSBRIDGE UNION, Devon—Medical Officer for District No. 7 (£56:10 per annum).

MILE END OLD TOWN UNION—Medical Officer for the East District: about 18th.

NEWPORT UNION, co. Salop—Medical Officer for District No. 4 (£35 per ann., and extra fees): applications, 7th inst.; election, 10th.

NORTH BIERLEY UNION, Yorkshire—Medical Officer for District No. 12 (£12 per annum, and extra fees): applications, 11th; election, 12th.

PETERSFIELD UNION—Medical Officer and Public Vaccinator for District No. 3 (£40 per ann., and Vaccination Fees): applications, 14th; election, 19th.

PLOMESGATE UNION, Suffolk—Medical Officer for the Orford District (£65 per annum, and extra fees): applications, 7th; election, 9th.

POCKLINGTON UNION, Yorkshire—Medical Officer for the Sutton-upon-Derwent District (£26 per annum).

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road—Physician: applications, 23rd inst.; election, 7th September.

ROYAL INFIRMARY SCHOOL OF MEDICINE, Liverpool—Lecturer on Botany and Demonstrator of Anatomy.

ST. GEORGE'S HOSPITAL—Assistant-Surgeon.

TAUNTON UNION—Medical Officer and Public Vaccinator for the Bishops Lydcard District (£99:10 per annum, inclusive of fees for Surgery; but exclusive of extra fees for Midwifery, Vaccination, and Quarterly Visits to Lunatics): applications, 14th; election, 19th.

WESTMINSTER HOSPITAL—Assistant-Surgeon.

WESTPORT UNION, co. Mayo—Medical Officer for the Louisburgh Dispensary District (£100 per annum, with Registration and Vaccination Fees, residence, and two acres of land): 16th.

BIRTHS.

LANSDOWN.—On July 30th, at Bristol, the wife of *F. Poole Lansdown, Esq., Surgeon, of a son.

WAHLTUCH.—On July 30th, at 280, Oxford Street, Manchester, the wife of *Adolphe Wahlutch, M.D., of a son.

MARRIAGES.

BUNTING, William John, Esq., Camberwell, to Jane, only daughter of S. T. Huke, Esq., Surgeon, Ludham, Norfolk, on July 15th.

HOARE, Reginald Ratcliff, Esq., Surgeon, only son of Wm. Hoare, Esq., Surgeon, to Amy Jane, third daughter of the late Charles TOVEY, Esq., of Pershore, at Duddeston, Birmingham, on August 3rd.

*MACHIN, E. S., M.R.C.S., of Erdington, to Janet, only daughter of George HODGKINSON, Esq., of the same place, on July 28th. [No cards.]

*THORP, Charles W., L.K.Q.C.P.I., of Todmorden, elder son of Gabriel Thorp, M.B., of Listowel, co. Kerry, to Edith, second daughter of Francis SPENCER, Esq., of Pendleton, at Eccles, on August 4th.

DEATHS.

REYNOLDS.—On July 28th, at Fallowfield, near Manchester, aged 25, Charlotte, wife of Osborne Reynolds, Esq., and second daughter of Charles Chadwick, M.D., President of the British Medical Association.

LINDSAY.—On August 4th, at Hanwell, Marguerite, infant daughter of *J. Murray Lindsay, M.D.

O'CONNOR.—On July 28th, at March, Cambridgeshire, aged 13, Roderick, son of *T. O'Connor, Esq., Surgeon.

WINCHESTER COLLEGE.—At the recent examination for thirteen vacant Scholarships at this College, J. H. H. Manley, son of our esteemed associate, Mr. Manley of West Bromwich, was placed first on the list of successful candidates. There were 137 competitors.

BEQUESTS.—The Devonshire Hospital, Buxton, has received a bequest of £100, free from legacy duty, from the executors of Mrs. Pearson, Buxton, the widow of J. A. Pearson, Esq., formerly one of the surgeons of the Devonshire Hospital.—The Committee of the Northern Counties Idiot Asylum have just received from the executors of the late Dean Waddington an intimation that he has bequeathed the munificent sum of £5,000 to the funds of that charity.

MALVERN COLLEGE.—The annual festival at this growing school was held on Tuesday, July 27th. The speeches having been delivered to a large and distinguished audience, Sir J. Pakington, M.P., addressed the pupils, and distributed the following prizes—Classical: J. Haworth, D. Faber, E. Corfe, H. Ingleby, J. Chadwick, A. Cope, W. Darley, C. Goodwin, H. Bartleet, S. Willcox; French: C. Lushington, H. Haddon, C. Horton; German: E. Smith; Mathematical: G. White, J. Stone, J. Nicolls, J. Hatchett, etc.; Drawing: J. Scholfield, W. Mealey, J. Stoner; Singing: C. Lucas, etc. The following award has been made for the scholarships and exhibitions. Classical—Lygon Scholarship—Drew, P.; Lea Scholarship—Lushington. Modern Department Exhibitions.—Senior, 1 Drew ii.; 2 Cooksay, Bearne, æq.; Junior, 1 Rodgers.

OPERATION DAYS AT THE HOSPITALS.

MONDAY	Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
TUESDAY.....	Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopædic Hospital, 2 P.M.
WEDNESDAY..	St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.
THURSDAY....	St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
FRIDAY	Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
SATURDAY	St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE length of the Report of the Annual Meeting at Leeds obliges us to defer the publication of various communications to which insertion would otherwise have been given.

ERRATA.—In the President's Address, the following corrections are required.

Page 107, col. i, line 9 from bottom, for "when fact is", read "where fact is".

Page 107, col. i, lines 6 and 7 from bottom, read "... become almost impossible.

As in the former instances to which I have referred, so our proceedings", etc.

Page 108, col. ii, line 39, for "aspirations", read "assertions".

Page 109, col. ii, line 5 from bottom, read "The Leeds Hospital".

Page 110, col. ii, in table of measurements of wards, the number of cubic feet for bed in the lower south ward should be 1875, and in the upper north ward, 2055.

Page 112, col. i, line 25, for "There we shall", read "Thus we shall".

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. Richards, not later than *Thursday*, twelve o'clock.

THE COUNTY ADMINISTRATION BILL.—Will our correspondent, "A. M. O.", kindly furnish us with his name, in confidence?

AMICUS CURIE should send his name—in confidence, not for publication. We cannot insert information of which we do not know the source.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, August 4th; The New York Medical Gazette, July 17th; The Parochial Critic, July 28th; The Tewkesbury Weekly Record, Aug. 4th; The New York Medical Record, July 17th; The Scotsman, August 3rd; The Glasgow Herald, July 22nd; The Indian Volunteer Gazette, May 18th; The Liverpool Mercury, July 26th; The Boston Medical and Surgical Journal, July 4th; The California Medical Gazette, July 1st; The Harrogate Advertiser, July 31st.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. Smith, Aberdeen; Dr. Murchison, London; Dr. Mapother, Dublin; Mr. Harry Leach, London; Mr. White, London; Mr. Moxon, Brigg; Mr. Baker, Brentwood; Mr. Machin, Erdington; Mr. J. Cartwright, Leintwardine; Dr. H. B. Dow, London; Dr. Thorne, London; Mr. T. Nunneley, Leeds; Dr. Hayden, Dublin; Mr. E. des Forges, Brough; Dr. Forrest, Dublin; Mr. W. Dalton, Cheltenham; Mr. H. P. Leech, Woolpit, Suffolk; Dr. Gairdner, Glasgow; Mr. G. C. Coles, London; Dr. E. B. Vise, Holbeach; Dr. D. Campbell Black, Glasgow; Dr. J. Ellis, London; Dr. J. D. Gillespie, Edinburgh; Dr. A. T. H. Waters, Liverpool; Dr. D. B. Hewitt, Dublin; and Mr. J. Birt, Stourbridge.

LETTERS, ETC. (with enclosures) from:—

Mr. T. Holmes, London; Mr. James Robertson, Edinburgh; Dr. Percy Leslie, Birmingham; Dr. Paul, London; Dr. Letheby, London; Dr. Stamford Felce, London; Dr. Dudfield, London; Dr. Rutherford, Edinburgh; M.D., London; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Lomas, London; The Registrar of the Medical Society of London; Dr. G. W. Balfour, Edinburgh; Mr. G. Street, London; Mr. J. T. Waller, Fleggburgh; Mr. E. Garraway, Faversham; A. M. O., Ulverstone; Dr. T. Savage, Birmingham; Mr. Walter Tyrrell, Great Malvern; Dr. H. Charlton Bastian, London; Mr. F. Le Gros Clark, London; Mrs. M. A. Baines, London; Mr. W. M. Banks, Liverpool; The Secretary of the Royal Albert Asylum, Lancaster; The Secretary of the Royal College of Surgeons, Edinburgh; Mr. T. Watkin Williams, Birmingham; Dr. Leared, London; Dr. J. G. Davey, Northwoods, Bristol; Mr. Vincent Jackson, Wolverhampton; Dr. G. B. Mead, Newmarket; A. Thorn, London; Mr. A. Prideaux, Liskeard; Dr. A. Wiltshire, London; Dr. G. Oliver, Redcar; Dr. P. M. Braidwood, Birkenhead; Dr. Carruthers, Northampton; Dr. C. B. Fox, Scarborough; Dr. J. W. Ogle, London; Mr. T. O'Connor, March; Mr. H. Denne, Birmingham; Dr. T. Skinner, Liverpool; Dr. T. R. Adams, Croydon; Dr. Chadwick, Leeds; and Sir Duncan Gibb, Bart., London.

Results of Meteorological Observations, for the week ending Saturday, July 31st, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.							Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	WIND.										RAIN.		
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.			Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell.	Amount in inches.
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm, etc.				
BATH	29.929	0.382	63.2	59.6	56.6	79	77.5	45.0	32.5	71.8	55.1	127.0	..	5.5	5	..	..	..	..	0.7	2.3	1	..	3	2	6	0.80
Dr. Barter, F.M.S.																												
BOURNEMOUTH	29.997	0.300	61.5	58.8	56.5	84	72.8	50.5	22.3	68.6	55.8	140.0	46.9	5.2	3.6	..	..	..	..	..	3.7	3	..	0.3	2.5	5	0.79
Dr. Compton, F.M.S.																												
DUBLIN	29.801	0.298	61.0	56.3	52.2	73	70.4	51.6	18.8	66.8	55.2	..	42.4	6.1	..	..	..	..	0.6	0.7	3.9	1.8	..	..	2.4	5	0.41
Dr. J. W. Moore.																												
KEW	29.972	0.306	64.5	58.8	54.0	69	75.8	50.1	25.7	72.7	56.3	148.9	44.0	5.8	6	..	0.3	..	..	..	3.7	2	0.3	0.7	2.7	2	0.65
Dr. Treutler, F.L.S., etc.																												
LLANDUDNO	29.857	0.288	60.3	57.0	54.2	80	72.2	48.7	23.5	68.7	54.5	..	..	6	..	0.7	..	..	..	..	1	5.3	..	..	1.4	6	0.50
Drs. Nicol and Dalton.																												
MALVERN	29.921	0.217	62.3	57.3	53.0	72	75.9	49.6	26.8	73.1	53.4	155.5	43.0	6.5	4.1	..	..	..	..	0.6	4	1	..	1.3	0.5	4	0.42
Messrs. W. and J. Burrow.																												
SIDMOUTH	29.971	0.400	61.1	58.5	56.3	84	70.5	49.0	21.5	67.6	55.3	..	..	3	7	..	..	..	..	..	1	6	..	..	0.7	6	0.51
Dr. Mackenzie, F.M.S.																												
VENTNOR, I. OF WIGHT	29.963	0.264	62.0	59.9	58.1	87	69.0	55.0	14.0	65.7	58.0	..	..	..	4.3	0.4	0.3	..	0.3	..	1	4	1	..	..	3	0.77
J. B. Martin, Esq., M.R.C.S.																												
WORTHING	29.980	0.334	62.4	59.9	57.8	85	72.0	52.1	19.9	68.6	56.1	127.5	50.7	6.1	4.5	0.3	..	..	..	0.3	3.7	1.7	0.3	0.7	3	2	0.12
W. I. Harris, Esq., M.R.C.S.E.																												

REMARKS.—There has been a general decrease of atmospheric pressure during the week of about 0.1 inch, while the range has been slightly greater than it was last week. Temperature has also diminished somewhat, though it has been more equable, as shown by the range, which has been less. Winds have been almost wholly South-Westerly, and of very moderate force. The amount of Clouds has been greater, the sky having been generally about half-covered. Ozone has continued to be fairly abundant. Rain fell at all stations during the week, but in very unequal quantities,—thus: more rain fell at Kew in two days than at Llandudno or Sidmouth in five; and at Worthing the amount was 0.12 inch,—the quantity for the whole of July being only 0.18 inch, which fell on three occasions. The general health is everywhere reported as very good. Oats were first cut in the neighbourhood of Kew on the 26th, and the wheat harvest commenced about Worthing on the 27th.

Plants first seen in flower during the week at Kew and in its vicinity.—*Convolvulus sepium*; *Veronica Anagallis*; *Veronica scutellata*; *Chrysanthemum Parthenium*; *Epilobium palustre*; *Hypericum Elodes*; *Hypericum quadrangulum*; *Scutellaria minor*; *Erica cinerea*; *Erica Tetralix*; *Campanula rotundifolia*; *Campanula Trachelium*; *Teucrium Scorodonia*; *Clematis Vitalba*; *Circæa lutetiana*; *Sparganium simplex*; *Arctium Lappa*.

Kew, W., August 3rd, 1869.

W. J. TREUTLER.

LECTURES

ON THE

PRINCIPLES OF SURGICAL DIAGNOSIS:

ESPECIALLY IN RELATION TO SHOCK AND
VISCERAL LESIONS.*Delivered at the Royal College of Surgeons of England.*

BY F. LE GROS CLARK, F.R.C.S.,

Hunterian Professor of Surgery and Pathology in the College; Surgeon to
St. Thomas's Hospital; and Examiner in Surgery at the
University of London.

LECTURE II.—LESIONS OF THORACIC VISCERA.

*Liability of Chest to Fracture.—Fractures of Sternum and Ribs.—
Various Consequences of Injuries of the Chest-walls.—Shock, Conse-
quent on Injury of the Chest.—Wounds of the Lung; how caused;
their Signs, etc.—Emphysema: Pneumo-thorax.—Pulmonic Hernia.
—Rupture of Lung.—Hydrothorax and Empyema.—Concussion and
Contusion of the Lung.—Penetrating Wounds of the Lung.*

MR. PRESIDENT AND GENTLEMEN,—In civil practice, traumatic lesions of the thoracic viscera are comparatively infrequent, and even the hospital surgeon has but rare opportunities of witnessing wounds of the heart or lungs, unless in such a form, or of so complicated a character as to involve speedy if not immediate dissolution. The exception to this remark is in the case of such pulmonary lesions as are occasionally entailed by fracture of the ribs or sternum, of which I shall speak presently. That the class of injuries to which I refer is so commonly fatal, is explained by the immediate importance to life of the thoracic viscera, hæmorrhage or suffocation often anticipating the more dilatory, though scarcely less destructive, consequences of inflammation. Yet, remarkable cases present themselves from time to time, in which this expected result is not realised; and although the nature of the lesion is generally well defined, and clearly indicated in most instances by the symptoms or signs which are present; in some exceptional cases the diagnosis is obscure, and a careful analysis of all the circumstances attending the hurt and its consequences is required, in order to form a probable estimate of the actual condition and prospects of the patient. The prolongation of life under necessarily mortal injury is not infrequently of great moment, even in a temporal point of view. The identification of an assassin, the communication of some important information, the arrangement of worldly concerns, may depend on a correct diagnosis and the means employed to delay a fatal issue.

In contrasting the relative liability to injury of the thoracic organs, and those of the head and pelvis, we find that the source of immunity is due to different causes; the arched and vaulted form, and the solid, resisting walls of the latter, constituting that protection which is afforded by the yielding and elastic parietes of the former. Each constituent element in the skeleton of the chest is possessed of this pliant quality, either in its own proper construction or derived from its relation to the other parts. Although the individual vertebræ are rigid, the central column which they collectively compose is flexible, by virtue of the tough fibro-cartilage which binds the several bones together. The flat plates of bone which constitute the sternum are so designed, from their obliquity of relation to the cavity they help to enclose, as to afford protection against the consequences of direct violence; but this attribute is greatly helped by the elasticity derived from the connexion of the breast-bone to the costal cartilages. The ribs themselves are essentially elastic, but are rendered much more so by the interposition of the cartilages between their extremities and the sternum, which is the common bond of their union in front. This property of the chest-walls is physiologically essential, to admit of the varying capacity of the cavity during respiration; but it also subserves, in a remarkable degree, the purpose of securing the viscera from the consequences of external violence.

When the sternum is fractured, it is very rarely the result of direct force: and if such should be the case, the ribs are almost always seriously implicated in the injury, and thus attest the extent and character of the violence which was competent to produce such an effect. Simple transverse fracture of the sternum is caused by forcible flexion of the spine; it is bent in its long axis, and gives way usually near its centre. In many instances the strong ligaments in front and behind are only

partially torn, and then the diagnosis of the fracture is obscure, and its existence is inferred rather from the nature of the causative accident and from the suffering of the patient, than from the presence of the usual signs of fracture. In some instances, however, fracture is produced by direct violence, as occurred in an omnibus-driver recently under my care. Whilst standing on the steps of his vehicle, a cart backed against him, and, as my dresser's report states, he was jammed against a small step above, and quite twisted round. The sternum was broken across in its upper third, and the right clavicle was dislocated forwards at its sternal end. He suffered from some dyspnoea at first, but recovered without any other untoward symptom.

I recently met with the remark, in a modern French author, that this injury (fracture of the sternum) is rare; and that, when it occurs, it is usually attended by serious visceral and vascular complications. The result of my own experience is the converse of this. Fracture of the sternum, though not a very common, is by no means a very rare, accident; but it is in very few instances, where the fracture is simple, that I have seen any visceral complications to excite even uneasiness. Indeed, I may say that, unless the costal cartilages or the ribs themselves give way, it is, mechanically, improbable that any serious organic lesion could result; inasmuch as displacement of the broken bone is prevented by its lateral relations, so long as they retain their integrity. But, it must be admitted that the more complicated form of fracture with organic lesion is not infrequent; torn pleura, wounded and collapsed lung, with their usual concomitants, entailing speedy death. In like manner, simple fracture of the spinal column very rarely injures the heart or lungs, which are protected, in either instance, severally, by the mediastina.

When the ribs are broken the case is different, though only exceptionally so. This injury is, in my experience, far more frequently the consequence of indirect than of direct violence; the bone is bent, as in fracture of the spine, beyond its power of resistance, and then snaps. It is this mode of fracture which is the security, in most cases, against injury of the lung. Fracture from indirect violence may, no doubt, cause laceration of the adherent costal pleura; probably it does so in most instances where there is displacement of the fractured ends; and local pleurisy, with its attendant short cough, is the consequence. But this does not entail wound of the lung; the resiliency of these organs permits them to yield to the encroachment, and secures them from lesion, the adjoining surfaces of the serous membrane soon becoming glued together by plastic deposit. When a rib is broken at the point of impact of an extraneous body, the bone, instead of being fractured outwards, is driven inwards, and the lung is thereby often wounded. This frequently occurs in drunken broils, when a fallen combatant is kicked in the side. The diagnosis of this injury is generally very simple, inasmuch as the escape of air into the areolar tissue is apparent to the touch or sight; and the far more serious extravasation into the pleura is indicated by unmistakeable signs and symptoms.

The higher the fracture, the more serious, generally, is the injury. I have a record of several cases in which the first and second ribs were fractured; and these injuries have been mortal, in consequence of the lung being wounded. When the fracture is quite low down, involving the last two or three ribs, the chest rarely suffers; but the abdominal symptoms assume a prominence, which clearly manifests the implication of these viscera in the mischief. This circumstance I shall have an opportunity of exemplifying hereafter.

The experience of civil practice, as I just now remarked, necessarily limits our practical acquaintance with those more formidable injuries of the thoracic viscera in particular, which are the consequence of penetrating wounds by sharp-pointed instruments or shot; for, except in this way, instances of deep wounds of the chest are rare. Thus, hæmorrhage to any alarming extent, from the lung into the pleural cavity or into the tissue of the organ itself is, so far as my observation has enabled me to judge, scarcely ever met with. Limited hæmoptysis is not infrequent, resulting from puncture of the lung by a broken rib; but it is rarely of a character to excite anxiety, except as an indication of the nature of the lesion, and that it entails a local hyperæmia, which may extend. Yet, such topical manifestation of traumatic inflammation is usually limited to the precincts of the injured part; and I have very rarely had to treat pneumonia in these cases. If present, this condition is revealed by the usual stethoscopic signs; and we must not trust alone to the rust-coloured sputa, cough, and febrile excitement, which may, and usually do, accompany inflammation limited to the vicinity of the lesion, and are simply expressive of the salutary effort by which repair of the mischief is inaugurated.

Blood-tinged expectoration is not infrequent, after the lapse of two or three days, and without the presence of any signs of pneumonia. In such cases, lesion of the lung, from contusion or laceration, may be inferred; the extravasated blood is mixed with and dissolved in the mucus,

and thus ejected by coughing. But the presence of frothy and bloody sputa, in any quantity, may reasonably excite suspicion that the lung has been torn more deeply.

I have remarked that profuse hæmoptysis is of very rare occurrence in such injuries of the chest as are encountered in civil practice. The following case was supposed, during the life of the patient, to be one of these exceptional instances; and my reason for quoting it is, that the special feature of the case was delusive, as regards the diagnosis of its source, and that its presence was purely accidental. A carman, of middle age, fell from a high van, the wheels of which passed over his chest. Several ribs of the left side, the upper six as was afterwards ascertained, were fractured; he had external emphysema, and apparently the same condition of the lung, for there was increased resonance, with faulty breath-sounds and slight crepitation. He rallied from the shock, and was going on tolerably well until the eighteenth day, when he suddenly brought up a pint and a half of scarlet blood, which, as it was pure, was supposed to be from the lung. Broncho-pneumonia existed at this time all over the chest. A second loss of blood, two days later, proved fatal. At the *post mortem* examination it was found that this blood was derived from an ulcer in the stomach, opening into the coronary artery.

Wounds of the parietal vessels—the intercostal and mammary—are scarcely ever met with; or, if they occur more frequently than I suppose, it is without the presence of such signs or symptoms as might be expected. Any accumulation of blood within the pleural cavity would be rendered apparent by the attendant dyspnoea and the dulness on percussion, with the absence of respiratory murmur at that part of the chest to which the blood gravitates, and where the lung is consequently displaced; but this complication is of very rare occurrence.

The position of the intercostal nerve renders it probable that it is often, if not usually, pressed upon or injured by the displaced rib, especially when the fracture is far back. I believe that the acute pain, the catching respiration, and short cough, accompanying this accident, are due in a measure to the implication of the nerve in the way described.

The *Shock* which attends the injuries to which I have referred is usually of a transient nature, and referable rather to the general violence or agitation accompanying them than to the local lesion. The reaction is proportionately moderate, and is almost always attended by a short and troublesome cough, which much distresses the patient, and requires tranquillising remedies to palliate. But occasionally contusions of the chest, when severe, though unattended by fracture, may entail the collapse of severe shock. Thus, in a lad under my care, who was crushed under a falling cart, the weight of which rested on his chest, the collapse was profound, although his entire recovery in a few days proved that there could have been no organic lesion. The local pain, with cough and distress in talking, were exclusively referred to the chest. The lungs had been forcibly compressed; and his condition is accounted for by the functional derangement of these organs, consequent on congestion, as I shall presently explain and exemplify.

Wound of the Lung, in fracture of ribs, is the consequence of the penetration of the organ by the depressed and jagged fragment. So commonly is this complication caused by violence applied directly to the seat of fracture, that the character of the accident may be almost certainly predicated from the presence of the unequivocal signs denoting the organic lesion. Thus, a severe blow received on the ribs, a heavy fall on the side, the passage of the wheel of a vehicle over the chest, commonly produce this effect, by forcing the broken bone inwards beyond the resisting capacity of the lung:—a property due, partly, to the natural elasticity and resiliency of the organ, and in part to its compressibility by parting with its air. The blow, therefore, which produces this injury must be sharp and circumscribed, or of a nature to compress forcibly the whole walls of the chest. This explanation accounts for the fact that, when the lung is wounded, we so commonly find two or more ribs broken; or, if the injury be limited to one rib, the displacement, from laceration of the connecting tissues, is more obvious than where such fracture is the consequence of overbending of the rib.

The ordinary and pathognomonic sign by which superficial laceration of the lung is characterised, is the escape of air from its tissue. This may occur in two ways: either by extravasation into the subcutaneous areolar tissue, or by accumulation in the pleural cavity. Although such lesion cannot occur without some laceration of vessels, I have observed that the presence of blood in the sputa is by no means a necessary concomitant of the escape of air. Probably such extravasated blood passes into the pleural cavity; certainly it is rare to find ecchymosis beneath the skin in the neighbourhood of the fracture. The condition which favours one or other form of escape of the air—which determines whether it be emphysema or pleural extravasation—would appear to be purely mechanical; viz., the correspondence or otherwise of the wound in the lung with

the wound in the costal pleura. Such coincidence may be due to the existence of some old adhesion between the adjoining surfaces of the pleura, a circumstance which any one familiar with *post mortem* examination must be aware is very common; or it may be determined by the degree of distension of the lung at the moment that the fracture occurs. If the wounded lung recede from the position it occupied at the time the injury was inflicted, the breach in its texture is valvular in relation to that of the reflected pleura; and the escape of air, if there be any, is into the pleural space. Probably the occurrence of this form of effusion is not infrequent, when to such a limited extent as not to attract attention; and it may, in part, account for the dyspnoea which characterises, more or less, all these fractures; whilst it is not sufficient to be manifested by signs whereby it is readily recognised when more developed. No doubt such limited pneumothorax is favoured by previous adhesions in the neighbourhood of the wound, if they be not an essential condition to its occurrence.

Circumscribed *Emphysema* is common, and creates but little anxiety, either on account of its presence, or of contingent inflammation in the wounded lung. There is no limit to the extension of such extravasation, except the plastic sealing of the lesion, and the consequent arrest of the escape of air. Even more general emphysema is not, by itself, necessarily an alarming symptom; but if it spread rapidly, this sign may be accepted as a measure of the gravity of the injury to the lung. Yet I have seen many instances in which air has been diffused over the trunk, face, and extremities, without the subsequent manifestation of any symptoms of pneumonia.

The peculiar crepitation which, on pressure, is indicative of the presence of air in the subcutaneous areolar tissue may, under certain circumstances, be a source of obscurity, or even of error, in diagnosis. Whenever extravasation is so limited as to have been overlooked until the ear or the stethoscope is applied to the chest, the sound elicited may be mistaken for the crepitation of pneumonia; under any circumstances, superficial emphysema seriously interferes with a satisfactory examination of the lung, until the air is carefully pressed out and excluded from the spot to which the stethoscope is applied. I have realised the embarrassment to which I allude, and, therefore, have mentioned it; probably the obscurity was due to my unpractised surgical ear.

Of accumulation of air in the pleural space—*Pneumothorax*—I have had some few cases under my care where the signs and symptoms were well-marked, and indicated an amount of pressure on the lung which almost entirely suspended its function for a time. The loud resonance of the affected side of the chest with absence of breath-sounds, and accompanied by dyspnoea and a livid tint in the face, indicating imperfect oxygenation of the blood, characterise this condition. The distension of the pleural cavity may even thrust aside the pericardium and displace the heart. I have stood by the bedside, with the instruments ready to perform paracentesis if requisite; but I have never found it necessary in this condition. The fact is that the actual mechanical relations of the affected part, at the climax of the mischief, constitute the essential condition of its relief. When air ceases to enter the lung, it can no longer be pumped into the pleura; the wounded lung has rest; and plastic lymph closes the lacerated opening. The extravasated air is gradually removed; and, *pari passu*, the healed lung resumes its function. The observed condition of the patient coincides with this explanation; viz., increasing dyspnoea to an alarming extent; the continuance of this condition for a period not very prolonged; and then gradual amendment, with the removal of the abnormal signs and symptoms. In other cases, the encroachment on the lung stops short of this extreme compression.

In my experience, emphysema, except to a limited extent around the fracture, does not usually occur with pneumothorax. The mechanical relations to which I have referred, account for the absence of one form of extravasation when the other is present; the following case, however, exemplifies this complication. J. F., aged 43, was admitted under my care about five years since, having fallen from a high cart on to a heap of stones. He did not complain much of his chest at first, having a severe contusion of the hip, which gave him great pain. But in the evening, some emphysema made its appearance over the right side. On the following day, when I saw him, the emphysema had extended over a considerable space, and quickly spread to the neck. The breath-sounds were indistinct towards the lower part of the right side, whereas the resonance on percussion was increased. On the third day, the emphysema had extended still further, but there were no general symptoms to create uneasiness. On the fourth day, the breathing became oppressed, the pulse quickened, and the face flushed. The resonance of the right side had diminished, so as to be less than that of the left, and the breath-sounds were still indistinct, and there was some cough. Dr. Bristowe saw the case with me at this period, and agreed with me in regarding the pneumonia as local. All the symptoms gradually subsided, and the patient ultimately recovered. I find the following re-

marks in my note-book appended to this case. In this instance the lung was wounded by the broken ribs being driven in upon it; air was extravasated into the areolar tissue; and the increased resonance of the affected side, combined with partially suppressed breath-sounds, indicated the further complication of extravasation of air into the pleura. When pneumonia seemed imminent, the diagnosis was obscured by the lung receding from the chest-wall as air accumulated in the pleural space; and the pneumatic crepitation was masked, and confused with the superficial crepitation in the areolar tissue—a source of perplexity which was in great measure removed by pressing the air away from the part to which the stethoscope was applied. With the dyspnoea and fever came diminished resonance of the affected lung. The absence of coloured expectoration, and the character of the cough, aided the diagnosis in this complex case.

Occasionally in severe injuries of the chest, we have the opportunity of witnessing the state of collapse of the lung produced by pneumothorax; and it is remarkable to what an extent the organ is shrunk from uniform compression; how effectually the air has been pressed out of it, and how shrivelled it appears. I have no recollection of paracentesis for pneumothorax ever having been performed in St. Thomas's Hospital since I have been connected with it; therefore, I conclude it can rarely be demanded. The temporary inconvenience caused by emphysema scarcely ever justifies interference. In one case only do I remember to have observed relief from evacuation of the air; and that was in a child in whom the emphysema was almost general.

What becomes of air thus extravasated? How is it removed? There is no doubt that, whether in the pleura or areolar tissue, it sometimes disappears with surprising rapidity; yet, as far as I can gather, there seems to be but little, if any, accurate knowledge as to the mode in which it is removed. This question would appear to be influenced very much by the nature of the gas which has accumulated, whether it be common atmospheric air which had passed into the tissue from without, or the product of chemical decomposition within. Yet the issue is, in reality, but little affected by these different conditions; for the habits of the gases are so similar in relation to this point, that, whatever their nature, their removal must obviously depend upon exactly the same kind of action, differing only in degree. Absorption is the agency to which such removal is usually attributed; but probably this process is accomplished only after the gas has been gradually dissolved in the fluids of the parts; and both physically and physiologically this view appears to be reasonable. The permanent gases are all of them more or less soluble in water; some to a much greater extent than others, but all are subject to the same law. Gas dissolved in water is so incorporated therewith, that under any ordinary circumstances absorption of the liquid implies absorption of the gas.

According to the circumstances under which they are produced, the gases present may be a combination of oxygen and nitrogen, or of carburetted and sulphuretted hydrogen. The extent to which these gases are soluble in water varies extremely. Thus, 100 cubic inches of water dissolve 300 cubic inches of sulphuretted hydrogen, and only two inches of nitrogen, the relative solubility of the four gases being as 1 to 24, 65, and 120. The low solubility of nitrogen would, according to the supposition named, require a longer period for its absorption; whereas sulphuretted hydrogen should be much more rapidly removed; or, in other words, a much longer time would be required for the absorption of atmospheric air, than that of gas, the product of decomposition; a circumstance which may throw some light on the obscure subject of blood-poisoning, where the conditions for the disengagement of sulphuretted hydrogen are favourable. Yet it would be difficult to erect, out of this comparison, any principle of diagnosis upon which dependence can be placed; for, in the case of atmospheric air, usually the extravasation takes place in a definite time, and is not renewed; whereas, in the case of gas disengaged by decomposition, the producing elements, in the form of disorganised tissue or fetid fluid, being still present, there is no limit to the production of fresh gas, as that which exists is removed.

Before quitting the subject of injury of the thoracic viscera, accompanying fracture of the ribs, I may remark that I have seen one, and but one, instance of wound of the heart from this cause. I shall again refer to this case in a future lecture.

Hernia of the lung may occur, when there is such a breach in the chest, from accident, as to permit it; or if the diaphragm be ruptured so as to allow of the escape of the abdominal viscera into the pleural cavity. This latter form of injury I have seen, *post mortem*, in rapidly fatal cases; but I have never had the opportunity of diagnosing it during life. No doubt, the laceration of the diaphragm is the most serious element in such a lesion: to this I shall again refer. Of pulmonary hernia I had an interesting instance under my care about a

twelvemonth since; and, as the case is a good exemplification of this form of injury, as well as of emphysema, I will quote it.

D. B., aged 39, a salt-hawker, with very defective vision, was knocked down in the street by the pointed shaft of some vehicle striking his chest on the right side at the upper part. He was immediately brought to the hospital. On admission, there was some degree of shock; his respirations being 20, and his pulse 92, in the minute. On examining the seat of injury, a peculiar appearance was witnessed. At each inspiration, a large tumour, of the size of the doubled fist, presented itself below the clavicle; and this disappeared at each expiration, leaving a deep depression, capable of containing a couple of ounces of fluid, at the least. On digital examination, I found that a large gap in the chest wall corresponded to the site of this alternating swelling and depression; and its position indicated that this was due to the absence of the second rib, at or near to its attachment to the sternum. The cartilage of this rib had, in fact, been displaced and driven in. There was no emphysema whatever at this time, and the patient did not suffer from dyspnoea. The chest-sounds were perfectly normal, and there was distinct crepitation in the tumour. On the following morning, the right side of the neck and chest began to show signs of emphysema; and there was a noisy, musical sound, during the filling and collapse of the tumour, which was now reduced to the size of an orange. There was also acute pleuritic pain near the seat of injury, but no sign of effusion into the pleural space. There was some congestion of the face; but the lips were well injected. He began to cough; and his pulse had risen to 112, and his respirations to 26. Temperature normal. The emphysema prevented me from using the stethoscope satisfactorily. A few ounces of blood were taken from the arm. On the third day, there was less congestion of the face; but his pulse was quick, and his cough was troublesome. There was loud rhonchus over the right side of the chest, and friction-sound was audible at the lower part. I ordered that a light pad should be applied over the injured part. The emphysema had by this time extended to the trunk, face, and limbs, reaching to the right forearm and knee. He spoke with difficulty, and was easier when laid on the left side and raised in bed. On the fifth day, he was greatly improved in every respect; and the swelling no longer appeared as previously when the pad was removed, though there was an alternate rise and fall at the injured part, synchronous with each inspiration and expiration. On the eighth day, the friction-sound had disappeared; but there was relative dulness generally over the left (opposite) side of the chest, the right being more resonant. Expectoration scanty, and slightly tinged with blood; emphysema diminishing, though still distinguishable in the groins, arms, and face. Gradually, and with many fluctuations, these symptoms subsided; and, at the end of six weeks, the patient was convalescent. The only abnormal sound to be heard over the chest was some dulness on percussion just below the seat of injury. The gap remained, but presented to the touch more consistence than at first. Some plastic deposit evidently occupied the space; and the impulse of the distended lung during inspiration was scarcely perceptible.

Many points of interest, bearing on the diagnosis, present themselves in considering this case. The alternative of our having to deal with circumscribed emphysema of the areolar tissue naturally suggested itself, but was rejected, on account of the strictly defined limits of the tumour, and the absence of any tendency to diffusion of the air beyond its boundary, until after the lapse of some hours, and then very gradually so. The lesion was followed by an attack of acute pleurisy and some pneumonia. The relative resonance of the two sides suggested to my mind the probability of there being some air in the injured pleura; yet the interval of a week renders such an occurrence very exceptional. The displaced fragment of rib must have retained its abnormal position, for it could not be felt.

I have never seen pulmonic hernia resulting from wound of the thoracic walls: indeed, the foregoing is the only case of external hernia of the lung that has come under my observation.

Rupture of the lung from compression of the walls of the chest is occasionally met with; but I do not remember to have seen this occurrence unaccompanied by fracture of the ribs. Yet the absence of displacement of the broken ends of bone points to compression as the cause of lesion of the lung, as in the following instance. A young man was crushed between the shaft of a cart and a wall, the shaft striking him between the inferior angle of the right scapula and the spine. He was in a state of pulseless prostration when admitted, and continued so during the forty hours that he survived. Dyspnoea was increasingly distressing; and emphysema had extended from near the seat of injury in the back, over the entire trunk. A large rent was found across the right lung; and the corresponding pleura contained a quart of blood. The sixth, seventh, and eighth ribs were broken near to their angles, but had not penetrated the lung.

A similar condition was manifested in a child under my care, who was run over, and survived the injury only a few hours. The lower lobe of the right lung was torn almost across, and the pleura contained nearly a pint of fluid blood. It is a remarkable circumstance that, in this instance, although some ribs were broken, the pleura was not wounded.

The presence of *hydrothorax* or *empyema*, if they occur as sequences of injury of the chest or of its contained viscera, is manifested by the indications which characterise these affections when consequent on inflammation from other causes. Although these conditions have rarely a traumatic origin, the surgeon should be alive to the possibility of their occurrence after acute pleuritis and pleuro-pneumonia; and the disinclination of the patient to lie on one side, the absence of vibration in the walls of the chest on the affected side when speaking, displacement of the heart, loss of symmetry in the chest-walls, and, notably, bulging of the intercostal spaces, would suggest the presence of fluid, even without the aid of the stethoscope. Yet the above signs may be more or less obvious when the pleura is not the seat of mischief, as I shall have occasion to exemplify, in a future lecture, by a remarkable instance in which an enormous cyst was developed below the diaphragm, and in its growth thrust aside all the viscera, both abdominal and thoracic, in its neighbourhood.

May the lung be the subject of *concussion* or *contusion*? I think this inquiry may, in both instances, be answered in the affirmative. Indeed, I have seen instances which might, on first view, be regarded as suggestive of contusion by *contre-coup*, or, at least, of seriously disturbed function in the lung on the opposite side of the chest to that on which the violence to the walls had been inflicted—a result which I shall endeavour presently to explain. It is true that, in many instances, such consequence is due to squeezing of the whole chest, and rending of the suddenly compressed vessels. This would appear to be the explanation of many of those apoplectic clots which are observed in *post mortem* examination of injuries of this class. Yet other cases which have come under my notice compel me to believe that simple functional disturbance of the lung may occur as the consequence of force applied, without mechanical lesion; and also that contusion and other results of the violence inflicted are met with occasionally, as indirect effects of such violence.

I do not believe that bruising of the lung, the chest-walls retaining their integrity, is a frequent accident; for its own resiliency and elasticity are its protection. And, when it does occur, I am unacquainted with any special diagnostic sign by which to recognise it—apart, that is, from the general indications of disturbed function, and possibly local pneumonia; unless we may accept as evidence the secondary expectoration—usually after the lapse of forty-eight hours—of blood-stained mucus, where no pneumonia exists. There is, however, no doubt that such lesions as those I refer to may cause local or even general pneumonia, as a consequence of the excessive action excited in the necessary effort to repair the mischief which has been inflicted.

But contusion of the chest-walls, without puncture or external wound, may entail more serious local consequences. Thus, I am acquainted with a case in which a blow from a fist was succeeded by acute local pneumonia, which terminated in abscess, and proved fatal. Similar consequences may be caused by suppurative inflammation, entailed by injury or operation in close proximity to the pleura, without perforation of that membrane. In these instances, I presume that inflammation extends, by contiguity, to the pleura and lung. I may remark, that a congested state of the lung is a not infrequent sequence of a practice which is now, happily, becoming obsolete: I mean pugilistic encounters, in which the chest is often sorely bruised; and thus the foundation of organic disease is laid, which has frequently proved fatal to those addicted to this practice.

The influence of previous disease or of chronic functional disturbance in the lungs should be taken into account in the diagnosis of these injuries and their consequences, and more especially in the prognosis in this class of cases. Such instances are of every-day occurrence in our hospital practice. For example, a bricklayer, fifty-eight years of age, was admitted under my care, having fallen from a height on to his chest, and fractured three or four of the upper ribs on the left side. He had been the subject of chronic bronchitis for a long time. He survived for a week, suffering severely from dyspnoea and inability to expectorate; and pneumonia, with prostration, supervened shortly before death. Recent pleurisy on the right side, with consolidation of the corresponding lung at its upper part, was found. The heart was large, and the left ventricle dilated. In this instance, the opposite lung to that injured was specially involved in the after-consequences.

How are we to explain the phenomena presented by the following case, which is simply typical of many that I have witnessed? A lad, ten years old, was admitted under my care last year, having been run

over. There was profound shock, and the breathing was difficult and hurried. There were no marks of bruising on the chest, but the movements of the left side were impeded. There was no fracture; but auscultation detected loud bubbling sounds, as of air passing through fluid; the resonance was diminished. On the right side the respiration was puerile; there was no expectoration. The boy was well in a fortnight.

In the first place, I may observe that this case exemplifies my remark, that serious functional disturbance may ensue as the consequence of mechanical violence, whereas a rapid recovery leaves us no alternative but to conclude that the lung has escaped organic lesion. But in this instance there were abnormal breath-sounds, with impaired movement on the left side, and puerile respiration on the right; or, in other words, partially suspended function in the former, and excessive activity in the latter. The explanation would appear to be that the left lung sustained the shock, and thus threw the burden of the work on the right—a partially paralysed state of the former, and congestive hyperæmia of the latter, being the result. It is in this way alone, I think, that we can account for the apparently paradoxical phenomena which we often witness in these injuries; viz., temporary paralysis of one lung entailing engorgement of the other; for, it must be remembered that a retarded circulation through one set of pulmonary vessels does not diminish the column of blood discharged by the right ventricle into the pulmonary artery; and the process of combustion is disproportioned to the quantity of combustible material supplied to one lung, which is thus surcharged with blood; and the labouring heart is also involved in the disturbance. Of course this condition may issue in acute inflammation, where such predisposition exists, but it generally subsides spontaneously, or may be relieved by local depletion.

The following case is one of peculiar interest, from the remarkable condition of the chest which supervened after severe concussion of the whole body.

J. H., a lad 12 years of age, was admitted into the hospital under my care about three years since. He had fallen about forty or fifty feet; but, with the exception of some bruises about the trunk, the only discoverable injury was a fracture, or separation of the epiphysis of the humerus; the shock was moderate. On the day following that on which the accident occurred, I found him with a flushed face, and hurried and oppressed breathing; but, though the dyspnoea was urgent, there was neither lividity nor coldness of the lips or of the extremities. The heart's action was forcible and frequent, but the sounds were normal. Over the left side of the chest there was entire absence of resonance on percussion, and of breath-sounds, and indeed of any sound but the heart's beat, except, perhaps, the feeblest murmur just below the clavicle. The vocal thrill was equally distinct on both sides. On the right side there was normal resonance on percussion, and the respiration was distinctly audible—indeed, puerile. There was neither cough nor expectoration. Four leeches were applied over the upper part of the affected lung, with almost immediate relief. On the following day the boy was breathing quietly; and in less than forty-eight hours all the above symptoms had disappeared, and the respiratory sounds, on auscultation and percussion, as well as the heart's action, were found perfectly normal.

The condition of this patient seemed so anomalous that I sought the assistance of Dr. Clapton, who was in the hospital at the time, and he entirely confirmed the diagnosis, or rather the presence of the signs I have mentioned; although he was at a loss, like myself, to account for them satisfactorily. The absence of pain, and the continuance of the costal movements, showed that there was no consolidation; indeed, the suddenness of the attack forbade that supposition. The entire left lung was the seat of suspended respiration. The extremely excited action of the heart appeared to indicate serious obstruction in the pulmonary circulation; and the result of the treatment points in the same direction. The lung was paralysed from shock, resulting from the violence done to the chest in the fall; and reaction was accompanied by engorgement of the pulmonic capillaries, due, probably, to the still suspended function of the vaso-motor nerves.

The conclusions I draw from these and similar cases are, that serious functional derangement, without organic lesion, may result from concussion or concussion of the chest; that this derangement may occur without any injury to the thoracic walls; and that it may be transient and subside without any ulterior results: but that, on the other hand, the disturbance in the circulation may be succeeded by inflammation, either local or general, of the affected lung. The vascular disturbance to which I refer appears to be a partial arrest, or retarded flow, of blood in the capillaries, giving rise to engorgement or congestion—not as the consequence of excess in the supply, but of a passive condition of the vessels, which fail to carry onward the blood received. This condition being the result of shock, it seems reasonable to conclude that the fault or failing is in nerve-supply to the vessels of the lung; that the vaso-motor nerves are paralysed, and thus permit this distension and conse-

quent engorgement of the capillaries—an inference which is consistent with what is known respecting the influence of these nerves over the vessels to which they are distributed. That the condition I speak of, or one allied to it, is occasionally observed in the lung on the side opposite to that which has sustained the injury, may be explained by the presence of a largely augmented supply of blood, which is thrown into it in consequence of the partially arrested circulation in the injured lung; perhaps something may be due to communicated concussion and to sympathy. However this may be, I certainly have noticed that serious lesion of one lung is accompanied, occasionally, by transient vascular engorgement of the other.

Death sometimes occurs rapidly, or even suddenly, under these circumstances; the patient is, in fact, suffocated from blocking of the air-cells and tubes by vascular pressure and accumulation of mucus. The *post-mortem* condition in such instances is exemplified in the case of a patient of mine who died in strong convulsions, struggling for breath. The first rib was found fractured near its sternal extremities, and the third, fourth, fifth, sixth, and seventh, near their necks. There was a little clear fluid in one of the pleuræ, but they were otherwise healthy. Both lungs were gorged with blood, a considerable part of the left not crepitating, and sinking in water. The trachea and bronchi were deeply injected, and contained thick, dark mucus; the surface of the brain also was deeply congested.

The repair of lacerated wounds of the lung seems to be effected by the deposit of plastic material upon and around the lesion; but I have rarely witnessed this to any extent, even where the patient has survived long enough for the lung to be involved in general inflammation. The following case exemplifies this condition, and likewise a state of the pulmonary arterial circulation which must have been consequent upon its obstruction in the injured lung.

A young man was admitted under my care, over whose chest the wheel of a waggon had passed. Three ribs on the right side were broken; and he was in a state of collapse, with extending emphysema. His lips were dusky; his breathing was laboured and abdominal; the inspirations were catching; and the expirations sudden, brief, and explosive. He survived forty-eight hours; and, shortly before death, his chest became dull on percussion, the vocal thrill exaggerated, and the heart-sounds indistinct. The sputa had been only slightly tinged with blood. There was found a lacerated wound of the upper lobe of the right lung, around which recent lymph was deposited in a rough granular form; the rest of this lung was barely crepitant. Clots were found in the tissue of the left lung, which was collapsed, emphysematous, and congested. The branches of the pulmonary artery in this, the lung which was *not* lacerated, contained fibrinous, cord-like coagula, prolonged from a clot in the right ventricle of the heart.

In a case of compound fracture of the second and third ribs in a child, which occurred recently in St. Thomas's Hospital, air was audibly driven out of the lung at each expiration, and the integument seemed to be sucked in at each inspiration. He survived six hours; and, on examination after death, a large lacerated wound in the upper lobe of the right lung was found to be closed, by the cementing of its adjoining surfaces. There was no pneumothorax.

Penetrating wounds of the lung are, under any circumstances, serious; and their fatality is much enhanced by the retention of any intruding body. Yet, as I have already remarked, it rarely occurs to the civil surgeon to witness such cases, which are almost always consequent upon gun-shot wounds. Of penetrating wounds from pointed weapons I have seen some few instances. Occasionally the costal pleura alone is perforated, as I remember witnessing on one occasion, many years since, in the operation of tracheotomy with a trochar; and also in a case of deligation of the subclavian artery. A similar accident occurred likewise in a patient in whom I had opened the trachea for acute laryngitis. A few hours after the operation, the tube was incautiously removed, in consequence of some obstruction in it, and another substituted. Shortly after this, in the night, the clinical clerk's report states that it was noticed the patient was able to speak, and was breathing by the mouth as well as the tube; air entered the cannula, which was quite pervious, but was not expired through it. Presently he complained of severe pain in the lower part of the chest; and soon afterwards his face, neck, and eyelids, began to swell, and became livid. Cold water was dashed in his face, and artificial respiration was resorted to, but without avail: he died twelve hours after the operation. The symptoms, as reported to me in the morning, perplexed me, for I had left my patient entirely relieved by the operation: I therefore looked to the autopsy with much interest for an explanation. The appearances revealed the fact that the substituted cannula had not entered the trachea, but had been pushed down by its side; and the introduction of a feather to clear away the supposed obstruction in its interior had completed the mischief. The patient died asphyxiated; and the lung was com-

pressed by the presence of air in the pleura. Unfortunately, a double-tube, obviating the necessity of removing the cannula, was not in use at that time.

Local pleurisy, and even pneumonia, may result from injury to the pleura. Thus, a young man was impaled by falling on some spikes, two of which wounded him between the sixth and seventh ribs. The shock was trivial, but he suffered from pain in the side and dyspnoea; yet there were no abnormal chest-sounds during the first week. After this there was pleuritic friction over a limited space, with slight cough, and no expectoration. After the lapse of another week, there was some dulness and indistinctness of breath-sounds over the injured side. He recovered. Probably, in this instance, the lung had receded before the penetrating spike, and was not wounded; and the later physical signs might have been due exclusively to pleural effusion.

The chief danger attending a penetrating wound of the lung from a sharp-cutting instrument seems to be in the early loss of blood: if this peril be survived, the risk of fatal inflammation would appear to be less, under favouring conditions, than might be anticipated. The amount of blood lost varies very considerably; and from this circumstance the direction of the wound may be diagnosed with tolerable accuracy, and the chances of the patient's survival conjectured. The further such wound is removed from the root of the lung, the less serious the mischief inflicted; inasmuch as the bronchial tubes as well as the vessels diminish in size, as they recede from the root and approach the circumference of the lung. A singular instance, exemplifying the rapidly fatal consequence of perforation of the lung near its root, occurred a few years since in a patient brought to St. Thomas's Hospital. A stout woman stumbled in the street, and fell upon the broken end of the handle of her parasol, which pierced the soft parts above the right mamma, and entered the chest between the second and third ribs. It was pulled out by a passer-by, and an increased gush of blood from the mouth proved almost instantly fatal. On examination, the wound was found to extend to the root of the lung, and allowed of the little finger being passed between the pulmonary vein and the bronchus.

The pneumonia which succeeds a wound of the lung does not manifest a tendency to spread far beyond the track of the instrument by which it was inflicted; although, as I shall presently show, this inflammation entails permanent obliteration of the air-cells in the lung-tissue involved. These injuries are not always simple, or confined to the thoracic viscera: the oblique entrance of a pointed weapon, or the position at which the lesion is inflicted, may involve some part of the abdominal contents likewise, thereby complicating the diagnosis. A sea-captain recently under my notice, whose case I may have occasion to refer to again in a future lecture, was the subject, apparently, of such an injury. He was stabbed by a Malay on board his vessel, the knife being thrust backwards and upwards, from the point of entrance four or five inches below the right nipple. The wound was transverse, and an inch and a half wide at its point of penetration. He was exhausted from loss of blood; and, there being no surgeon on board, the wound was closed with a pledget of lint dipped in Friar's balsam, for which adhesive plaister was substituted after two days. He had but little pain, and no subsequent discharge, the healing process being completed in fifteen days. He had neither cough nor hæmoptysis. Five weeks afterwards, when on shore, a swelling which had appeared near the wound was lanced, and a quantity of yellow fluid escaped, which stained his linen of an ochre colour; and this discharge lasted for some time, gradually becoming paler and more limpid. When I examined him, he complained of soreness round the wound, and some oppression, in breathing, low down on that side of the chest. The lower lobe of the right lung was solid, as manifested by the dulness on percussion and total absence of breath-sounds at that part. But for this last sign, and the position and direction of the wound, it might be doubted whether the lung was really wounded; for, it will be observed, there had been neither hæmoptysis nor cough. Probably the breadth of the wound, and the free discharge of blood externally, until syncope ensued, may account for this circumstance, which is certainly unusual. From the other symptoms, I conclude that the liver was implicated in the injury; and of course the diaphragm must also have been included. The permanent consolidation of the lung exemplifies the fact to which I just now referred; viz., that the fibrinous deposit in the lung, from traumatic inflammation, is not absorbed without obliteration of texture, as is the plastic deposit in non-traumatic pneumonia. This, indeed, is what we should expect, in considering and comparing the pathological condition under the different circumstances. There is breach of texture in the former, including the air-tubes and cells, and the inflammation and its consequences extend to and involve all these tissues in the reparative effort. Not so in the latter. There is no necessary disintegration of tissue; and, whether the deposit be interstitial or intracellular, or both,

its absorption leaves the affected textures *in statu quo ante*—in their previous, actual, and functional integrity. I may remark, incidentally, on the very sensible and judicious treatment adopted in the early period of this case. The Friar's balsam (compound tincture of Benzoin) has been much disused of late, but is really an excellent styptic for hermetically closing a wound; and it thus fulfils the, perhaps, not least important function of the modern carbolic acid treatment.

The following case likewise exemplifies the pathological point last referred to in the preceding. J. W., aged 49, became a patient at St. Thomas's Hospital, after the healing of a wound which he received in the following way: A garden-fork, with long, flat prongs, was thrown at him, and one prong entered the back of the chest, immediately below the inferior angle of the scapula; a second prong made a smaller wound lower down. The depth to which the upper prong penetrated is, of course, conjectural; and the patient's assertion that it entered three or four inches is probably an exaggeration. He stated that he did not lose much blood from the wound, but that he afterwards had hæmoptysis. This must have been succeeded by pleurisy and hydrothorax, for there was an abundant flow of serum from the wound two months after the accident: this continued for a few hours only, and soon afterwards ceased entirely. He did not suffer much pain at any time; and the wound was quite healed at the end of three months. On examination with the stethoscope, in conjunction with my colleague, Dr. Clapton, I found that there was neither resonance nor vesicular murmur in the neighbourhood of the wound, and the respiration was bronchial: there was evidence of adhesion between the adjoining surfaces of the pleura at the injured part. As this last examination was made nearly two years after the accident, we may conclude that the condition described represents the permanent state of the lung.

In the College Museum is a representation of a sailor, who was transfixed by the pivot of a heavy trisail-mast, which passed obliquely through his body, entering above and to the inner side of the left nipple, and coming out at the upper part of the loin on the same side: he was otherwise seriously injured. The patient was under Mr. Andrews' care in the London Hospital, and recovered in five months so as to be able to walk about; and he ultimately resumed his sea-faring occupation. Probably the lung was perforated, in this instance, at some distance from its base; and it is doubtful whether the diaphragm could have escaped.

The preparation from our museum, which is on the table, is the anterior wall of the chest of a stout man, who was transfixed, transversely and horizontally, by the shaft of a gig. It entered the thorax on the left side, between the second and third ribs, fracturing the former, as well as the cartilages of the third and fourth; and, crossing the anterior mediastinum, made its exit at a corresponding point at the opposite side, fracturing the third rib. He was fixed in this position till assistance arrived; and, when liberated, breathed deeply and freely, and was not faint until he was prepared for bed, having walked to his house, close by. He survived ten years. The preparation shows the repair of the fracture and the adherent lung.

CARDIFF INFIRMARY.—We mentioned a short time ago (June 19th) that a number of working men had formed a Committee of thirty-five, for the purpose of raising sufficient money to clear off the debt of about £1,100. The Committee have already collected £223. The debt, however, is within a trifle of £1,200, instead of £1,100, which of course necessitates a greater effort, and, at the same time, makes it more praiseworthy.

DONATIONS.—Her Majesty has contributed £100 to University College Hospital; and a donation of £200 has recently been received from the Marquis of Westminster, for the general purposes of the hospital. The Marquis has lately forwarded a further contribution of £1000 to the general funds of the British Home for Incurables at Clapham.—Mr. Stead, of Glasgow, has presented £1000 to the Hospital at Yarmouth.—The Ashton Infirmary has received a donation of £5,000 from Mr. Robert Huggin of Liverpool.

THE DOCTORS OF HERAT, IN AFGHANISTAN.—General Ferrier says as in their eyes every European is a doctor, their conversation never ceased running on the healing art, of which they considered themselves distinguished professors. They often brought with them their drugs, in order that I might tell them how to use some chemicals which they had received from India. They gave these chemicals in progressive doses, in all obstinate cases, until they found out the right dose, and in what diseases to use them. Finally, one of them, Mirza Aska, pulled a bottle of cyanuret of mercury from his pocket, and requested to know what devil of a salt that could be. "It has been of little or no use to me," he added, "for of over one hundred patients that I have given it to, all died but one."—*Caravan Journeys.*

THE HYDATID DISEASE IN ICELAND:

A FEW REMARKS ON DISTRICT-PHYSICIAN JOHN FINSEN'S CONTRIBUTION TO OUR KNOWLEDGE OF THE DISEASE.

By JOHN HJALTELIN, M.D.,
Physician-in-Chief, Reykjavik, Iceland.

AN abbreviated translation of Dr. Finsen's contribution may be found in the *British and Foreign Medico-Chirurgical Review*, No. LXXII, April 1868, with some remarks, probably written by the translator. Dr. Finsen seems very little acquainted with the best authorities on helminthology of our time. He freely quotes certain young physicians in Copenhagen, as Christensen, Storch, Aarestrup, and others, but takes little notice of the names of Cobbold, Davaine, or Siebold. Eschricht, Rasmussen, Storch, Aarestrup, and Christensen, have never been in Iceland at all; and of all Dr. Finsen's authorities, Dr. Krabbe alone has been here for a very short time, the greater part of which was spent in making some feeding experiments on dogs, in which he was assisted by Dr. Finsen. It was soon afterwards announced by them that the echinococcus of man was, by their feeding experiments in 1865, demonstrated to produce the *tænia echinococcus* of the dog, and this was put forward in some Danish medical journals without any regard to previous experimenters. The experiments of Krabbe and Dr. Finsen were afterwards made known in Germany through Dr. Küchenmeister, Leuckart, and others. These experiments and the alleged discoveries of Dr. Krabbe, and perhaps of Dr. Finsen, who is himself an Iclander, became mixed with some curious stories, which were afterwards promulgated by high authorities. This was, no doubt, done without their being aware that they were spreading incorrect statements about a harmless, and by no means stupid little nation; namely, Iceland. One of these statements is to be found in Dr. Spencer Cobbold's little work, *Tape-worms and Thread-worms*, second edition; London, 1867, p. 57. "On the authority of Krabbe, it has been stated by Leuckart, that for every 100 inhabitants of Iceland there are 1,100 head of horned cattle, and every peasant has, on an average, six dogs. In Denmark, there are 180 cattle to every 100 of the people. There are several of the Icelandic doctors who not unfrequently have upwards of 100 patients (afflicted with this disease) under treatment at the same time, the total number of such cases in the island being estimated at 10,000. By far the greater number of those patients, however, are in the hands of quacks, whose influence is the greater because there are in all Iceland but six legally authorised medical practitioners, each of whom presides over a district of about 1,500 square miles (English), embracing a population of about 1,000 individuals. The treatment of the quacks is exactly suited to keep up the epidemic, for, amongst their remedies, the urine and excrement of dogs play a conspicuous part."

It would be difficult to find a statement of equal length which contains more error than this; and I am sorry that medical men of distinction, such as Drs. Cobbold and Leuckart, have been induced to adopt such misstatements. I have the pleasure of knowing Dr. Cobbold personally; and, should he happen to read these remarks, I request him to rest assured of my high esteem, and that I know that he and Dr. Leuckart are not to blame in this matter.

To estimate the value of Dr. Finsen's contributions to our knowledge of the echinococcus disease in Iceland, it will be necessary that the reader should be made acquainted with his proceedings here for ten years as a district physician. Dr. Finsen came here in 1856, when he had just qualified as a physician at Copenhagen, and had no experience of the endemic diseases of Iceland. He possessed, however, much of that self-confidence which sometimes belongs to young practitioners. He was, like the other district physicians, bound by our laws to send to me, as the chief physician in the country, a yearly report on the prevailing diseases in his district. I found that, contrary to custom, his reports were filled with insignificant cases, such as otalgia, odontalgia, rheumatic pains, and hysteria. The result of this upon his statistics will be presently seen.

Dr. Finsen states that the frequency of the hydatid disease in Iceland, as compared with other maladies, is only as 1 to 26. I must here remark, that this is quite contrary to the experience of every other observer. The late Dr. Thorstensen, who for nearly thirty years was the physician-general of this country, found that about 1 in 7 of the inhabitants was affected with hydatids. According to my own experience of numerous autopsies, I am inclined to think that in native Icelanders traces of echinococci may be found in nearly every *fifth* adult dead body in one or another of the internal organs. About thirty years ago, it was a general custom in this country to register the cause of death; and, by

comparing the fatal echinococcus disease with other mortal diseases, it was then found that nearly every fifth adult died of hydatids, or of their complications with other maladies. This was accepted by Dr. Thorstensen, Drs. Thorarensen, Skaptason, and others.

When Dr. Finsen began his career here, there were three very able physicians in the island; viz., Dr. Hjalmarsen, Dr. Thorarensen, and Dr. Skaptason, who for many years, not only in their official reports, but in foreign medical journals, had made numerous practical observations on the hydatid disease. Dr. Thorarensen had made his name known, both in German and French medical periodicals, as having cured hydatids by electricity, and also as having effected a cure, in many cases, by puncture, in which operation he had great experience. Dr. Skaptason had collected very instructive cases, which seemed to prove that the echinococcus disease is hereditary. I myself afterwards proposed the internal use of tincture of kamala, which was used with considerable success both by Dr. Thorarensen and Dr. Hjalmarsen. Dr. Finsen, however, writes "that it will probably have surprised many that the physicians in Iceland, who, beyond all others, must have the opportunity of acquiring rich experience in this direction, should have remained perfectly passive, and not have made the least exertion to elucidate a disease almost peculiar to their country." In the name both of my dead and of my still living colleagues, I protest against this; and I am now prepared to show that they have, in a practical point of view, done far more than Dr. Finsen himself.

In 1862, a well-known English physician, Dr. Leared, physician to the Great Northern Hospital, London, came here. He then wrote a popular and clear article on the causes and prevention of the echinococcus disease of this country. He showed that, according to the views of the best helminthologists of our time, this disease had its origin in a kind of *tænia* (the *tænia echinococcus*), very common in the Icelandic dog. I translated this article, and had it printed in the Icelandic newspapers. The best and surest method to prevent this endemic disease would, according to Dr. Leared's views, be to cure the dogs themselves of the *tænia echinococcus*; and, in order to do so, he advised that all the dogs in the island should be simultaneously dosed with kamala, which is a sure remedy for tape-worm in these animals. From this plan I got the idea of using the tincture of kamala against the hydatid disease in man. Dr. Leared's plan was both original and practical; but, although he himself wrote about it to one of the leading physicians in Copenhagen, nothing came out of it; and even Dr. Krabbe, who came here two years later, did nothing in that direction, but thought that the best preventive measure would be to kill a great number of the shepherds' dogs. This proposal was sent to our Diet; but it was demonstrated that, though Dr. Krabbe had very much exaggerated the number of shepherds' dogs in Iceland, the execution of his plan would still leave many thousand dogs afflicted with *tænia echinococcus*, and that the hydatid disease would still be disseminated both amongst men and sheep. The shepherd's dog is quite a necessity to the Icelander, for, without it, it would be impossible for the peasants to collect their sheep in the mountainous regions; every peasant must, therefore, according to the number of his sheep, have a certain number of dogs; and when, as has sometimes happened, they are rendered scarce by disease, they are bought at a very high price. I myself, in the Icelandic Diet, supported Dr. Leared's plan of curing the dogs, and would at the same time have all the hydatids of sheep and cattle burnt or buried in the earth, when those domestic animals are slaughtered; but both propositions are still unsettled by our Government. Dr. Leared himself may best be able to tell how his propositions were looked upon in Copenhagen; and I should like that he would make this matter known.

The statistics of the echinococcus disease in Iceland, as laid down in the writings of Dr. Finsen, are very inaccurate; and especially as regards his calculations about the seat of the disease in the various internal organs of the body. Dr. Finsen says that in his 255 cases, found to be as follows: 176 in the liver, 3 in the kidneys, 2 in the spleen, 52 in the abdominal cavity (but where, is not mentioned), 7 in the lungs, 4 in the head, 1 in the nape of the neck, 2 in the supraspinous region, 1 in the subclavicular region, 2 in the axillary region, 1 in the arm, 1 in the mamma, 1 in the thigh. These statements are neither confirmed by autopsies, nor by microscopical, nor by clear clinical observations. Dr. Finsen evidently takes a good deal of interest in statistics, but statistics ought not to be built upon mere conjectures, or incomplete clinical observations.

I cannot help thinking that many of Dr. Finsen's so-called hydatid tumours—especially those in the external parts of the body—were nothing but serous cysts. Serous and atheromatous cysts are by no means unfrequent in this country. They are common in the neck ("hydrocele of the neck"), near glands, and in glandular tissues, as in the thyroid

gland and in the mammae, as in the case of Dr. Finsen, on the other hand, tells us that he has met with echinococci in two per cent. of all his cases, met with echinococci in the lungs, he has most likely overlooked many of them in that organ; for, according to my experience, and to the experience of all my medical brethren in this country, echinococci occur in the lungs far more frequently. In our sheep, echinococci are extremely common; and they are found nearly as often in the lungs as in the liver. I am very often consulted by people affected with chronic bronchitis, or bronchopneumonia, and hæmoptysis, who expectorate many echinococci, or their membranes. Echinococci in the spleen are certainly of very rare occurrence; and I have only once met with echinococci in the kidneys. In short, I look upon Dr. Finsen's statistics as almost worthless.

Dr. Finsen's symptomatology of the echinococcus disease is equally erroneous. He says that echinococci may be present in internal organs even for several decades, without producing any symptoms whatever indicative of this disease. This statement, which has also been made by some Danish physicians, who have had either a very limited or else no experience of the disease, is only partially true. Hydatids seated in internal organs, in most cases give rise to symptoms, which may be said to be premonitory, when they occur without any palpable tumour. These symptoms are variable, according to the seat and the size of the parasite, and consist mainly in the *functio læsa* of the affected organ. This rule holds good, whether the hydatid exists in the brain, in the spine, in the organs of the chest, or in one of the abdominal organs.

When the nervous centres are affected, the symptoms may either be cramps, or paralysis, or anæsthesia, with or without mental disturbance. If the disease is situated in the lungs, we find cough, dyspnoea, chronic bronchitis, with dull percussion in the affected part of the lungs, hæmoptysis, and expectoration of the echinococci themselves. When in the liver, hydatids will, even in their early stages, cause jaundice, together with well-marked dyspeptic symptoms, and sometimes hepatitis. It is true that many of the symptoms, caused by hydatids in their earlier stages, are very puzzling, as the same symptoms may depend on growths of quite a different nature, or on chronic inflammation; but the statement of Dr. Finsen, that echinococci may be present for several decades without producing any symptoms whatever, is altogether erroneous. When Dr. Finsen, to prove his position, adduces the autopsy of the Rector Arnesen (see p. 21 of his memoir in Danish), he is greatly mistaken. I knew this patient well for many years, and can testify that he was very dyspeptic, and had symptoms of disordered liver.

Récamier's treatment of hydatids, used by Dr. Finsen, has, for a number of years, been well known to his Icelandic medical brethren. None of them, except myself, has given it a trial, and I soon abandoned it. As far back as 1863, a long article on Récamier's treatment of hydatids, written by Dr. Finsen, appeared in the Icelandic newspapers. In this article it was stated that out of 116 patients, he had operated upon 32 after the method of Récamier; that of these, 19 were cured, 5 died; and that in 8 cases there was no result, although some of them had been under treatment for many months. About this time the governor of the north of Iceland attacked Dr. Finsen for having unwarrantably operated, after the method of Récamier, upon his own clerk, without any good result. As Dr. Finsen had written of the puncture of hydatids not only as an useless, but as a dangerous, operation, he came into opposition with some of his medical brethren, one of whom, up to that time, had punctured about 40, with the best results. As the official chief physician in this country, I could not, in the meantime, bear that the governor should interfere in this matter, and thereupon wrote an article in defence of Dr. Finsen. The governor made no reply; but some of our medical men murmured at Dr. Finsen's behaviour in reference to the results of the operation by puncture. He nevertheless maintained that nearly all those treated by this method died, which was altogether unfounded.

I resolved myself to try the method of Récamier in some cases, which seemed to me more favourable for it than others, but am sorry to say that nearly one-third of all those operated upon died. In two cases, where an autopsy was allowed, I found that very extensive peritonitis was the cause of death; and, although marks of the caustic could be clearly seen on the hydatid cyst itself, there was not the slightest trace of adhesion to the interior of the abdominal wall.

After I had quite given up the method of Récamier, and had returned to my old method of puncturing hydatid cysts, I happened to read Dr. Murchison's excellent article "On Hydatid Tumours of the Liver; their Diagnosis and Treatment." As the experience of this excellent physician is quite in accordance with my own experience, my faith in the treatment by puncture became strengthened, and I have since that time operated in a great number of cases with the best results. Should Dr. Murchison happen to read these remarks, I request him to accept my best thanks, not only for the theoretical and practical information which

but also for the I have obtained and their treatment contained in the afore-

I feel convinced that the revival of Récamier's method by Dr. Finsen will be unsuccessful. Although some German doctors—as Professor Küchenmeister—have regarded it as a practical operation, I feel pretty sure that contrary views will be held in England. It seems to me that the statistical statements of Dr. Finsen himself form the best arguments against this method of operating. Dr. Finsen says that, during his stay in Iceland, he had 255 hydatid patients under his care: out of this number 48, or not 1 in 5, were operated upon; and only 31, or not 1 in 8, recovered. It is not clear how many of the 48 operated on were lost; but it is certain, from his own statements previously published, that in 1863, out of 32 patients operated upon, 5, or every sixth case, died, and 8 were treated without any good result.

It is well known that Dr. Davaine operated upon 12 patients for hydatids, according to the method of Récamier: out of this number he lost 6, or 50 per cent. This bad result, compared with one nearly as bad by Dr. Finsen, ought to make medical practitioners cautious about performing so dangerous an operation.

As I am now preparing a monograph on the Hydatid Disease of Iceland, which is intended to show my own practical experience, as well as that of my medical brethren, in this matter, it is unnecessary to enter more deeply into this subject at present.

CASE OF RESECTION OF THE KNEE-JOINT: FOLLOWED BY FIBROUS ANCHYLOSIS: AMPUTATION: SPEEDY RECOVERY UNDER THE ANTISEPTIC TREATMENT.*

By JAMES D. GILLESPIE, M.D., F.R.C.S.E.,

Surgeon to the Royal Infirmary, Edinburgh, and to Donaldson's and Gillespie's Hospitals, etc.

W. M., aged 22, a miner, was admitted into the Royal Infirmary, Edinburgh, on October 31st, 1865, with disease of the knee-joint. It had begun two years previously, with pains of a lancinating character, and no swelling. He continued at his employment in England up to ten months before his admission, when he was obliged to seek surgical aid, but without obtaining material relief. While he was under treatment in the Infirmary, various remedies were employed till November 28th, when, as nocturnal pain had much increased, and the patient was most anxious to have active measures adopted, excision of the joint was performed; a semilunar incision being carried round the lower margin of the patella—that bone, and a portion of the condyles of the femur, with a thin slice of the head of the tibia, being removed. The disease was found mainly to consist of ulceration of the cartilages. The cut surfaces of bone were brought into close apposition, and found to fit accurately; the limb was supported on a long Gooch's splint, enveloped in plaster of Paris, and fastened to a Salter's swing, in the way recommended by Dr. P. H. Watson.

The following short notes indicate the progress of the case.

Dec. 5th. Almost the whole of the incision was healed. There was moderate discharge of healthy pus.

Dec. 20th. The incision was entirely healed; but a small abscess was forming on the inner side.

Dec. 23rd. The abscess had opened.

Jan. 2nd, 1866. The wound was healed.

March 20th. A leather knee-support was applied, and the patient was sent to the Convalescent House, able to bear his weight on the leg with ease.

April 28th. He was readmitted with a small abscess.

May 26th. He was dismissed cured, able to walk with much freedom.

Dec. 12th. After his dismissal, he returned to England, and again commenced work in a pit; and says that he gave his knee a wrench, which caused it to become first swollen and painful, and latterly weak. It was put up, and kept for a long time at perfect rest, but without much apparent benefit; as, although the bones appeared to be in the closest approximation, they were slightly moveable. A powerful electric current was next tried, as recommended by Dr. John Duncan for aneurism. Two long needles were inserted at the outer and inner side, and the current kept up for about ten minutes. It was found very difficult to insert the needles, owing to the close apposition of the bones. This application caused inflammation, and the discharge of a minute piece of bone from one of the points of insertion; and it seemed to consolidate the parts.

Aug. 23rd, 1867. He was sent to the Convalescent Hospital, again able to use the limb.

Feb. 5th, 1869. He was readmitted. He had been again in England, and latterly been employed as a gate-keeper on a railway; but he had required a much stronger support for his limb, and it had gradually been becoming atrophied and weak. There was now great mobility. The cicatrix was perfectly healed; and the bones were apparently in admirable apposition, but moveable. The leg was three inches shorter than its fellow, and much atrophied.

March 9th. Amputation was performed at the lower fourth of the thigh, by long posterior flap, and a short anterior one close to the cicatrix. The vessels were twisted, and a few secured by fine silk ligatures, which had been steeped in carbolic acid and dried, cut off short in the wound. In the evening, the flaps were accurately brought together by sutures of the same sort of silk as had been employed for ligature, and put up antiseptically.

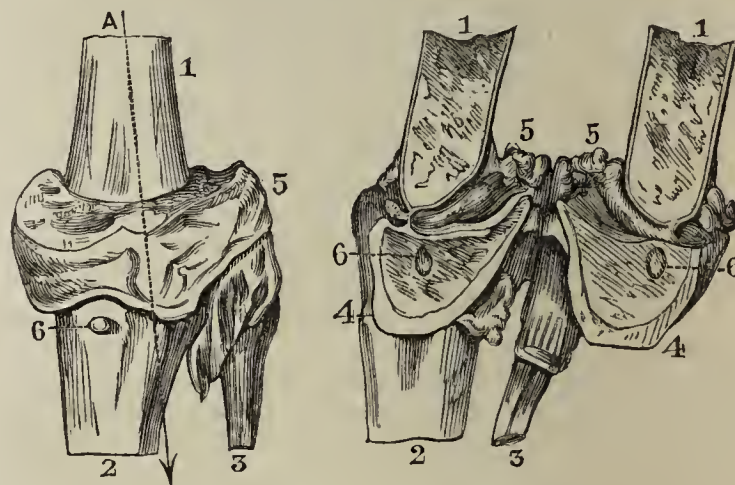
On March 10th, the pulse was 96; on the 12th, 92; and on the 18th, 80. The dressings were now for the first time removed, and the stump found entirely consolidated. The skin was not quite healed; but there was not a trace of pus. The carbolised sutures were removed. The patient was able to be up.

March 25th. He was sent to the Convalescent Hospital, cured, sixteen days after the operation.

I have deemed this case worthy of notice, as it illustrates two points.

1. The occasional failure of excision of the knee-joint, after it has apparently been most successful; the patient having been, on his first dismissal from the hospital, in a state which warranted the belief that the ultimate usefulness of the limb was secured; but, when it came to be tested by hard work, it began to fail, the occupation of a miner being peculiarly unfitted for a man with a leg incapable of flexion. You will see, by an examination of the preparation and the drawings, that there is now no trace whatever of bony ankylosis; the rounded extremity of the femur playing in the cup-shaped head of the tibia, with strong fibrous tissue intervening. In the head of the tibia may be seen a small healing cavity, whence a minute piece of bone had been expelled previous to his last admission into hospital. This cavity does not communicate with the original cut surface of the tibia; so the sequestrum was probably the result of inflammation induced by the pressure of the end of the femur. The section of the false joint shows how accurately the bones were in apposition; while the drawing of the joint before it was divided indicates that a considerable portion of the condyloid extremity of the femur had been left unremoved by operation.

This is the only case in my own practice, and, so far as I know, in the practice of my colleagues of recent years who perform resection, where permanent bony ankylosis has not been established; and it appears to me due to the profession to narrate its history, as it tends to



Section of a resected knee-joint.—A. Line of section. 1. Femur. 2. Tibia. 3. Fibula. 4. Oblique section of tibia. 5. Dense fibrous tissue enveloping the bones. 6. Healing cavity, from which a sequestrum had been discharged.

show that, in exceptional instances, however carefully the bones are brought together, however immovable they may be made by suitable apparatus, and however satisfactory the immediate result may appear, gradual giving way of the apparently firm union may take place, and disappointment as to the ultimate issue ensue. I do not think that the unexpected termination of this case should bear any weight against the operation, for bony ankylosis is undoubtedly the rule, not the exception; and I have met with excellent results.

2. The second point to which I would allude is the very rapid recovery after amputation, without a trace of pus during the consolidation

* Read to the Medico-Chirurgical Society, Edinburgh, June 2nd, 1869.

of the stump. It is as yet unprecedented in my experience to have an adult, whose thigh was amputated, able to be up on the tenth day, and dismissed absolutely cured on the sixteenth. There were, of course, certain favourable circumstances in the case, such as the absence of disease at the seat of amputation; the wasting of tissues, which had gradually been taking place; the absence of ligatures, save one or two small insignificant knots of carbolised silk, which were never seen afterwards. But I believe that some merit must be ascribed to the antiseptic mode of treatment.

ABYSSINIA:

ABYSSINIAN CHARACTER; ETIQUETTE; CUSTOMS; THE CHURCH; A FESTIVAL; BRINDO, ETC.

By HENRY BLANC, M.D., M.R.C.S.E., F.R.G.S., etc.,
Staff-Assistant-Surgeon, Bombay Army.

PART V.

THE Arabs are well known to be kind and humane, even attached, to their domestic animals. They more than pet, they really love, their noble horses, and their handsome breeding mares. With them the camel's load is never too heavy nor too bulky, and at the end of the day's journey the useful and patient animal is carefully attended to. The very pariah dog, unclean as he is in the Moslem's eye, wanders in the Bedouin's camp unmolested, an ever ready scavenger. If we now look to the Abyssinians, we will find a marked difference. It is true the chief will take great care of his fast ambling and favourite mule, and his charger will often share his hut; but only as long as the one or the other keeps in good condition and thus flatters his vanity. Long and faithful service have, neither in men nor beasts, any value in his selfish eye; and with their decreasing value his affection equally abates. Feeling no pride in his beasts of burden, be they mules or donkeys, he is totally indifferent as to their fate. A simple piece of hard skin alone protects the poor animal's back, on which is tied, with thin leathern ropes, here and there cutting through the skin, heavy and bulky loads. In almost every case, after a few days' march, the poor animal's back is covered with sores; nevertheless, the same loads are tied on again day after day, without regard to the animal's sufferings. I have seen many a time on the march the vertebræ and ribs of a loading mule quite bare, to an almost incredible extent. The sight of the white bones, bathed in pus and blood, and bordered with sloughing flesh, was so sickening that I could but wonder how the poor brute did not even find, at that stage, some pity in its master's callous heart, who would simply laugh and grin when his attention was drawn to the pitiful condition of the poor animal.

Abyssinians are great boasters. When a chief gives an entertainment to his officers and soldiers, it means a low orgie, intoxication, and self-vaunting. Suppose a warrior has been invited to such a feast: after long libations of potent hydromel, he rises on his tottering limbs, fires his gun or pistols, mounts his horse, brandishes his sword or spear, and at the top of his voice shouts in loud and noisy strains the record of his valorous deeds. "I am so and so, the leader of many a fight, the master of the grey horse; in such a fight I have killed so many men; I am a good plunderer; none knows better than me where to find the peasants' goods. I have deprived many enemies of their manhood, and those trophies adorn my hut. I have raped so many young girls", etc. Yes, strange as it may appear, it is a fact, rape in Abyssinia is a feather in a warrior's cap.

Our daily ablutions were a matter of great wonder to the Abyssinians, and it required time and much persuasion to convince them that we were Christians. Abyssinian Christians never wash. They can, if they choose, do so once a year on St. John's Day; but few, indeed, avail themselves of that privilege. The utmost an Abyssinian is allowed in that respect, without being suspected of being at heart a Mussulman, is to wipe his eyes in the morning with the corner of his cloth, and before meals rinse his hands with a little water. Soap is unknown; its substitute, a kind of seed called "endood", is only used for washing cloths.

At the beginning of our captivity at Magdala, I had taken into my service a couple of boys to help me in passing through my chains thin calico drawers, a very difficult operation to the inexperienced. As the boys in question were intensely dirty, I had told them to wash themselves every morning. I soon perceived that my order was not obeyed. On that I directed my Portuguese servant to see himself that every morning the boys washed at least their faces and hands. Both at once came to me crying, and begged to be dismissed. They said that to please me they would have no objection to wash, but by so doing they would be the laughing-stock of the fortress, and preferred "poverty to

public disgrace!" As I could not do without them, I made the washing optional, and the young scamps availed themselves of my permission to remain in future firm adherents of the *pure* Abyssinian Church.

But let the reader accompany me on a visit to one of those sanctuaries. We were well on our journey towards the Imperial camp, fast approaching the Tana Sea; and though we had passed several churches whose Coptic cross could be seen for many a mile, rising on distant hillocks above the dark foliage of the cedars, amidst the green-leaved Guicho and the elegant coffee-tree, as yet we had visited none. We knew not whether it would be prudent or not; when, however, one morning perceiving a church on our way, we consulted with the chief of the escort Theodore had sent us, and as he assured us that we could not do wrong in his master's eyes should we enter one, we rode up to it under his escort. Except in the province of Tigré, all the churches in Abyssinia are circular, the walls generally of mud and stone, the roof conical, and thickly covered with straw. The church proper consists of three concentric circles; the first, a kind of verandah, wherein the congregation assemble; the second, the church itself, where the priests perform their ceremonies; the third, or innermost circle, the "Holy of Holies", containing the sacred vase and the "Tabot", a small square piece of wood, having on one side a cross, on the other three stars, symbols of the Trinity, and on which are carved the name of the church and that of the bishop by whom it was consecrated.

The verandah is, for the stranger, the most interesting portion of the edifice. In some, like "Medani Alum" (Saviour of the World), the church we visited that day, the paintings that adorn the walls, all considering, are not badly made. St. George and the Dragon in the church of Medani Alum held a prominent and conspicuous place; next came the Twelve Apostles and the Trinity, God being represented in the form of a benevolent-looking old gentleman. Several representations of our Lord's sufferings graced the walls. In the trial by Pontius Pilate, this one is represented as a villainous-looking scoundrel, on the point of dipping tremendously long fingers in a monster basin full of water. In the scene of the flagellation, the Jews are painted very black, with red eyes, all a prey to violent contortions (probably mental torments), evidently suffering more than their pale-faced, smiling victim. Further on, martyrs of all shapes and colour, some being roasted, some toasted, others tortured with ropes, some beheaded, others crucified, but all, without exception, smiling, apparently pleased and happy; whilst here again the tormentors must, if we credit their grimaces, have undergone at the time excruciating pain. The Devil is represented as a gentleman in black, something between a man and a monkey. In his dominions are perceived long lines of black faces, swimming quietly in a red substance, no doubt intended for fire; and whatever the attitude, all endeavouring to have a glimpse at another row of white faces, with large stupid eyes and long curly hair, some distance above them, and no doubt meant to represent the happy dwellers in heaven, as these plain figures were all framed in rounded white-looking clouds.

But one of the greatest curiosities was the representation of the judgment of a dead man, who, from the picture, seems to have been a Theodore in his way. The devil urges his case, showing a heap of dead bodies murdered by the man who is being tried; on the other hand, the Virgin represents him giving a cup of water to a beggar. The cup of water, *versus* wholesale murder, evidently carries the day; as a little further on the devil, frowning spitefully, plunges into red paint, whilst the smiling Virgin ascends with her *protégé*, whom she introduces to the Deity.

Priests are very numerous; more dirty, more bigoted, and more ignorant as a rule than the people they pretend to instruct. When Gondar was the capital of Abyssinia, the population of that town was estimated at from 20,000 to 25,000; the proportion of priests was, however, considerable, and put down at no less than from 8,000 to 10,000. Many of the priests cannot read; few can write. They are taught parts of Scripture, of the Psalms, of the lives of the saints, by heart; and as the Sacred language is the old Gees, the majority of the priests are quite as ignorant of what they say as those who listen. The prayers are chanted and accompanied by a peculiar dance, intended to imitate David's appearance before the Ark. On the whole, the service of the Abyssinian Church is a curious compound of a few Christian and Jewish notions, blended with coarse absurdities and gross superstition.

The usual food of the Abyssinians is a kind of pancake bread, made of a grass seed called "teff." Those who can afford it, render it more palatable by the addition of a highly spiced sauce, or a dish of boiled vegetables, fowls, or mutton, highly spiced, called wat. Abyssinians delight in raw meat, but they do not indulge so much in it as was believed, for the reason that it is beyond the reach of the mass, and all are well contented if they can feast upon it three or four times a year. "Brindo", as the raw flesh of the cow is called, is, no doubt, for an Abyssinian, the greatest of delicacies. As I have tried it myself

several times, I think I will do well to record my own experience on the subject. I remember the first time I tasted "brindo" was at Magdala; our fare had of late been bad, and Samuel, our gaoler, having asked Prideaux and myself to an Abyssinian dinner, we accepted his hospitality. A large high basket, containing the native pancake loaves, was first placed before us; behind it stood, ready to wait upon us, a female servant, very little dressed, and the little she wore very ragged and dirty. In one hand she held a wooden bowl containing the sauce—a mixture of red pepper, smoked butter, pounded salt, and bile. After a few minutes passed in rinsing the hands and in complimentary talk, a half-naked man-servant rushed in, carrying over his greasy shoulders a huge sirloin, warm and bleeding. The master of the house usually, as on this occasion, cuts off first the choicest piece, and if you are his honoured guest, after dipping it in the sauce and rolling it in a piece of teff bread, graciously bows, and intimates that the tit-bit is for you. As a refusal would be paramount to a gross insult, hiding your disgust, you try to smile (specially if you are a prisoner and a gaoler's guest), and, with extended jaw, receive the proffered favour. Unfortunately, mastication and deglutition are not quite so easy, and long before you have overcome the difficulty your host is ready with another mouthful.

Samuel had, in his younger days, travelled in India and Egypt, and picked up here and there some vague European notions; he never went, therefore, so far as to bestow upon us the *highest honours*, consisting in first half-chewing the mouthful himself, and then dexterously passing it from his mouth into ours. We even succeeded in making him understand that we would prefer feeding ourselves, so that the servant was told to place the joint before us. The proper thing is first to cut off a long slice, seize it between the teeth, and, with a long sharp knife, cut upwards, just shaving the lip, and taking care of the nose. But being "ignorant" *white donkeys*, as we were then called, more license still was extended to us, and we were allowed to cut up our slice in small squares; these we then dipped into the sauce and swallowed like huge boluses, previously wrapping them up in teff bread, sandwich fashion. After the two or three first mouthfuls (I am almost ashamed to confess it), we rather enjoyed the "brindo." The taste of warm, raw meat is sweet, not very unlike a good oyster, and as for its nourishing and digestive qualities there can be but one opinion; a couple of pounds seem a mere trifle, and leave you still with an open appetite. However, on personal experience I can affirm that the delicacy of the flavour depends in great measure on the meat being warm and thrilling; and Samuel, to whom I suggested my comparison between "brindo" and oysters (he had tasted some in Egypt), agreed, but remarked, "cold 'brindo' is quite as disagreeable as a dead oyster."

Tej, a kind of hydromel, made with honey, water, and the bitter leaves of the Guicho, is the favourite drink of the wealthy. Its strength depends on the proportion of water; some is so strong that a tumblerful is quite as much as a man can drink without inconvenience. It is also used to prepare araki. Bouza, a kind of sour beer, made with barley or wheat, is the usual beverage of the petty chiefs and peasants. To eat half-boiled eggs is considered a shame; they are only admitted when they have been boiled for several hours. Fowls are not much liked, and only served when cooked to shreds. Mutton is never eaten raw, only when boiled to a kind of pulp. Butter in its natural state is only given to young children; for grown-up people it would be a perfect disgrace to taste it; it is used, however, in cookery. During the long fast, several vegetable oils are used instead of butter, but all are very impure, and of a disagreeable flavour.

The Abyssinian dress consists principally in a large piece of cloth—a dress by day, a covering by night; it is the same for all, rich or poor, with the only difference that the more wealthy have it made of a finer texture and bordered with a red stripe, from four to ten inches wide. Men wear cotton drawers; but, unless by special permission, no shirts. The long cotton shirt is the female's dress, and to it is added, in the better class, a cloth or shama, as worn by the men. None wear shoes. Except soldiers, whose hair is plaited, all the men shave their heads once a month; the priests alone wear turbans; every one, men and women, cover the head as often as possible with a thick coating of butter, allowing it to melt and drop from the head over the face and shoulders; the more the butter, the higher the rank.

Circumcision is performed in both sexes eight days after birth. In the female, the whole clitoris is included in the section, and seldom any trace of it remains. Now if we compare with this practice the one followed by the Bedouins, we will come to a very curious physiological fact. Seven or eight of the Massawah boys who had accompanied us became Christians in order to marry Abyssinian girls; as Mussulmans, they had found some difficulties. They all told me that their countrywomen were cold and indifferent, and that they had never conceived what a woman's embrace really was until they had become ac-

quainted with Abyssinian girls. We remember that the Bedouin females are deprived of the mucous lining of the vulva, the Abyssinians of the clitoris; the first are cold, not to say frigid, the second the most ardent and sensual of women, living Messalines, always "*lasciate sed non satiatæ*."

Abyssinians are good walkers, and can endure abstinence. They are well made, and those in good circumstances, and who feed occasionally on raw meat, strong and healthy. They keep up to a very old age their virile power. Very old married men are no exception, and often we were not a little surprised to hear that one of their wives had given birth to a child, and that in cases where so many precautions were taken that no chance of a *faux pas* had been left to the fair one.

Abyssinians are not honest; they are not bold enough to steal a large sum, but they will pilfer small ones. As for speaking the truth, they have not the slightest notion on the subject. One of their most curious failings is that they cannot appreciate good and considerate treatment; they themselves acknowledge it. If well fed, taken care of, and not too much worked, they fall into a mental morbid state, called "tagave", literally meaning "full." Once in that condition they are lazy, impertinent, and good for nothing. Often I have seen servants who had been severely beaten by their masters, after a little crying and howling, smile, laugh, and declare that they were all right again, and go and kiss their master's hand for having administered the only remedy that could cure them of their "tagave."

In the next and concluding article, after giving a short account of some diseases of the country, I will complete the account of ourselves as far as our health was concerned, and summarily state how we fared in that distant land.

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

VAGINAL HERNIA: PERFORATION OF ILEUM UNDER SUDDEN VIOLENCE.

By J. BIRCHENALL, Esq., Macclesfield.

MRS. T., aged 63, tall and spare, had had for many years a chronic bronchial affection, accompanied by asthmatic breathing in certain states of weather. She had suffered greatly from this cause during the winter and spring of 1861; and, as her husband, who had been an invalid from hepatic congestion with gouty complications, was going to Harrogate by my direction, she accompanied him. They visited Scarborough on their return, and came home on August the 30th, in excellent health and spirits. On my calling in the evening of the same day to make a friendly inquiry, I found Mrs. T. laid on the couch in great pain. Her husband stated that, after dinner, himself, Mrs. T., and a grown-up daughter, went into the garden, and, in a frolicsome humour, began to chase each other. In the course of their hilarity Mr. T. slipped behind his wife and pressed both hands suddenly and forcibly upon her shoulders, which bent her forwards towards the ground, exerting a shriek, and an exclamation that she was much hurt. She was taken into the house, became faint, and vomited, but had rallied when I called. She was conveyed to bed in great suffering. The pulse was quick and small; the abdomen soft; there was no inguinal or femoral protrusion, but there was tenderness in one spot, a little below the umbilicus, which was referred to as the seat of pain, and could be covered with the tip of the finger. Fomentations were applied, and opiates administered. At ten o'clock there was some abatement of suffering; there had been no return of the vomiting, and, although the pulse had become sharper and fuller, there was no diffused tenderness, nor any tympanitis. The pain became aggravated, however, shortly after my visit, and my patient passed a night of extreme restlessness. At six the following morning I was summoned in haste. A sudden change had supervened. Mrs. T. had vomited bilious matter when the messenger was despatched, and was dead before I arrived.

I obtained permission to open the body. Mr. T. informed me that his late wife had long been the subject of what I inferred to be vaginal hernia; but, as it had caused her no particular inconvenience, she would not allow him to speak of it even to myself. The body was remarkably plump, considering the age and previous ailments of the deceased. There was a thick layer of adipose matter over the abdominal

muscles. The viscera of the abdominal cavity were all healthy, except the ileum; upon this there was a diffused bright scarlet patch indicating recent acute inflammatory action, and radiating from a common centre. Here, on a careful examination, I detected a minute orifice, into which the point of a blow-pipe could be introduced, and the collapsed gut inflated. No fluid or semi-fluid matter had passed through the perforation. The hernia was indeed in the vagina, but it slipped back readily before the point of the finger.

How far the protrusion might have given rise to the perforation, under a violent compression of the entire alimentary canal, can only be matter of conjecture; but, to my own mind, it did appear at the time to offer the only plausible explanation.

OBSTETRIC MEMORANDA.

THE USE OF OBSTETRIC INSTRUMENTS.

By THOMAS SAVAGE, M.D., F.R.C.S. (Exam.), Professor of Comparative Anatomy in Queen's College, Birmingham.

It seems remarkable that until quite recently, so few practitioners should have advocated the more frequent use of the forceps in midwifery, except in difficult cases, such as the older writers describe. Mr. Steele of Liverpool, Dr. Hardy of Manchester, and Dr. Swayne, in the JOURNAL of May 29th, have given the results of their experience, which is decidedly in favour of their use in cases where, as Mr. Steele says, "the second stage of labour ceases to be actively progressive, excepting, of course, when contraction or distortion of the pelvis necessitated turning or craniotomy, or where the os uteri is only partially dilated, and at the same time undilatable."

My own experience, though limited, is so decidedly in favour of this practice, that I am induced to record it. The following table will show my practice.

In 1864, out of 73 labours, forceps were used	3 times or 1 in 24 $\frac{1}{3}$
1865 " 154 " "	15 " or 1 in 10 $\frac{1}{3}$
1866 " 173 " "	18 " or 1 in 9 $\frac{2}{3}$
1867 " 203 " "	37 " or 1 in 5 $\frac{3}{4}$
1868 " 204 " "	31 " or 1 in 6 $\frac{2}{3}$
Total	807
	104

And of these 807 cases, five children were still-born; and one maternal death occurred from puerperal fever, which was, as far as could be seen, in nowise traceable to the means used to accomplish delivery. In comparison with this, I may give the statistics of the Royal Maternity Charity, as quoted by Dr. Ramsbotham, where, out of 48,996 deliveries, forceps, long and short, were used 73 times, or once in 671.2 cases; and out of these 73 applications, 17, or 1 in 4.05, children were still-born, thereby showing that their use was not resorted to until the head had been for a long time subjected to excessive pressure. In none of my cases have I found any ill effects afterwards, such as laceration of the soft parts, or extensive rupture of the perinæum, etc.; and I cannot but think that more children would have been still-born if instrumental aid had not been forthcoming. The occipito-posterior presentation appears to offer most difficulty in effecting delivery; and Tyler Smith says that in these cases the head should be slowly rotated during the process of extraction, so as to bring the vertex towards the pubic arch, and thus convert them into occipito-anterior presentations; a proceeding which, to myself, has seemed very easy in a diagram, but to be attended with some difficulty in practice.

Nearly all my cases have been those requiring short forceps; and in most, labour would have been terminated by the natural powers, if I had not thought that much pain, anxiety, and exhaustion would be spared, especially in primiparæ. In the use of the long forceps, few practitioners will differ as to the cases, or the time, when they should be applied; viz., when there is moderate contraction at the pelvic brim, preventing the head from entering the cavity, and generally in the antero-posterior diameter, or where, from some accidental circumstance, such as convulsions, hæmorrhage, etc., delivery ought to be effected immediately, while the head is still above the brim, or has only just entered the pelvis. These do not seem to be of very frequent occurrence. I can only recall about five cases out of the numbers given above. In a recent case, I had the occipito-posterior presentation in addition to extraction from above the brim, which made the case a little more difficult, as it did not seem possible to diagnose the exact presentation before the forceps were applied.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, AUGUST 14TH, 1869.

THE MEETING OF THE ASSOCIATION AT LEEDS.

IN this day's JOURNAL, we conclude our report of the proceedings of the General Meeting of the Association in Leeds; with this exception—that we have reserved to an early number the account of the interesting discussion on hospital construction which originated with the reading of Captain Galton's paper, and was afterwards continued in the Section of Public Medicine. Full notes of the discussions in the Sections have been taken; and these, with the abstracts of the papers to which they referred, will be published from week to week; so that all the members of the Association will in time be in possession of a full account of all that took place at the meeting.

The Leeds meeting will long be a memorable one in the annals of the Association. As an opportunity for advancing the science and art of medicine in all its branches; for the formation and renewal of friendships between the members of our widely spread Association; for enabling the members of our profession, first in the town to which the Association was invited, and next in several neighbouring localities, to show how noble and hearty a welcome they could give their brethren—the meeting at Leeds stands pre-eminent. If there be any one who can yet ask concerning the Association, *Cui bono?* let him read the report of the meeting; and he must be very obtuse if he cannot be convinced of the immense advantages which its annual gatherings alone confer on its members.

In taking a brief retrospective view of the proceedings, the Addresses first claim notice. The address of the President, containing as it did, in addition to a hearty welcome on the part of himself and his brethren, a full description of the new Infirmary at Leeds and an expression of his opinions on the construction of hospitals, forms an important contribution to the literature of a subject which is exciting much attention and controversy. Sir William Jenner's philosophical Address in Medicine points out the true *media via* between blind empiricism and rash scepticism, and shows how, in fulfilment of its practical aims and objects—to prevent disease, to cure disease, to prolong life, to alleviate suffering—medicine has made real progress in recent years. In his Address in Midwifery, Dr. Beatty proved himself a worthy representative of the Dublin obstetricians; and he carried with him the feelings of his audience when, in honest and energetic terms, he denounced the proceedings of those who, it has been said, would have medical knowledge degraded to the basest purposes. Last among the readers of addresses came Mr. Nunneley, with it must be confessed, a rather difficult task—that of sustaining the reputation of Leeds surgery. How admirably he fulfilled the task is shewn by his address; which consists mainly of an outspoken and honest criticism, founded on observation and experience, of several of the more important improvements and novelties in surgical practice.

The sectional meetings were a thorough success. They were well attended; and the reading of the papers was followed by discussions, in which the utility of such meetings for professional improvement was fully maintained. The rule laid down for the limitation of the length of the papers and of the speeches worked, we believe, to great advantage in securing a fair share of time to those desirous of affording information.

Excellent as was the intellectual treat afforded to the members attending the Leeds meeting, its enjoyment was greatly increased by the cordial reception with which they met as visitors—not only in Leeds, but elsewhere. The visit to the Wakefield Asylum, under the guidance of Dr. Crichton Browne—a man worthy of his father's name; the sumptuous receptions at Harrogate and Scarborough; the well-planned and hospitable acknowledgment of the Association by the Mayor of Leeds; the public recognition of our body by Mr. Baines and his fellow-promoters of the temperance cause; and the unbounded hospitality of the resident members of the Association in Leeds—will not soon escape the memory of those who had the opportunity of enjoying these displays of brotherly feeling and good-will. Indeed, chronicled as they are in our pages and those of our contemporaries, these hospitable entertainments will not be forgotten even by those who had not the good fortune to partake of them. These social gatherings are by no means small influences in carrying out the good work of the Association.

Of the manner in which the Local Committee carried out the arduous task which they undertook when it was determined to invite the Association to Leeds, it is impossible to speak too highly. They worked with a will to secure a successful meeting; and they worked so that not only the general arrangement, but the minutest details, were provided for in such a way as to leave no room for complaint on the part of even the most fastidious grumbler. An excellent innovation introduced by the Leeds Committee was the combination, into a small and convenient book, of the card of membership, the map of Leeds, the programme of the meeting, the catalogue of the annual museum and library, and other papers which have hitherto been supplied separately to members. The convenience of the new arrangement is obvious; and it was, we believe, thoroughly appreciated. The Local Committee, as well as the Mayor and Town Council, the managers of the Philosophical Institution, and all others who joined with them in providing for the Association the noble reception which it met in Leeds, deserve, as we know they have, the warmest thanks and gratitude of the Association.

Next year, the Association is to meet, for the first time, at Newcastle-on-Tyne. The President-elect, Dr. Charlton, facetiously remarked after the dinner at Leeds, that he feared that, after what had been done there, the Association would indeed “come down with a run” when it visited Newcastle. We have no fear of that. Splendid as have been the receptions at Dublin, Oxford, and Leeds, we have too much confidence in the cordial hospitality and the hard energy of our Northumbrian brethren to anticipate any other than a happy and successful gathering in Newcastle-on-Tyne.

THE COMMISSION ON NAVAL HOSPITALS.

THE Report of the Civil Commission—consisting of Dr. Murchison, Mr. Holmes, and Mr. R. Ellis—appointed to inquire into the condition and organisation of the Naval Hospitals, has just been issued. The Commissioners report that they have visited the hospitals at Chatham, Plymouth, and Portsmouth. In general terms, they find that the management of these large hospitals is in all respects admirably adapted to secure the comfort and well being of the patients; but that the scale on which they are kept up is more costly than that of civil hospitals of equal size. This difference of expenditure they believe to depend mainly on the following circumstances: the necessity of being ready for sudden calls on the hospital accommodation; the payment of the medical officers; the necessary separate treatment of patients of different ranks in different wards; the government of the hospitals by certain fixed rules of the service; the additional duties imposed on the medical officers; and the extended scale on which naval hospitals are founded

and endowed, as compared with civil institutions. The Commissioners recommend the abolition of the offices of Captain-Superintendent (with two lieutenants) at Plymouth and Haslar; arguing, from the evidence of Dr. Armstrong and from the actual practice at the Chatham Hospital, that discipline can be efficiently maintained by the Inspector-General in charge, and that some of the duties of the Captain and his Lieutenants may be readily distributed. They consider also that the Admiralty provision of one nurse to every seven patients is, in chronic cases, more than is necessary. The Marine Infirmary at Plymouth may, in their opinion, be advantageously combined with the naval hospital; but this amalgamation cannot, for various reasons, be carried out elsewhere. They advise a reduction in the medical staff of each hospital, as follows.

Meville Hospital, Chatham.—*Present Staff:* Deputy Inspector-General, a Staff-Surgeon (acting also as Medical Storekeeper), and three Assistant-Surgeons.

Recommended.—Deputy Inspector-General and Staff-Surgeon, with two Assistant-Surgeons.

Plymouth Naval Hospital.—*Present Staff:* Inspector-General, Deputy Inspector-General, Staff-Surgeon (and Medical Storekeeper), five permanent Assistant-Surgeons (two being borne on the books of the flag-ship), and two or three Assistant-Surgeons waiting for ships.

Recommended: An Inspector-General for the general management and supervision of the hospital, pension, boards, surveys, etc.; a Deputy Inspector-General for the Medical side; a Staff-Surgeon for the Surgical side; and four Assistant-Surgeons—the senior of whom might act as Medical Storekeeper.

Haslar Hospital.—*Present Staff:* Two Inspectors-General; two Deputy Inspectors (one acting as Medical Storekeeper and the other being borne on the books of the flag-ship); and four Assistant-Surgeons, besides Assistant-Surgeons waiting for appointments.

Recommended: Inspector-General in charge; two senior Medical and two senior Surgical Officers; and four permanent Assistant-Surgeons.

The report contains also recommendations regarding the nurses, etc., and concludes with the following remarks.

“We would recommend the abolition of the practice of employing permanent officers, whose names and salaries do not appear in the hospital accounts, and who are borne on ships' books, or paid in some other way.

“We think, also, that the cost of drugs consumed in the hospital each year ought to form an item in the calculation of the expense per patient.

“The present system of placing the medical stores under the superintendence of a staff surgeon appears to us capable of improvement. The medical stores for ‘service afloat’ might be supplied direct to the ships from London, and those for hospital use might be left under the charge of the chief dispenser, subject to such supervision as might seem necessary.

“In each hospital a permanent minimum staff of nurses should be kept up. We understand the system at Plymouth and Haslar to be this, that when a ward is empty its nurses are discharged, however long they may have been in the service; they may be, and would be, hired again when fresh patients are admitted, but meanwhile they have probably got more permanent employment. The extreme inconvenience of such a system, as applied to skilled labourers, as nurses ought to be, hardly needs to be pointed out. It is, no doubt, to a certain extent, obviated by management on the part of the medical officers, but it still does act as a serious obstacle to them in procuring and keeping efficient nurses.

“In consequence of the generally slight character of a large proportion of the cases admitted, we think that much of the labour of these institutions might be performed by patients, who might receive a small remuneration for their services.”

In this report, the difference in the annual expenditure per bed for salaries and wages—drugs not being included in the account—is shown to be remarkable. Thus, at Haslar it is £45:10:2; at Plymouth, £53:12; and at Chatham, £31:16:8. To the Report are appended tabular statements of the expenses of the three hospitals, which are well worthy of attention.

DR. WADDINGTON, Dean of Durham, has bequeathed £6,000 to the Durham County Hospital.

BARON ROTHSCHILD of Vienna has erected in that city a Jews' hospital, of one hundred beds.

MR. TITUS SALT of Saltaire has presented £5000 to the Royal Albert Northern Counties Asylum for Idiots at Lancaster.

DR. G. C. CARUS of Leipzig, the eminent writer on psychology and physiology, died on July 28th, at the age of 80.

NUMEROUS cases of typhoid fever have occurred in Marseilles during the last two months. The disease has chiefly attacked children, and has presented a strongly marked adynamic tendency.

DR. CZERMAK, having been appointed to a professorship in the University of Leipzig, has removed thither from Jena. On his departure from the latter place, he received a brilliant ovation.

M. SÉE has been elected a titular member of the Section of Medical Pathology in the Academy of Medicine, in the room of the late M. Grisolle.

DR. GEDGE, of Caius College, Cambridge, will accompany Sir Samuel Baker into Africa, as superintendent of the medical staff, and collector of natural history specimens for the Viceroy.

At a meeting of the Council of Queen's College, Birmingham, held on Thursday, August 5th, Mr. James F. West, Senior Surgeon of the Queen's Hospital, was unanimously elected joint Professor of Anatomy with Mr. C. J. Bracey.

SURGEON-MAJOR J. ARTHUR, late of the Madras Fusiliers, has been made a Companion of the Order of the Star of India, for prominent and efficient service during the Mutiny in 1857. Better late than never.

THE Lords of the Privy Council have, in consequence of the previous orders having been revoked by the Contagious Diseases (Animals) Act lately passed, issued a new series of orders relating to the importation of animals from foreign countries and the introduction of cattle into the metropolis.

At a session of the Council of University College, held on the 7th inst., Mr. G. V. Poore, M.B., M.S., was appointed Resident Medical Officer of University College Hospital. A free Medical Scholarship was awarded to Mr. T. G. Vawdrey, of St. Austell, on the nomination of the Council of the Medical College, Epsom, of which he had been a pupil.

OUR associate, Mr. Spencer Wells, has been unanimously elected an Honorary Fellow of the Obstetrical Society of Leipzig. The terms in which he was asked to accept the diploma will, we feel sure, be accepted as a compliment to English surgery; it having been sent as "a feeble expression of the high esteem which pervades all the members of this Society, and which you have earned by many meritorious services to science, to the medical profession, and to the whole civilised world." It is very pleasant to see that work well done here finds its reward far away.

Dr. HEYFELDER, formerly Professor of Clinical Surgery in the University of Erlangen, has lately died at St. Petersburg, where he held the office of consulting-surgeon of the military hospitals of that city. He was also a Councillor of State to the Czar. Dr. Heyfelder was the author of works on the diseases of children, from observations made at the Children's Hospital in Paris (1825); on suicide in its medico-legal aspect (1829); on cholera (1832); on the mineral waters of Wurtemberg, Baden, Alsatia, and the Vosges (1840); on the inhalation of ether and chloroform (1848-9); and on resections and amputations (1859). He was also engaged in various medico-legal missions on the part of the Russian Government, and made a report on the medical organisation of the Prussian Army during the last war in Germany.

PROFESSOR PURKYNJE, of the University of Prague, died on July 28th, in his eighty-second year. His name has been for many years honourably known in connexion with the advance of physiological science. His funeral was attended by deputations from Breslau, Agram, Brünn, and Vienna, by the municipal body of Prague, by representatives of the University and of other bodies, and by a large concourse of people. Before his funeral, his body, clothed in black, was exposed to view for a day in the lecture-hall of the Physiological Institution. On the day of his death, a diploma raising him to the rank of a Knight of the Austrian Empire was sent to him from Vienna—an honour given too late.

MR. GLADSTONE'S HEALTH.

THE Premier's late illness arose, it appears, from an attack of mucous diarrhoea, which was severe, and at one time, through the pressure of anxious and unavoidable work, threatened to be obstinate. On the 2nd August, the disease was subdued; and Dr. Andrew Clark, under whose professional care Mr. Gladstone has been, gave a reluctant assent to his resumption of official duties. On the 6th, there was a slight relapse which was completely overcome by the 8th. On the 10th, with no other ailment than weakness, Mr. Gladstone proceeded on a short visit to Walmer Castle, where we trust he will speedily recover his accustomed health and strength.

THE MEMORIAL OF TROUSSEAU.

THE friends of M. Trousseau have succeeded in collecting a sufficient amount of subscriptions for two busts of this celebrated physician and clinical teacher. One of the busts—a marble one—is in the hall of the Faculty of Medicine; the other, of bronze, has just been placed under the peristyle of the Hôtel-Dieu. The amount collected has been sufficient not only to defray the cost of the busts, but also to enable each subscriber, whose address is known, to be supplied with a photographic copy.

THE ROYAL SANITARY COMMISSION.

OUR readers will recollect that, at a meeting held in June, the Metropolitan Counties Branch of the Association resolved unanimously to suggest to the Joint Committee on State Medicine of the British Medical and Social Science Associations the propriety of soliciting an interview with the Home Secretary and the Chancellor of the Exchequer, in reference to the terms of appointment and powers of the Royal Sanitary Commission. The Joint Committee agreed to adopt the suggestion thus offered, and ordered a memorial to be drawn up, which will appear in our columns next week. Last week, the Chancellor of the Exchequer replied to the request that he and the Home Secretary would receive a deputation for the purpose of presenting the said memorial, that, "as he had taken no part in recommending the appointment of the Royal Sanitary Commission, or in fixing the scope of their inquiry, he thought it would be unnecessary for him to receive the proposed deputation." The following note from the Home Office, in reference to the same subject, has just been forwarded to us.

"August 9th, 1869.

"Gentlemen,—Mr. Bruce desires me to acknowledge the receipt of your letter, requesting, on behalf of a Joint Committee of the British Medical Association and of the Association for the Promotion of Social Science, that he will receive a deputation on the subject of the scope and method of inquiry of the Sanitary Commissioners. I am directed to say that the Commission was prepared after a careful consideration of the reasons for extending its scope in the manner indicated in your letter; and, at this stage of the inquiry of the Commissioners, and before receiving their first report, Mr. Bruce thinks it would be premature to reopen the question.

"Mr. Bruce will gladly receive any further communication in writing that may be made to him on behalf of the Joint Committee; but, under the circumstances I have mentioned, he thinks the proposed interview unnecessary.

"I remain, gentlemen, yours faithfully,
"W. H. Michael, Esq.
A. P. Stewart, Esq."

"GEO. RUTSON.

MORTALITY AFTER OPERATIONS.

THE question as to the mortality after operations in hospital and in civil practice, which has lately been the subject of much interesting discussion in this country, has been taken up by the Surgical Society in Paris. The Society, through its secretary, M. L. Le Fort, has expressed its desire to be able to establish, on the bases of observation and experience, the difference in the mortality after operations performed in hospitals and in town or country private practice. All French surgeons are urgently appealed to, to send to M. Le Fort a complete list of all the operations performed by them. The Society suggests that it would be useful to have information as to the sex and age of the patients, the reason for operating, the duration of convalescence, the complications of the case, and the period and probable cause of death. It is very important to know these points; but the Society has made an omission which may utterly invalidate the returns. Not a word is said about the hygienic influences under which the patients have been placed.

PREVENTION OF THE SPREAD OF CHOLERA.

THE French Government has sent Dr. Proust, one of the physicians of the Parisian Hospital, on an important mission to Persia. He is to explore the shores of the Caspian Sea from Astrakan to Recht, with the view of ascertaining the local conditions which have caused the cholera always to follow that course in extending from Persia into Europe; to study on the spot the measures taken by the Russian Government to prevent a fresh invasion of the disease; and to point out the means of more sure prevention. The plan laid down for him is as follows. After visiting St. Petersburg and explaining the object of his mission, and being perhaps joined by a Russian physician, he will proceed to Astrakan and visit the Russian quarantine establishments at that place. He will then explore the coast from Astrakan to Recht, and will thence proceed to Teheran. Having arrived in that city, he will impress on the Persian Government the necessity of carrying out the sanitary organisation projected two years ago, especially the regular performance of the duties of the council of health which was formed at that time, but which has remained almost a dead letter. One of the most important objects to be effected, will be to put a stop, especially during the prevalence of cholera, to the carrying of dead bodies in a state of putrefaction with the pilgrims' caravans. This mission of M. Proust is highly important and well-timed; especially as it was reported, in the middle of last month, that cholera was prevalent at Teheran, and that there was some danger of its spreading along the shores of the Caspian Sea into Europe.

ROYAL ALBERT HOSPITAL, DEVONPORT.

THE surgeons of this hospital—Dr. F. Row, and Messrs. Laity, Bulteel, and W. P. Swain—write to us as follows.

"Our attention has just been drawn to the evidence given by Mr. W. G. Romaine, late Secretary to the Admiralty, before the Select Committee of the House of Commons on the Contagious Diseases Act of 1866, wherein he states (page 46, answer 905, compared with page 47, answer 914) that the medical officers of the Royal Albert Hospital visit their lock patients only once a week; and that very often, in consequence, a patient is kept longer in the hospital than is necessary. We are, of course, quite unaware of the source of Mr. Romaine's information; but we lose no time in expressing our surprise that statements should have been made so entirely at variance with fact. The patients are visited daily by the house-surgeon; and always twice a week by the surgeons of the hospital, and oftener when required. It is impossible that patients can be kept longer than is necessary. The very opposite allegation has, in fact, reached us; and as Mr. Sloggett, the visiting surgeon, was in attendance on the Committee, we must presume that he was absent when those statements were made, or he would certainly have contradicted them. We trust that Mr. Romaine will furnish us with his authority for the above statements; the more so, since he appears anxious, by answer 905, to supersede the present staff of our lock hospitals, or place them under the supervision of a medical officer paid by the Admiralty."

The statement made by Mr. Romaine is one which certainly demands explanation. As to the question of superseding the medical staff of lock hospitals, or placing it under the supervision of an Admiralty

medical officer, we can scarcely imagine on what grounds, if any, such a step can be contemplated. The Government has availed itself of the accommodation afforded by the Royal Albert Hospital for cases of contagious disease occurring among sailors; and this involves the supposition of confidence in the medical staff of that hospital. There is already a visiting surgeon on the part of the Admiralty. Surely this is enough to protect the interests of the service, without offering a slight to the medical officers of the hospital.

ACTION FOR RECOVERY OF FEES.

IN the Birmingham County Court, last week, Mr. Hickenbotham, a surgeon, residing at Nechells, brought an action against Mr. George Page for £4 : 18 : 6, the balance of an account due for medical attendance on the defendant's family during 1867 and 1868. The defendant pleaded that he had kept a diary, in which Mr. Hickenbotham's visits were entered; and that several days had been charged for on which no visits had been made. He could not, however, say that he had been at home on the whole of those days. The judge regarded the defence as frivolous; and a verdict for the plaintiff, with costs, was recorded.

THE WATER-SUPPLY OF SIMLA.

Dr. DE RENZY, Sanitary Commissioner of the Punjab, gives a woful account of the desperately bad state of the water-supply at that famous Indian health-resort, Simla. The springs from which the water is supplied are situated below the level of the houses; and thus the labour and cost of supplying the inhabitants with water are greatly increased. Moreover, the springs are almost invariably in the water-courses on the sides of the hills; which water-courses (there being no sewers) carry off a large proportion of the filth of the place with the surface drainage. Consequently, the water from these springs, stored in the reservoirs, is disgustingly filthy. Dr. De Renzy recommends, as palliative measures, the thorough cleansing and general improvement of the reservoirs; and as a medical remedy, the establishment of tanks for the collection of rain-water and its storage—care being taken to prevent fouling by drainage.

ACTION FOR RECOVERY OF FEES IN A RAILWAY CASE.

AN action of some interest to the medical profession was lately tried at the Clerkenwell County Court. Mr. Sydney Jones of St. Thomas's Hospital had been consulted, through a practitioner, by a Mr. Williams, with reference to certain injuries received by him in an accident on the Great Northern Railway. Mr. Williams brought an action against the railway company for compensation, and Messrs. Evans and Laing, the defendants in this action, acted as his solicitors. Mr. Jones received from these gentlemen a subpoena to attend the trial at Ipswich on August 10th, 1868; three guineas were also enclosed for his expenses. This was followed by a correspondence between Mr. Jones and Messrs. Evans and Laing, in which they agreed to pay the fees demanded by him; viz., forty guineas for one day, and sixty-five guineas for two days' attendance. Mr. Jones went to Ipswich on the day appointed, and gave his evidence. Williams had a verdict for £750. In September, Messrs. Evans and Laing enclosed to Mr. Jones a cheque for £5 : 17, making, with the £3 : 3 already paid, £9, which was all that had been allowed to Williams on taxation of his costs. Mr. Jones demanded the balance of his fee of forty guineas; and this action was brought in the Court of Queen's Bench to recover it; but, by a judge's order, the cause was tried at the Clerkenwell County Court. Mr. Le Gros Clark gave evidence that the plaintiff's charges were proper for a surgeon of his position; but this point was not seriously disputed by the defendants. Mr. Pearce, for the defendants, contended that they merely acted as agents, and were not personally responsible; and that their client Williams was the proper person to be sued for the amount. The defendants denied, moreover, ever having received the letter from the plaintiff in which he stated the amount of his fees. Mr. Pearce, moreover, contended that plaintiff was bound to go in consequence of the subpoena. The objections having been answered by Mr.

Tatham on the part of the plaintiff, the judge gave judgment for the plaintiff. He said that the defendants had undertaken a personal liability. He thought, also, that the evidence was very strong as to Mr. Jones's letter having reached the office of the defendants, although it was quite possible that it had been overlooked. After the letters undertaking to pay "fees" or "charges", and the proof that the sum demanded was a reasonable one, this would make no difference. Judgment was accordingly given for the plaintiff for the full amount claimed, with costs.

CLUB REMUNERATION.

A meeting of Sick Club Medical Officers was held on Tuesday week, in the Theatre of the Medical Institution, Liverpool, for the consideration of the above question. Resolutions were adopted, expressing approval of the system of Sick Benefit Societies, and a desire to co-operate with the provident mechanics and labourers in procuring relief and aid by such means. It was agreed, however, that the present average remuneration of medical officers was inadequate; and it was suggested that, on and after the 1st of January next, the minimum rate should be 4s. per member. Resolutions were also passed, suggesting that the benefits of such Societies should be confined to those who were in receipt of weekly wages, or whose occupation was contingent upon the vicissitudes of trade; that it was a serious injustice to the profession to admit any person as a member of a Sick Benefit Society who could afford to pay a private medical attendant; and that a fee should be paid for the medical examination of each person proposed as a member of any sick club. At the conclusion, Dr. Sinclair expressed a hope that the members of the profession would soon be called together to consider the question of giving "advice gratis," which he considered to be derogatory to the profession.

DISEASED MEAT IN CABS.

THE *Pall Mall Gazette* calls attention to a case in which a butcher named Kearton was brought before Mr. Newton, the magistrate of Worship Street, for exposing unwholesome meat for sale. The offender and his wares were brought to the court in a cab. The magistrate expressed his surprise at this, observing that "to put diseased meat into a cab was to breed further infection, and was manifestly wrong." Mr. Newton, we are inclined to think, strained the point a little as to the danger of the proceeding; but the idea of carrying diseased meat in a cab is certainly not very nice. It is a small evil, however, compared with the consequence of persons suffering from infectious diseases.

THE HEALTH OF THE METROPOLITAN POLICE.

MR. HOLMES, the principal surgeon of the Metropolitan Police, in his official report for 1868, states that the total number of cases of illness during the year was 6,470, and the number of patients 4,474. The monthly sick-bill, however, gave a total of 8,793 cases; the apparent increase arising from the repetition of cases from month to month. In comparing the average number of men constantly non-effective from sickness in the police force and in the brigade of Foot Guards, Mr. Holmes finds that, although the police are more exposed to the weather and to injuries, they present the smaller average daily loss. There were 63 deaths in the metropolitan divisions, excluding the dockyard divisions and the public carriage attendants. This number is greater than that for 1867 (58); but the percentage is lower, being 0.75 per cent. Of the deaths, 27 were caused by consumption, 7 by bronchitis and pneumonia, 11 by small-pox and other zymotic diseases, 2 by rheumatism, 3 by erysipelas, 4 by disease of kidney; and the remainder were divided equally among blood-poisoning from injury, diphtheria, disease of brain, apoplexy, abdominal abscess, stricture of bowel, aneurism of aorta, cancer (?) of liver, and cancer of tongue. In the Household Brigade, the death-rate during 1868 was only 0.51 per cent. This difference arises in great measure from the system in the police of retaining invariably in the force, on "detached sick-leave", a number of men unfit for duty, and who would, in the army, be discharged as invalids. In

the year, 221 men were invalided; the principal causes being rheumatism and allied affections (49), injury and its results (35), phthisis and pulmonary diseases (28) long service and debility (25), defective vision and diseases of the eye (14), etc.

ACTION FOR RECOVERY OF FEES.

IN the Swansea County Court, on August 9th, Mr. Platt Wilks, surgeon, sued a Mr. Morgan for the sum of three guineas for professional services. The defendant was thrown from his horse on December 17th, 1864, and received severe lacerations of the head. Mr. Wilks partially removed the hair, and applied cold water, after washing and dressing the wounds. After the 25th, Dr. Griffiths was called in. After his recovery, the patient asked for time to pay, which was granted; but he then began to quibble, stating that the treatment had done more harm than good. Dr. Griffiths, who was called for the defence, admitted that the plaintiff's treatment had been proper. The judge said that he had himself received a similar injury, and had been treated in a similar way. He gave judgment for Mr. Wilks, expressing his firm belief that he had exercised all necessary skill.

A WRONG ROAD TO FAME.

THE *Redditch Indicator* of August 7th contains the following paragraph.

"A Rare Operation in Surgery.—One of the rarest operations in surgery was successfully performed on Thursday, the 29th of July, by Mr. W. A. Parsons, surgeon, Tanworth, Hockley Heath. The facts of the case are simply these. A married woman, in poor circumstances, of the name of Bissell, residing at Ashley Heath, in the parish of Tanworth, was in the family-way; the time of her delivery drew near; her medical attendant, Mr. W. A. Parsons, was called in, and, upon making a careful examination, he found her labour could not be effected in the natural way in consequence of a peculiar malformation. Without delay, he held a consultation with two of his medical friends; viz., Mr. Gaunt of Alvechurch, and Mr. William Kimbell of Tanworth, when it was decided to perform the Cæsarian operation. At three o'clock the same day the medical men met at the patient's cottage; she was placed under the influence of chloroform, and the operation was cleverly performed by Mr. W. A. Parsons: a male child was brought into the world. No bad symptoms have arisen up to the present time—in fact, both mother and child are going on well; and, should she recover, this case may be recorded as one of singular interest to the medical profession, and of deep thankfulness that science and skill can render such signal help to a suffering creature in such a time of peril and distress."

We regret to see this announcement in a public paper. It may be, that the gentlemen mentioned have to thank some zealous reporter for thus parading their names. But, if the paragraph has been inserted with their consent, we must say that they have acted very wrongly. It is very creditable to country practitioners to have undertaken and successfully performed so severe an operation as the Cæsarean section; but a public newspaper is not the place in which their skill should be shown forth. Many-tongued rumour will be sure to do all that is necessary for their local professional reputation; and if there be reasons of special professional interest why the case should be put on record, the medical periodicals are open.

A RAILWAY CASE.

AT the South Lancashire Assizes, on August 5th, an action was tried before Mr. Justice Hannen, which had been brought by Mr. Jelly, a commercial traveller, against the London and North Western Railway Company. The plaintiff had been unfortunate enough to have twice sustained injuries from railway collisions. In January 1857, he was injured in a collision at Warrington, and received damages to the amount of £1,500. After this, he renewed business as a commercial traveller, and was again, in February of the present year, injured by the train in which he was travelling being run into by some coal-waggons. The interest of the case rested, as usual, with the medical evidence. Mr. Erichsen, Dr. Webster of St. Albans, Dr. W. Roberts of Manchester, and Mr. Evans of Leigh, gave evidence to the effect that recovery was very doubtful; while Mr. Beever, Dr. Noble, and Mr. Southam of Manchester, thought there were no symptoms of spinal disease, but that

the plaintiff was suffering from hysteria. Ultimately, the jury returned a verdict for the plaintiff. The trial afforded another instance of the wrong position in which medical men are placed by being obliged to appear as partisans in a court of law.

AN UNFOUNDED CHARGE.

MR. RICHARDSON, one of the medical officers for Middlesborough, Stockton-on-Tees Union, having been charged with neglect of duty, the allegations have been inquired into by the Middlesborough Relief Committee, who have exonerated Mr. Richardson from all blame, and expressed an opinion that the charge had been made from personal motives alone.

SCOTLAND.

UNIVERSITY OF ABERDEEN.

ON Wednesday, the 4th inst., the ceremony of "capping" the medical graduates took place in the hall of Marischal College, Aberdeen, in the presence of a large attendance of ladies and gentlemen. Vice-Chancellor and Principal Campbell presided.

GLASGOW INFIRMARY.

DR. GEORGE BUCHANAN has been elected surgeon, in the room of Professor Lister, whose term of office has expired. Dr. T. M'Call Anderson has been elected physician, in the room of Dr. Leishman, resigned. The election of Dr. Anderson creates a vacancy in the staff of extra surgeons to the dispensary, which will be filled up on the first Thursday of September.

UNIVERSITY OF EDINBURGH: FEES FOR PRELIMINARY MEDICAL EXAMINATIONS.

THE University Court have adopted the following form of regulation. "Every person not being a student of the University matriculated for the whole academic year, who shall present himself for examination at the examinations preliminary to entrance on medical study, shall pay a fee of ten shillings in respect of all such examinations conducted during the academic year in which he shall present himself for examination."

IRELAND.

DISEASES PREVENTION ACT.

THIS important measure, passed for England in 1863, has been extended to Ireland by a short Act which received the Royal assent on Wednesday.

INQUESTS AND POST MORTEM EXAMINATIONS.

THE Public Health Committee have offered some of the Dublin hospitals payment for the holding of inquests in their *post mortem* rooms. The pathological information which would become available for the students would be most useful.

ROYAL COLLEGE OF SURGEONS OF IRELAND.

THE vacancies on the demonstrating staff, caused by Dr. McAlister's election to the Zoology Chair in Trinity College, and by Dr. Roe's resignation on account of his connection with the Coombe Lying-in Hospital, have been filled by the appointment of Dr. S. Hewitt and Mr. Ormsby.

SIR PATRICK DUN'S HOSPITAL MATERNITY.

THE first Report of this excellent institution in connexion with Sir P. Dun's Hospital gives some interesting details of its working during the first year of its existence. In that period, 336 women have been attended at their own houses by the members of the staff, under the

direction of Dr. Sinclair, King's Professor of Midwifery to the School of Physic. Of these, two died; but neither of the deaths was from puerperal diseases. The cases requiring interference during labour, operative or otherwise, numbered fifty-five; and all these made good recoveries. There was not a single case of puerperal fever registered during the year. The institution does not confine itself to the mere attendance of its staff, consisting of a qualified assistant, trained nurses, and pupils, all under the direction of the King's Professor of Midwifery; but has its usefulness greatly extended by the coexistence of machinery which enables it to extend a helping hand to those lying-in women who are so destitute as to be unable to provide the necessary comforts and appliances for themselves. This is done by the distribution of wine, beef-tea, sugar, tea, etc.; and by loans of clothes for mother and child, which have in every case been returned correct, and almost invariably in a remarkably clean condition. We commend this excellent charity to the notice of our readers, and we wish it all success in its laudable efforts to alleviate suffering and check disease.

DEATH OF DR. BABINGTON OF DERRY.

WE regret to have to announce the death of Dr. Thomas Henderson Babington of Derry, in consequence of an attack of typhus fever, on August 2nd. The deceased was Surgeon to the Derry County Infirmary and Derry Gaol, and Physician to the Fever Hospital. He enjoyed an extensive practice, and took an active part in all measures of professional and general utility. At the time of his death he was Mayor of Derry.

MR. BRADY, M.P.

THE Council of the Royal College of Surgeons of Ireland have conferred the honorary Fellowship on Mr. Brady, M.P., D.L. This distinction has heretofore been reserved for men like Mr. Syme or Mr. Bowman, who had attained the highest surgical position; but Mr. Brady had earned the gratitude of the Poor-law officers, and the College to which many of them belong, by gaining the enactment of the Superannuation Bill, and the honorary membership was the only reward the College had to offer.

SIR JOHN GRAY AND MEDICAL REFORM.

A HOPE is expressed that Sir John Gray, who has signified his intention of introducing a measure next session to provide for the better education of those intended for the medical profession, will take no decided step in the matter without consulting with the several corporations and examining bodies in whom the power of regulating the details of medical education has been hitherto practically vested. It will be the duty and interest of these corporations to take some initiatory and decided step in the way of reform, unless they wish to submit to legislation which may take the matter out of their hands. Such a course, however, would meet with the most strenuous opposition on their part.

POISONING BY SULPHURETTED HYDROGEN.

ON the 4th instant, two workmen were instantaneously killed and three sickened by sulphuretted hydrogen, in a sewer in Dublin, which leads from the gas works and chemical works. Dr. Mapother deposed at the inquest that the gas was emitted from the lime refuse of the gas works, which found its way into the sewer, while Professors Sullivan and Cameron were of opinion that some acid from the chemical works must have been added for the evolution of enough of sulphuretted hydrogen to produce fatal effects. The verdict condemned the Corporation for not having carried out the recommendation of their medical officer; namely, that the gas company be compelled to abandon the lime process. The only analogous case which is on record is that in which four workmen, and the surgeon who heroically tried to save them, perished in a sewer in Kenilworth Street, Pimlico, in 1849. Drs. Ure and Anderson swore in that case that the sulphuretted hydrogen and cyanogen compounds were emitted from lime refuse, cast over the sewer, and through which rain-water had percolated.

THIRTY-SEVENTH ANNUAL MEETING
OF THE
BRITISH MEDICAL ASSOCIATION.

Held in LEEDS, July 27th, 28th, 29th, and 30th, 1869.

FRIDAY, JULY 30th.

THE Fourth General Meeting commenced at 10 A.M.; Mr. HUSBAND in the Chair.

Report of Parliamentary Committee.—Dr. GIBBON read the Report of the Parliamentary Committee. On the motion of Mr. SOUTHAM, seconded by Dr. WEBSTER, the Report was ordered to be received and laid on the table.

The Address in Surgery was delivered by Mr. NUNNELEY. It was published at page 143 of last week's JOURNAL.

Mr. CARDEN (Worcester) moved—"That the cordial thanks of the meeting be given to Mr. NUNNELEY for his valuable address."

Dr. MACLEOD (Glasgow) seconded the motion, which was carried unanimously.

At 11 A.M., Sectional Meetings were held, when the following papers were read or otherwise disposed of.

Section A.—*Medicine.* President—W. T. GAIRDNER, M.D.

Wallace, J., M.D. On Hydrothorax and Empyema; Thoracentesis and Forcible Extraction of the Fluid by Suction; with Cases. [In last week's JOURNAL, this paper was by mistake stated to have been read in the Midwifery Section. It was a paper on Eclampsia by Dr. Williams which was read in that section.]

Mulvany, J., M.D. On Permanganate of Potassa in Neuralgia and Crude Tubercle.

Leake, J. R., M.R.C.S. On the Treatment of Palpitation with Delirium by Digitalis.

Robertson, W. H., M.D. Commentary on the Report of the Edinburgh Committee of the British Medical Association, entitled "Researches into the Action of Mercury, Podophyllin, and Taraxacum, on the Biliary Secretion," by J. Hughes Bennett, M.D., F.R.S.E., Chairman and Reporter; extracted from the Report of the British Association for 1868.

Anstie, F. E., M.D. On the Principles of so-called Counterirritation.

Bastian, H. Charlton, M.D., F.R.S. Notes on the Pathology and Treatment of Chorea.

Rutherford, W., M.D. On some Electrical Apparatus for Therapeutic Purposes.

Section B.—*Surgery.* President—W. HEY, F.R.C.S.

Moore, C. H., F.R.C.S. On certain Causes of Mammary Cancer.

Little, P. C., F.R.C.S.I. On Railway and other Accidents; with Cases and Observations.

Rendle, Richard, M.R.C.S. On the Use of Protoxide of Nitrogen in General Surgery, and on a New Mode of Producing Rapid Anæsthesia.

Hinton, James. Catarrh of the Tympanum.

Land, R. T., M.D. A Case of Femoral Aneurism successfully treated by Ligature of the External Iliac Artery.

Richardson, B. W., M.D., F.R.S. On a Pocket-Bellows for Artificial Respiration; with Notes on the Extended Application of Artificial Respiration in Practice.

Lee, Henry, F.R.C.S. On Albumen in the Urine after Surgical Operations.

Murray, W., M.D. On a Case of False Anus, treated by a New and Successful Method.

Hemingway, C. A., M.R.C.S. On the Reduction of Compound Fracture with Protrusion of Bone by the Use of the Lever.

Jessop, T. R., F.R.C.S. Short Notice of a Fatal Case of Emphysema, produced by Violent Screaming.

Section D.—*Physiology.* President—J. HUGHES BENNETT, M.D., F.R.S.E.

Brown-Séquard, C. E., M.D., F.R.S. Continuation of Remarks on Epilepsy, accompanied by Experiments.

Bain, W. P., M.D. On a Portable Spirometer, with a short Demonstration of the different Modes of Artificial Respiration.

Nicolson, D., M.D. On the Body-Weight and Urea in a Case of Starvation.

Rutherford, W., M.D.; and Tuke, J. B., M.D. On the Morbid Appearances met with in the Brains of the Insane.

De Méric, Victor, M.D., F.R.C.S. On Cases of Syphilitic Affection of the Third Nerve, producing Mydriasis with and without Ptosis.

Taylor, R. Hibbert, M.D. A Case of Poisoning with Extract of Belladonna, with detailed Account of *Post Mortem* Appearances.

Section E.—*State Medicine.* President—W. Farr, M.D., D.C.L., F.R.S.

Kennedy, Ivory, M.D. On Zymotic Disease and Hospitalism, especially as illustrated by Puerperal Fever.

Coote, Holmes, F.R.C.S. On Hospitalism.

Birkett, John, F.R.C.S. On the Causes of Death after Amputations of the Limbs in Hospitals.

Dickson, Walter, M.D. On the Extension of the Contagious Diseases Act to Commercial Ports, and other Measures for the Improvement of the Sanitary Condition of the Mercantile Marine.

Moriarty, T. B., Staff-Surgeon. On the Absence of Typhus and Typhoid Fever in Tropical Africa.

Craister, T. L., M.R.C.S. On an Outbreak of Typhoid Fever at Bramley.

Hewlett, Dr. On the Sanitary State of Bombay.

The last meeting took place at 3.30 P.M., in the Council Chamber at the Town Hall; W. D. HUSBAND, Esq., in the Chair.

Report of Joint Committee on State Medicine.—Dr. STEWART (London) said the Committee consisted of members of the British Medical Association and of the Social Science Association. He read the Report, and also a memorial which had been drawn up by the Committee.

Dr. HUGHES BENNETT proposed "That the Report now read be received and adopted; and that the Committee of Council be empowered to make such grant of money as they may see fit for defraying the necessary expenses of the Committee."

"That the Committee on State Medicine be reappointed, and consist of Dr. Rumsey, Chairman; Dr. Acland, F.R.S.; Dr. Arlidge; Mr. T. J. Dyke; Dr. Falconer; Dr. W. T. Gairdner; Dr. Alfred Hill; Dr. Lankester, F.R.S.; Dr. Lewis; Dr. Mapother; Sir J. Ranald Martin, C.B.; Dr. Maudslay; Dr. J. E. Morgan; Dr. Paget; Dr. Philipson; Dr. Arthur Ransome; Dr. Tindal Robertson; Mr. Heckstall Smith; Dr. Strange; Dr. Symonds; Dr. A. T. H. Waters; Dr. A. P. Stewart, Honorary Secretary; with power to add to their number."

Dr. E. WATERS seconded the motion, and it was carried unanimously.

The American Medical Association.—The CHAIRMAN said that Dr. Acland, who had been obliged to leave Leeds, had received a letter from Dr. Gross of Philadelphia, inviting the Association to send representatives to the meeting of the American Medical Association to be held next year in Washington. The Chairman added, that it had occurred to the Council that the best plan would be to pass a resolution empowering the Committee of Council to obtain the consent of three gentlemen to represent this Association at the meeting of the American Medical Association.

Dr. A. P. STEWART said this subject had last year been taken up by the Committee of Council, and they believed they had secured two admirable representatives, who had it in their thoughts to go to America this year; but, from inevitable circumstances, they had been compelled to remain in England. The time of the American meeting was the great objection. If it were in the autumn, perhaps gentlemen might be able to go there; but, the meeting being in May, it was very difficult for medical men engaged in practice here to make their way to America in the early part of the year. However, he was sure, if the motion he had to make were adopted by this meeting, the Committee of Council would do their best. He proposed—"That the Committee of Council be instructed to use their endeavours to obtain three representatives of the Association for the forthcoming meeting of the American Medical Association."

Mr. NUNNELEY (Leeds) seconded the motion, which was carried unanimously.

Original Investigations.—Dr. E. WATERS (Chester) said that, at the meeting of the Physiological Section on Wednesday, he had the honour of proposing a resolution to the following effect: "That the Physiological Section unanimously desire that a grant be annually made by the British Medical Association in support of original investigations of a scientific character bearing on Medicine." It naturally, therefore, fell upon him to submit the resolution to them on this occasion. All voices in the Physiological Section were agreed as to the importance of continuing investigations of a scientific character in connexion with the Association; and he could not but think that the Association generally

would with the same unanimity approve of the principle. In accordance with the resolution, he moved—

“That it be remitted to the Committee of Council to decide on some subject of original investigation, and to appoint a Committee to conduct such investigation, and to report at the next annual meeting; the Committee of Council to be also empowered to grant such sum as may be considered necessary for carrying on the investigation and the experiments connected therewith.”

He need not say how much interest attached to such investigations directly associated with the institution; and he would say that at Dublin it was unanimously agreed that the Committee of Council should be empowered to pay the expenses and make grants for the purpose. At Oxford, the resolution was confirmed; and the Association had had, in consequence, a Committee at work on investigation and experiment for upwards of two years—a Committee consisting of Dr. Christison, Dr. MacLagan, and Dr. Hughes Bennett as chairman and reporter; with their respective assistants, Dr. Fraser, Dr. Gamgee, and Dr. Rutherford, the latter of whom had been appointed Professor of King's College, and who in some measure—he (Dr. Waters) did not say entirely—had had his already great reputation increased by his work in connexion with the Committee. [*Hear, hear.*] Now, he regretted to say, the Association had fallen short of its duty. It was distinctly understood that the workers in connexion with the Committee should have an honorarium awarded to them, not as payment, but as an acknowledgment of their valuable services. The work these gentlemen did was familiar to the members of the Association, as it had been brought before them on more than one occasion. Its wearisome character; the nature of the experiments; the examination of the excreta of dogs; the keeping of dogs; the weighing of them; the analysis of all dejecta: in fact, the work of these gentlemen had been of the most extraordinary character; and, unless they had been encouraged to look forward to some honorarium as the reward of their labours, he believed that their assistance could not have been obtained. But, as time went on, the Association fell off in the discharge of its duties; the workers whom the Committee employed rose in position; and it became a matter of indifference to them whether they received any remuneration or not; and the Association could no longer offer to a Professor of King's College the honorarium which was contemplated by the Committee of Council at one time in his case and that of others employed with him. He had, therefore, to say, with regard to that, that bygones must be bygones. Now, the thoroughly exhaustive work of the Committee did not admit of any doubt. He could further state most positively that, at the last meeting of the Committee, the question of further experiments with regard to the action of mercury on dogs was considered, and that the Committee decided that nothing further could be done, and that they had no further suggestion to offer; but it was thought advisable that, having dogs fit for them, experiments might be tried in connexion with podophyllin and taraxacum. With regard to the expenses incurred in these investigations, he was sorry to say that a plan was pursued which was scarcely fair. The Committee of Council thought it was most important that this work should be continued; but there was no fund to meet the expenses, and on two occasions it was attempted to institute a private subscription. At the Dublin meeting, some of the members gave five guineas, and several of them a guinea, with this view; and at Chester, where the question was first mooted, provincial practitioners, in their desire to advance their knowledge, subscribed their guineas and half-guineas in promotion of the same object. It was not creditable to an Association with an income which approached £6,000 a year to delegate to individuals the payment of the cost of these investigations. He thought the Association as a body should take upon itself the payment of the cost of anything of this kind which was undertaken; and it should be the work of the Association, and not merely of some ardent members of the Association. The Association as a body derived all the credit arising from these investigations, and the Association had now the means of carrying them out. Two grants of £25 were very much below what was expected for this work, which had extended over two years. [A Member: £71 was granted altogether.] They were very desirous of doing things in a manner to reflect upon the Association. They had their Hastings Medal, which they offered for competition. For three years the Hastings Medal had not been awarded. The Association was thereby £75 in pocket; therefore they had £75 in hand to start with, in favour of this scientific investigation. Further, by the report given in by the Secretary this year, he saw that, instead of being in debt, as they were last year, they had £200 in hand. Then, they had the delightful speech of their excellent Treasurer, who, looking at the motto in the noble hall where they dined together—“*Auspiciis melioris ævi*”—told them that he could not but read it, as regarded their funds, “*Auspiciis melioris auri*.” When the Treasurer, who held the purse-strings

so closely that he (Dr. Waters) had despaired of drawing anything from him, made such a pleasant statement as he then did, he (Dr. Waters) knew full well that he was prepared to aid them in this matter; and it gave him great pleasure to find the Treasurer on his side on this occasion. At Chester, at Dublin, and at Oxford, it was determined that scientific investigations should be carried on in connexion with the Association; and he was sure they should not depart from Leeds without the necessary power being confided to the Committee to carry them on still further. [*Hear, hear.*]

Dr. HESLOP (Birmingham) seconded the resolution, expressing the hope not only that the sum would be given as a recognition of past services, but as a duty which annually devolved upon the Association. [*Hear.*]

Dr. A. T. H. WATERS (Liverpool) thought it was a most important part of the duty of the Association to grant funds for the purpose of carrying out scientific investigation. There were certain inquiries which must be carried out, and it was only proper that, for such specific objects, grants should be made. As one of the Vice-Presidents of the Section in which the resolution originated, he had merely risen for the purpose of supporting it, and not with the view of continuing the discussion. [*Hear, hear.*]

Mr. PRICE (Leeds) suggested that some sum should be named for the investigation—the importance of which he at once recognised.

Dr. E. WATERS said, that the actual expense in connection with the last Committee for investigating the evidence of mercury in the secretion of bile, such as the purchase of dogs, their food, their cages, a boy to look after them, and certain necessary implements, amounted to £117. As for the gentlemen who had spent so much of their leisure time, a remuneration of something like £50 each ought to be given, so that the total expenditure for the promotion of scientific work would not exceed £200 or two hundred guineas. To name a less sum in connection with an important body, numbering four thousand members, would be preposterous. If a sum were to be named, he would suggest that the Council should grant £100 now, and £100 towards the close of the year.

After some further remarks, the original motion was carried unanimously; the sum to be granted being left to the discretion of the Committee of Council.

The Representation Committee.—The Chairman said the next business was the reappointment of the Representation Committee. Since the adoption of Dr. Haughton's motion on the previous day, several members of the Association had given it their earnest consideration, and arrived at the conclusion that it would be found most inconvenient when the Committee came to discuss the matter with Her Majesty's Government. Dr. Haughton had been communicated with, and, with his consent, it would now be proposed that he should be added to the Committee, and that it should be understood that the Committee had power to carry out the whole of the resolution, or such part of it as they thought practical. As the resolution now stood, the Committee had no power whatever in the matter—their hands being tied in a manner which even Dr. Haughton himself never intended.

Mr. HECKSTALL SMITH proposed—“That the Committee on the direct representation of the profession in the Medical Council be re-appointed, with the addition of the Rev. Professor Haughton and Dr. Sibson; with power to carry out the various resolutions of the General Meeting, or such parts of them as the Committee may be able. That Dr. E. Waters be Chairman and Convener.” He was delighted to hear the remarks made by the Chairman, and felt sure the Committee would rejoice that their work during the last year was, after all, not to be destroyed by the resolution carried on the previous day.

Dr. HENRY (London) seconded the resolution.

Dr. STEWART (London) thought the proposal a very dangerous precedent. There was a large meeting yesterday, the matter had been very fully discussed, a certain proposal was carried by a large majority [*no, no*], and now it was proposed at a subsequent meeting, much smaller—only a fraction of those present at the other—to virtually, it might be, supersede the resolution come to then. In that case, he thought their general meetings might in the future cease to pass such resolutions. It was giving to the Committee that power which ought only to be conferred by the general body of the Association. He really could not see how they could adopt the proposal, establishing as it did such a precedent in regard to their general votes, and he must protest against the adoption of any such resolution.

The CHAIRMAN read the resolution of Dr. Haughton, and said it was only an expression of opinion, as it were, by the Association. He thought the Committee ought to have some power, and certainly the present meeting could give them the power, as it was a general one of the Association. Dr. Haughton did not think his resolution bound a Committee, but the Committee thought it did, and they would

rather have the discretionary power. It might endanger the whole scheme about which they were anxious, and he thought, sooner than do that, they should pass the proposal that had been made.

Dr. HESLOP felt sure that, if they passed any such resolution, it would only confuse matters, and beyond that it appeared to him to be beside the question. The Committee had received instructions, and they would honestly endeavour to carry them out if they could; if they could not, they would come before the Association next year. By acting in the manner proposed, they would introduce such a serious element of confusion that he could not defend that course as a proper one to pursue by the Association.

Mr. HECKSTALL SMITH felt very seriously upon this matter, which would require some time to explain so as to enable his brethren to see the full force of it. As the matter would stand, unless there were some plan taken to relieve them, the Committee would be compelled to bring Dr. Haughton's proposition before the Government, in connection with the views which they had already submitted to them, and which had been virtually accepted. The proposal of Dr. Haughton was said to be an opinion, but it was an opinion formed during the progress of the matter, and after a great deal of reflection; and if the Committee were called upon to lay it before Government, and propose it honestly, as they must and would, they would have to endeavour to carry it out, and, by this means, they stood a chance of having the whole scheme crushed. The Government would say: "Gentlemen, if you cannot agree on your own terms, and if, after we have proposed this, you do not abide by it, but present us with additional resolutions, we will not listen to you at all; the profession is not united, for you come to no terms whatever, and we will take you into our own hands and settle the matter for you." It was a very serious matter to pass such a resolution. He quite agreed with Dr. Stewart that there was a difficulty, but it was got over by the course advocated. The Committee ought to be at liberty, even as to presenting the resolution of Dr. Haughton. If they did present it, and if they thought that they were not only pledged to do that, but to press it as far as they could, the chances were that they would make a mess of the whole matter. It must be left to the entire undivided discretion of the Committee; and if the Association agreed with Dr. Stewart that the meeting, with the consent of Dr. Haughton, could not to a slight extent undo the resolution, then there was nothing for it but to present the resolution. In his deliberate opinion, however, they would not only not succeed, but would cut from under them the firm ground on which they now stood.

Dr. E. WATERS, as Chairman of the Council for the past two years, said the Committee had been appointed for one simple object; and the Association, having had the subject before it twice at its annual meetings, had adhered to that one object. The Committee had no other work to attempt to aim at than to obtain the direct representation of the profession in the General Medical Council, and they had come to the general meeting with a feeling that they had made considerable progress towards the attainment of that, as they considered, very desirable object. [Applause.] And then came the resolution brought forward by Dr. Haughton. He went with him in his resolution, and he had told him so before it was proposed, but he felt that they would be fettering the Association if it were adopted. The resolution had been brought forward without notice. [Hear, hear.] The gathering was far from being a large one; it was at an early meeting, and he questioned himself whether there were so many members of the Association present when Dr. Haughton's resolution was proposed as there were now. But whether he were right or wrong in that part, the resolution was brought forward on a sudden, and was passed on a sudden; and if, after the two days' consideration that they had been able to give it, the members chose to rescind the resolution, though he was opposed to blowing hot one day and cold another, he thought that rescinding of the resolution would carry greater weight with it than its being carried. But Mr. Heckstall Smith did not mean rescinding the resolution. He merely put it to the Association that it should be confided to the Committee, with Dr. Haughton as a member, to endeavour to carry it out. He (Dr. Waters) did not think there was any objection to such a course, but he could not himself see why Dr. Stewart, for whose opinion he had the greatest respect, and also Dr. Heslop, who had been a most valuable member of the Committee, should not go with Mr. Heckstall Smith in this matter. It was not rescinding the resolution, but it was attempting to carry it out, with Dr. Haughton there to support them, and to urge them on if the Committee flagged in any respect in their efforts.

The motion was then put to the vote, and was carried by a considerable majority.

The Parliamentary Committee.—Dr. STEWART wished to understand what was to be done about the Parliamentary Committee, because there were members appointed by all the different branches of the Association.

Mr. HECKSTALL SMITH wished to withdraw his name as a member of the Committee, and asked the Secretary to take a note of his request. The GENERAL SECRETARY—It will appear in the proceedings in the JOURNAL.

Dr. STEWART said he wished to withdraw also.

The SECRETARY of the Committee not being present to make any explanations, the Committee was not reappointed.

Vote of Thanks.—Mr. T. HECKSTALL SMITH: I have to propose a resolution which is sure to be accepted, not only unanimously, but most cordially. It is as follows: "That the thanks of this Association be given to the Mayor and Corporation of Leeds; to the Literary and Philosophical Society; to the Leeds Mechanics' Institution; to the Committee of the Leeds Library; to the proprietors of the Leeds Commercial Newsroom; to the various manufacturers who have thrown open their manufactories; to Dr. Spark for his organ-performances; and to the contributors to the Annual Library and Museum." [Applause.] That is a very comprehensive resolution, and I trust it does full justice to this noble town. For my own part, I feel that it is quite impossible to do full justice to the efforts which have evidently been made for so long a time to organise and arrange the magnificent reception which we have met with. [Applause.] I might almost say that it is the whole town of Leeds which has given us the reception [applause]; for, when one got to the corner of a street, and hesitated which direction to take, one or two of the inhabitants have come up directly, and, seeing that you were a countryman [laughter], asked what they could do for you. Indeed, this attention one received from both sexes. [Renewed laughter.] I trust the resolution is sufficiently comprehensive; but I see that it does not include one important body, and I do not know whether any subsequent resolution is to be proposed which will include that body. Is there one that will include our medical brethren in Leeds? [The GENERAL SECRETARY said that such a resolution had been prepared.] I am thoroughly glad to hear that there is to be an addendum to this resolution, which is really deserved; and I hope that it will be carried by acclamation.

Mr. CHURCH (Bath): I second the resolution most cordially.

The motion was adopted with loud applause.

Dr. GAIRDNER (Glasgow): I was going to second the proposition with the greatest pleasure; and for this reason, that I was one of the few persons present to-day to hear the delightful music played on the organ by Dr. Spark. [Applause.]

Dr. STEWART (London): There is another resolution, which, I am sure, needs few words of mine to recommend it to your unanimous adoption: "That the cordial thanks of this Association be given to the Local Committee and Local Secretaries, Dr. Allbutt, Dr. Eddison, Mr. Wheelhouse, Mr. Seaton, and Mr. J. A. Nunneley." [Applause.] Each of these names is of itself a text upon which, if I were disposed to trespass on your time, and you had the patience to listen—which I dare say you would have—I could dilate at considerable length. I do not require to tell you how devoted they have been to our service. You know well how for months past they have been labouring like slaves in order to do justice to the meetings of this now great and important Association; and how they have succeeded, the events of the last few days amply tell us. [Applause.] We have been in many places where we have met with noble receptions, but a nobler reception than this has certainly never been the lot of the British Medical Association. [Applause.] Having myself, on one occasion, had the duties of preparing for the meeting of the Association, I can assure all present that they little know what an amount of drudgery is involved in the work of the Local Secretaries. I feel exceedingly gratified at having been requested to propose this motion to-day, and I am very sure that you will adopt it in a very cordial manner. [Applause.]

Dr. WILTSHIRE (London): Having been in Leeds for some weeks, on work not connected with this Association, I have come into contact with many of my medical brethren in the town; and I should not like to let the opportunity pass of giving my warmest thanks to all who have behaved so kindly towards me. [Applause.]

Mr. G. SOUTHAM (Manchester): I support this resolution most cordially. It has been my lot to attend many meetings of this Association, but I cannot bring to mind any meeting where we have been better received than on the present occasion. [Hear, hear.] I know that our Leeds friends felt some little diffidence, after the meeting at Oxford last year; but I am sure that I have not met with a single individual attending this meeting who has not spoken in the highest terms of praise of their reception in this town. Whenever they think it desirable to invite us again, we shall be very willing to accept the invitation. [Laughter and applause.] I esteem it a very great honour to have been asked to second the resolution.

The resolution was heartily adopted.

The CHAIRMAN: I most cordially join in thanking our Leeds

brethren for the public spirit they have shown on this and all other occasions. [*Hear, hear.*]

Mr. WHEELHOUSE said: At this late hour of the day, I will not detain you many minutes; but I desire to say that it will indeed be a very proud moment when I deliver the resolution which you have just passed so cordially to the body of the Local Committee. It has been the earnest desire of all the practitioners in Leeds—not of the Local Committee alone, but of every practitioner in the town, without a single exception—that the Association should be welcomed as heartily as it could be welcomed, and that everything should be done to render the meeting as great a success as possible. [*Applause.*] The Local Secretaries have only done that which every gentleman placed in the same position would have done. Every means has been used to secure a successful meeting; and, up to a very recent period, there was reason to hope that we should have no very serious drawbacks, and that nothing would cross our path. That there have been shortcomings, we cannot but recognise; but we hope that they have been as few and as slight as possible. When, however, you remember the especial trials that have fallen, not only upon our President, Dr. Chadwick, but upon others; when you remember also that we have been obliged to lose the services of the house-surgeon at the hospital, through an injury contracted in the service of the institution; and that the second officer in the infirmary has been taken away from us on account of the death of one of his brothers,—you will readily understand that we have had great difficulties to contend with. If anybody feels that there were any shortcomings, either at the dinner last night [*No, no*], or at any other time, we beg you to believe that these are the only reasons we can assign for not having carried out the meeting more successfully. [*Applause.*]

Vote of Condolence with the President.—Dr. FALCONER (Bath): The last resolution has been committed to my hands, and I am sure it is on a subject which will commend itself to your deepest sympathies. Many of us feel that this Association ought not to close its meetings without expressing its deep sympathy and condolence with our President, Dr. Chadwick. [*Hear, hear.*] All of us had doubtless looked forward to seeing him often amongst us here; and we know full well, from his gentle and philosophic countenance and happy bearing, how he would have added to our happiness during the past week. I cannot trust myself to my feelings in proposing the resolution; and I would rather submit it simply and plainly to you, hoping that it will be carried in silence and with due consideration. At the same time, I should like to make the addition, that a copy of it be sent to Dr. Chadwick, through our Secretary. I beg to move—"That the members of the British Medical Association cannot separate without expressing their condolence with their President, Dr. Chadwick, on the severe bereavement which he and his family have so recently sustained, and which has deprived the Association of his valuable services in presiding over this meeting."

Dr. CHARLTON (Newcastle-on-Tyne) seconded the resolution. He said: On such a mournful occasion as this, it is unnecessary for me to say more than that it brings back many recollections of my friend Dr. Chadwick when a student in Edinburgh, when I felt sure that his amiable conduct there would not only procure for him a large share of professional success, but would likewise make him lasting friends, in whatever town he might settle. [*Hear, hear.*] From what I have seen, I am sure that this has been the case in Leeds; and therefore the deeper is the sympathy for the bereavement that has fallen upon him.

The resolution was agreed to in silence.

Vote of Thanks to Mr. Husband.—Dr. FALCONER took the Chair, which was vacated by Mr. Husband.

Dr. W. FARR proposed a vote of thanks to the President of the Council. Since Mr. Husband had been in office, he had discharged his duties to the entire satisfaction of the Association. All that the Council had to complain of respecting their President was, that he had said rather too little; but his wisdom had guided them to satisfactory conclusions. He asked them, then, to thank the President of the Council for the able services he had already rendered. [*Cheers.*]

Dr. A. T. H. WATERS seconded the resolution, and congratulated the Association on having secured the services of Mr. Husband as President of the Council for the next three years. [*Applause.*]

The resolution was put to the meeting by Dr. FALCONER, and was carried unanimously.

Mr. HUSBAND, in returning thanks, said he had been exceedingly reluctant to take upon himself the onerous duty of President of the Council; and he felt more so when he knew he should have to undertake the duty of President of the Association, in the absence of their worthy President. Yet he had had great pleasure in doing what he could on the occasion; and, if he had performed his duties to the satisfaction of the Association, he should feel all the more pleasure. [*Cheers.*]

Mr. HECKSTALL SMITH said he had to take the great liberty, before they separated, of asking the Association to attend to one point which

had been whispered in one ear and another, but had never been formally mentioned. It was very pleasing to him to be able to supplement what they had already done by another vote of thanks; for he did not feel that what they had done in the way of returning thanks included the names of those to whom he referred. Amongst those to whom they felt their great indebtedness, their rule was to thank, which they did, and ought to do, most cordially—not only the gentlemen who had officially given them a reception in the town, but also the whole medical profession of Leeds, without one single exception, from whom they had all received a most cordial reception. He would not propose a resolution on the subject, as he did not desire to break through their programme; but he desired, and he was sure they would agree, that he might take the liberty to assume that they thanked most cordially the whole medical profession of Leeds for the very great honour they had done them. [*Applause.*]

The proceedings then terminated.

Visit to Harrogate.—On Friday, July 30th, upwards of a hundred members accepted an invitation from the Harrogate Improvement Commissioners, at the instance of Dr. Deville, to visit that celebrated watering-place. The visitors were conveyed from Leeds by special train at half-past twelve o'clock, and arrived at Harrogate about half-past one, where they were met by Dr. Myrtle, Mr. Abraham, and other gentlemen, who conducted them to the carriages in waiting to convey them to the Queen Hotel. Twenty-seven private carriages of the resident gentry had been spontaneously placed at their disposal. At the Queen Hotel, they were received by Dr. Bennett, Dr. Bealey, Dr. Norman, Mr. Short, and Mr. Bainbridge. After this, the guests visited the scenery of the neighbourhood and the localities of the principal mineral springs. After this, they proceeded to the Royal Pump Room, which had been ornamented for their reception; and there they tasted of the waters. They also visited the Montpellier Gardens and the Chalybeate Spa Rooms; returning afterwards to the Queen Hotel, where a splendid luncheon had been provided for them by the liberality of Mr. Milner, the proprietor of the hotel—the medical practitioners of the town defraying the expenses of the wines. Dr. Bennett occupied the Chair; and Mr. Short and Mr. Bainbridge were vice-chairmen. After several toasts had been drunk, most of the guests returned to Leeds, highly gratified with the hospitable reception which had been given them in Harrogate. Several members of the Association were guests of the medical men in Harrogate—especially Dr. Bennett and Dr. Myrtle—during the week.

Soirée at the Philosophical Institution.—In the evening of Friday, Dr. Heaton gave a *soirée* at the Philosophical Hall, which was very numerously attended.

Temperance Breakfast.—On the invitation of Mr. Baines, M.P., a Vice-President of the National Temperance League, about one hundred and fifty of the members of the British Medical Association assembled at breakfast on Thursday in the Great Northern Station Hotel, to meet Mr. S. Bowly and the Rev. Alexander Hannay, Vice-Presidents of the League. Mr. Baines presided; and Mr. Bowly, the Rev. A. Hannay, the Mayor of Leeds, Mr. W. H. Conyers, Mr. John Whiting, and other leading members of the League in Leeds, occupied seats on his right and left hand. The meeting was addressed by the Chairman, Mr. Bowly, the Rev. A. Hannay, Dr. Stewart (Dublin), Dr. Langdon Down, Mr. E. Davies (Swansea), the Rev. Dr. Bell, Dr. C. J. Hare, Dr. Frobisher, Dr. Beales (Congleton), Dr. Martin (Warrington), Mr. Teevan, and Mr. Norris (Petherton). The merits of total abstinence from alcoholic drinks were freely discussed. A vote of thanks to the Chairman, proposed by Dr. Munroe of Hull, and seconded by Mr. Johnson of Liverpool, concluded the proceedings.

The Mayor's Dinner.—On the evening of Wednesday, the Mayor of Leeds, T. W. George, Esq., entertained a large number of members of the Association at dinner in the Town Hall.

Visit to Scarborough.—On Saturday, July 31st, a large number of the members who had attended the meetings of the Association accepted a hospitable invitation to dine at the Grand Hotel in Scarborough.

THE DINNER.

ON Thursday evening, the members of the Association, with their guests, dined in the Victoria Hall, Town Hall. In the unavoidable and regretted absence of the President, the chair was taken by Dr. Heaton, who was supported by the Rev. Canon Woodford, Vicar of Leeds; T. W. George, Esq., Mayor of Leeds; Dr. Charlton; the Rev. Dr. Haughton; Sir J. Y. Simpson, Bart.; Dr. Hughes Bennett; W. D. Husband, Esq.; Dr. W. Farr; Dr. A. Farre; Dr. Beatty; Dr. Sibson; Dr. Radclyffe Hall; Dr. Stewart; etc.

After the usual loyal toasts, the CHAIRMAN proposed "The Bishop, the Clergy, and Ministers of Religion."

The Rev. Canon WOODFORD, D.D. (Vicar of Leeds), said: I thank you very much for the honour you have done the Bishop and clergy of this diocese in drinking their healths. I cannot but take this, from such an assembly, as something far beyond a common compliment. I take it rather as the generous greeting of one great profession to another. [Applause.] If I were speaking to an assembly less intellectual, and therefore one to whom such thoughts would be less familiar, I should be tempted to dwell upon the close affinity existing between the clergy and the medical profession; I should be tempted to point out how both are banded together in one crusade against human suffering and human sorrow; I should point out how it is almost impossible to dilate upon the duties of my profession without borrowing language and using imagery derived from yours; I might also point out how intimately interwoven are the rules for ensuring religious and physical well-being [hear, hear], so that, in interpreting the most ancient national code of laws—the Mosaic code—it is still a question among theologians what part of those laws are sanitary and what are moral. [Applause.] But I must not detain you upon these topics: let me rather, as a clergyman, take this opportunity of bearing my testimony to the noble kindness and self-devotion, which every clergyman must have seen exhibited by members of the medical profession towards the poorest of his parishioners. [Applause.] There is, I suppose, no parochial clergyman whose experience does not furnish him, as mine does, with instances upon instances of the highest talent, of the greatest sacrifices of time and trouble, devoted to attendance upon those who have no earthly means of repayal; and that with a philanthropy which does not attract the public eye, because it is philanthropy belonging to every part of the profession, and is made common by the profession through every corner of the land. [Applause.] Let me, then, not delay longer to tender, as a clergyman, the most grateful thanks of the clergy to the medical profession for the assistance they have received from them in ministering especially to the poor; and let me express on my own behalf, and I believe on behalf of all the more sensible of my brethren, our firm conviction of the duty and the wisdom of a clergyman, in making his approaches to the sick bed, to rule himself by the suggestions of the medical adviser, as not only necessary, if he would not mar that delicate process of restoration over which the medical man presides; but also, if he would see (and he ought to see), that this is the shortest way of arriving at those moral results which it is the business of his profession to seek and to promote. [Applause.] I thank you most heartily for the honour done to me and the members of my profession in remembering us on this occasion. [Applause.]

The CHAIRMAN said the next toast was "The Medical Officers of the Army, Navy, Militia, and Volunteers." He said they afforded valuable assistance to the State in the preservation of life; and, but for their scientific agency, much greater sacrifices would have to be submitted to, while also in time of war they were of great value in many cases in guiding the counsels of the Government in relation to their own department. [Applause.] He looked upon the medical officers of the naval and military professions as a section of the great medical body who were deserving of especial respect. He was glad to see several of them amongst the company that evening; and in proposing the toast, he coupled with it the names of Dr. Blanc and Mr. J. A. Nunneley. [Applause.]

Dr. BLANC regretted very much that none of his seniors were present to respond to the toast in a more fitting manner than he was able to do himself. He could, however, acknowledge the toast with a thankful heart, and in doing so he had no doubt that he expressed the feelings of all the medical officers of the army. He might say that when in distant countries—in India, Egypt, or Abyssinia, for instance [applause]—they always looked to home for sympathy; and they always found that in the hour of need England was England still, and would not allow any black tyrant to keep her sons in chains [cheers], but would come bravely to the rescue; and he had no doubt that of those who were the most earnest advocates for the expedition to Abyssinia, as much credit must be given to his medical brethren as to any of those who were foremost in demanding the release of the captives. There was another point to which he wished to beg attention. In India or other distant climes where they were obliged to serve, they were cheered and aided very greatly in their difficult work by studying the writings of the learned in the profession at home; and the names of many gentlemen who were present at this banquet had often been a great comfort to him and to others under very difficult circumstances. He could especially mention the names of Jenner, of Farr, and of Simpson—illustrious men whose learning had helped him and his brethren very greatly in the most difficult and critical positions in which medical officers could be placed in connection with the army. In conclusion, he returned thanks most sincerely for the honour done to the various corps comprehended in the toast. [Applause.]

Mr. J. A. NUNNELEY briefly returned thanks in behalf of the volunteers.

The CHAIRMAN: I believe that every one here present knows the peculiar circumstances under which I occupy the chair this evening. A few evenings ago most of us witnessed with deep emotion a good man, in the presence of a large audience, standing under the apprehension of an impending calamity. That calamity, unhappily, has been fulfilled, and it became impossible for your President, Dr. Chadwick, to appear before you in public any more on the present occasion. A hastily summoned meeting of the Local Committee assured me with great kindness, but with great earnestness, that the duty and honour of presiding on the present occasion would have to be undertaken by myself. [Applause.] When it fell to my lot some time ago to occupy the chair at a meeting of the profession of this town and neighbourhood—a meeting held for the purpose of making arrangements for this annual meeting of the British Medical Association—and when the cordial and unanimous expression of opinion was that it was our duty to recommend to the Council of the Association that Dr. Chadwick should be elected President for the coming year, I took occasion, in occupying the chair, to urge upon the gentlemen whom I saw around me the importance of the various duties which devolved upon us at that moment, loyally to give the best assistance we could to the President we had chosen, and to promote, in every possible way, the success of the anticipated meeting in Leeds. It is for you, gentlemen, now to say how far we have been able to carry out that intention. [Applause.] I can say for myself, and our friends around us, that we have worked with earnestness and zeal not only to promote the success of the Association, but to give every possible help to your President, Dr. Chadwick. [Applause.] It is only in carrying out the axiom I then proposed, that I am holding the position in which you now see me. I am only here as the representative of Dr. Chadwick. It is an old and trite remark, that some men are born to greatness, others achieve greatness, and others have greatness thrust upon them; but I claim to be one of those on whom distinction has been forced unwillingly, though I have not shrunk from it under the circumstances; and have endeavoured that, if I failed at all in discharging its duties, it should be not from want of good-will, but because of a deficiency of tact and ability. ["No, no," and applause.] It is well known that I have not sought this position; but it was only because I was assured that it was my duty to hold it that I undertook to do so, however inefficiently I might acquit myself in Dr. Chadwick's absence. [Applause.] Our next toast is, "Success to the British Medical Association, and Dr. Chadwick, the President," [hear, and applause.] Those who can remember, as I can, though but imperfectly, a meeting of the Provincial Medical Association in this town more than a quarter of a century ago, and the comparatively small and uninfluential gathering which then took place under the presidency of Mr. Hey, those who can contrast what took place on that occasion with the much more influential proceedings of the present week, can scarcely deny how great has been the success which has attended the career of the British Medical Association. [Applause.] That success has been manifested in many ways. One operation of this Association has been to unite together the members of the profession, to take care that they were not any longer a disunited, but a compact and harmonious body. By its operations, the discoveries of medical science have been encouraged, and the dissemination of them has been extended over a vast area. By the operations of this Society, too, the medical profession have been able, on many occasions, to assist the Government and the State in many important questions of political economy; and last, though not least, and not in any narrow spirit of sectarian egotism, but with a proper regard for the respect due to a nobler profession, we may claim that this Association has nobly maintained the position of the profession, and asserted its dignity throughout the country. [Applause.] If I may look for one moment from the success of the sections to the success of this banquet, may I not hope that a favourable verdict will be pronounced? [Hear, hear.] There is only one cloud over us, and we know what it is, and we all do most sincerely condole with the President in that unexpected family calamity which prevents him from now appearing before us. If it had not been for that calamity, the latter part of the toast I now propose would not have come from the chair, but would have been responded to by the Chairman. I will only add that I am sure every one sympathises most deeply and feelingly with the President—whom to know is but to love and respect—in the very great loss which he has recently sustained. [Hear, hear.]

Mr. HUSBAND said all present had reason for regretting the absence of their respected President, but how much more had he reason to regret the absence of one who would much more ably and eloquently have represented the Association. The name of their President was associated with the toast; and with regard to him he need say nothing further than this, that their best, their kindest, their largest sympathies

were with him in his hour of affliction; and, while they very deeply regretted his absence on this occasion, they much more deplored the cause which compelled him to be absent. But, when they turned from the President to the toast of the evening—"Success to the British Medical Association"—how were they not carried back to those times of old, so well remembered by those who had stood by this Association from its earliest institution, when they were accustomed to hear the eloquent tones of Sir C. Hastings returning thanks on such occasions on behalf of the whole body. There were those, no doubt, who remembered the times when the horizon was but black and the importance but insignificant of that Association, which was now one of the worthiest representatives of the medical profession. He (Mr. Husband) remembered that, twenty-six years ago, the Association, when it held its meeting in Leeds, had little or no influence either with the profession, with the Government, or in the councils of the nation. But let them ask now whether the British Medical Association was not an established power, influencing the opinions of the nation, and, much more, influencing the Government for the welfare and for the elevation of the profession at large. If they had met in Leeds for no other purpose than to give birth to the oration which they had heard from Sir W. Jenner on the previous day, they had done something which justified their assembling together; for they had heard practical medicine—he would not condescend to say vindicated—but illustrated, in a manner which surpassed all expectations. He hoped in the present day there was such a knowledge of medicine among those who studied it, that no one would venture to detract from its importance; and, when it was remembered that they had asserted the right of every member of the profession to be represented in the Council; when they had entered their protest against the attempts of the Government to interfere with their constitution and with their right to manage their own affairs; and, above all, when it was remembered that they were giving the greatest impulse to sanitary legislation—an impulse such as no individual efforts could equal—he claimed for them, as a body of men earnest and determined to do their duty, that they had a right to be regarded as the most efficient and most enlightened sanitary reformers in the kingdom. And, when he remembered the eloquent words of Sir William Jenner, as the exponent of their principles and their practice; when he considered that now between four thousand and five thousand of the most distinguished medical men in England—not only in the metropolis, but in the provinces—were combined together, not only for scientific purposes, but with a fixed determination also to elevate the character of the profession, he felt sure that it was a combination that could not but be attended with the happiest consequences. Its operations and its records, notwithstanding the obstructions of prejudice and ignorance, would eventually place the medical profession on a much loftier pedestal as a philanthropic profession. He believed that it was now beginning to occupy the position which it should have taken long ago. It only remained for him, on behalf of the Association, to thank their friends and brethren in Leeds—those to whom belonged the honour of such names as Hey and Teale and Smith, and whose celebrity as practitioners ranked second to none among the provincial towns: he had to thank them for the respect which the members of the Association had met with everywhere, and to acknowledge that the arrangements they had made would make this memorable as one of the most successful meetings the Association ever had. The civic authorities, too, were entitled to their gratitude, for they had received them with a hospitality almost beyond precedent, and with a kindness of feeling which was never excelled. He remembered partaking, ten years ago, of the hospitality of the late Sir P. Fairbairn in Leeds. Sir Peter was at that time one of the most distinguished citizens; but he could not have endeavoured more worthily than the Mayor of Leeds had done on this occasion to represent his native town. All these things showed a kind appreciation of the efforts the medical profession were making to alleviate the misery and improve the condition of their fellow men. He was glad to find that the Mayor of Leeds was their latest enrolled brother; and in enrolling him they were enrolling one who would always maintain that the medical profession was one which was entitled to the confidence and respect of the public, because it used its influence to carry out those sanitary arrangements which they, from philanthropic motives, believed to be associated with the best interests of mankind. [Applause.] He concluded by proposing "The Mayor of Leeds"; which was drank with enthusiasm.

The MAYOR OF LEEDS: For the Corporation of Leeds, as well as for myself, I give you our most hearty thanks for the kind manner in which you have received the toast which has been so handsomely proposed to you by Mr. Husband. When the Corporation first heard of the visit of this Association to our town, they at once and without the least hesitation said they would do all they could to afford the Association every facility for holding their meeting, and with that view should place every

room they had entirely at your disposal [*hear, hear, and cheers*], and do everything they legally could to further the objects of the Association. It has been said by our honoured Vicar that there is a sort of sympathy between the clergy and the medical profession. [*Hear, hear.*] Now, the Corporation also feel they have a common interest with the medical profession, for it is our duty to guard the sanitary condition of the town. [*Hear, hear.*] It is no small part of our duty to take care of the health of the population; and we feel that, seeing the advice we receive from medical gentlemen, and the aid they are always willing to give us in the pursuit of that object, we could not do less than give them every facility we possibly could in carrying out the object they have in view. [*Hear, hear.*] Now, I will just say one word for myself. I feel deeply honoured in being called one of your brethren. [*Cheers.*] But I feel that in doing me that honour you have paid also to the Corporation of this town a great compliment by making the chief magistrate an honorary member of your Association. I may say that, when your intention was mentioned to me yesterday, I really thought it was a joke that I should devote the remainder of my life to the study of medicine. [*Laughter.*] I scarcely feel that I am in the slightest degree entitled to the honour you have conferred upon me; but, seeing that I represent the town on this occasion, I must say I felt very proud of the honour done to the town through me. I thank you heartily in the name of the Corporation and of the town for the honour which I have received at your hands. [*Applause.*] I heartily wish the Association all the success the members can desire; and I hope, at no distant period, when some other Mayor has the honour of holding the post I now occupy, you may visit this town again, and be received in a more hospitable manner than you have now been. [*"Impossible," and loud cheers.*]

Dr. RADCLYFFE HALL: Every man found his highest gratification in the success of something that was good; and even in private practice there was much reason for satisfaction; but there was no gratification so great, no satisfaction so solid, as that which any man in the medical or in any other profession, felt when, despite what he believed to be his shortcomings, despite whatever deficiency he might find in his intellect or acquired information, he was selected by his friends and professional peers to be placed in a position of prominence, and be their representative as presiding over such a body of intellect and knowledge as that which existed in the British Medical Association. [*Cheers.*] He could assure them that this moment in the existence of any man was one of high gratification—perhaps the very acme of his pride. [*Hear, hear.*] For that justifiable reason he ventured now to congratulate Dr. Charlton; and, considering what they knew of Dr. Charlton's attainments, of his habitual courtesy of manner, and of his amiable habits, he felt persuaded that the British Medical Association had as much reason to congratulate themselves as Dr. Charlton undoubtedly might have to congratulate himself. [*Cheers.*] It might be that not a little of the success of these annual gatherings—so full of all that pertained to sociality and kindness of heart—might depend upon the energy put forth, upon the kindliness of disposition, and the whole tone imparted to the thing by the presiding spirit; and in that point of view he felt assured that they would all have reason to feel satisfied, when they met next year in the great emporium of the north—Newcastle—with the reception given to them by his fellow professional men, through their representative, Dr. Charlton. [*Hear, hear.*] He proposed "The Health of the President-elect, Dr. Charlton." [*Applause.*] The toast was drank with enthusiasm.

Dr. CHARLTON said that, as President-elect, after having seen the labours which the President at Leeds had to undergo, he thought it would be very right in him to keep his strength back for the incoming year [*laughter*], and to say as little as possible now, both to preserve his own energies for the occasion, and likewise for fear of tiring the members out at that time of the evening. When he heard at Oxford that the British Medical Association were coming to Leeds, he felt a kind of gratification, because he thought that, after Dublin, Oxford, and Leeds, they should be let gently down and landed at Newcastle. But Leeds had put itself upon a higher pinnacle than ever, and if they came down to Newcastle they would come down with a run indeed. [*"No, no," and laughter.*] The members in Newcastle would, however, do their best, and the Association would meet with a willing welcome: they might know by anticipation to what kind of place they were coming. Some said Newcastle was blacker than Leeds—they in Newcastle said it was not so black. [*Laughter.*] They had not, however, such reception rooms; nor could he ensure for them—though he should do his best—such a glorious reception as they had met with from the Mayor and Corporation of Leeds. [*Hear, hear.*] But whatever their reception might be, they had had experience in receiving associations in Newcastle, in regard to which he had himself taken an active part, especially during the two meetings within twenty-five years of the British Association, and also of other associations which had been

there. He knew that Newcastle was capable of receiving them; but he was by no means certain that they could anything like rival the magnificent reception accorded to the Association in Leeds. Their town was indeed a manufacturing town—it was a town of hard work, hard thinking, and hard heads; but there were good hearts amongst them, and he trusted that these hearts would warm as much towards the British Medical Association—which was now beginning to take its proper position—when it next visited Newcastle, as they did on both the occasions on which the British Association for the Advancement of Science was there. [*Cheers.*] From what had gone before, he anticipated that they should be able to receive them heartily—well he would not answer for: at all events he was quite certain of this, that if such men came to Newcastle as had come to Leeds, their meeting at Newcastle could not fail of being a success. [*Applause.*] He thanked the Association, both on his own part and on the part of the profession in Newcastle, for the honour they had done to the town in choosing it as their next place of meeting. [*Loud cheers.*]

The Rev. Dr. HAUGHTON, who was received with cheers, said: I thank you for the kindness with which you have received the speech which you have not heard. [*Cheers and laughter.*] If I were a wise man—which I don't profess to be—I should now sit down, and accept your thanks. [*Laughter.*] If, however, you have honoured me so far by anticipating my speech, I am bound to justify, to some extent, your good will. It has fallen to my lot to propose a toast—I cannot say it is my good fortune—for I can assure you from my heart that I feel no pleasure whatever in speaking on such an occasion: it gives me no more pleasure to speak at such a time than it does to a rat to show fight when attacked by terriers. [*Laughter.*] It is a disagreeable duty; but I shall go through it like a man. I had the misfortune to deliver an address at Oxford, and therefore this toast has been placed in my hands to-night. Not being altogether ignorant of the misery which should attend such a process, I can sympathise with those who have delivered, or about to deliver, addresses at this meeting. [*Cheers and laughter.*] I am called upon to propose to your consideration the readers of the addresses at the meeting of the British Medical Association at Leeds. [*Applause.*] We have heard two of these addresses; and the third we shall have the extreme gratification of hearing to-morrow morning. Therefore, I have the difficult task imposed upon me of asking you to give a vote of thanks for two addresses which you have heard, and for another address which, like my own speech, you have not heard. [*Cheers and laughter.*] Now, I shall begin at the wrong end, and first ask you to give thanks for the address which you have not heard. A friend told me I should have to speak to-night in proposing your thanks for these addresses. I immediately said, "There is one address which I have not heard; what shall I say about that?" My friend said, "Mr. Nunneley is to give that address to-morrow morning at ten o'clock; but you should go to the Infirmary to-day at half-past three and see how he uses his knife." I did go; and I can assure you that, if Mr. Nunneley will use his tongue to-morrow as skilfully and as readily as he used his knife to-day, he will do well indeed. [*Cheers.*] Sir William Jenner laid us all under a great obligation by his valuable address—one of the most weighty and valuable addresses that it has been my privilege to hear delivered before the British Medical Association. [*Applause.*] One point of his address particularly struck me as a stranger—his unwavering and undying faith in the future progress of scientific medicine. [*Applause.*] I cannot claim the honour of being myself intimately acquainted with the practice of medicine. I know something of it, but I do claim the right to say that I have the deepest sympathy with the progress of scientific medicine. There are many points in Sir William Jenner's address that struck me—coming from a practical man—as being of the greatest weight and importance for an Association like ours to carry out. In the first place, I was glad to find that Sir William Jenner has a practical and real faith in the power of drugs. [*Hear, hear.*] He states his belief that, although we do not know in every case the power of the medicine which we prescribe, there is a higher knowledge, and even a higher scientific standard, which we must cultivate, and which it was the highest object of theoretical and practical physicians to lay down. [*Cheers.*] Sir William also expressed his confident belief in the progress of medicine, founded upon the aid furnished to medicine by the use of such instruments as the thermometer and the ophthalmoscope. Such scientific aids to medicine meet with my cordial appreciation; and, as he is a representative of the practical school of medicine, I heartily thank him for his appreciation of these purely scientific aids to practical medicine. [*Hear, hear.*] I now turn to a part of my duty that I feel myself completely overwhelmed with. I am an Irishman [*hear, hear, and laughter*], and I am called upon to ask you, in this town of Leeds, to which we are both strangers, to thank my fellow-countryman, Dr. Beatty. [*Applause.*] It would require—properly to warm me to this subject—an

assembly not only of Irishmen, but of Irish women. [*Laughter and cheers.*] In the absence of my fair countrywomen, I shall only ask you to imagine their presence; and for the benefits which my friend Dr. Beatty has rendered them, your cheers would not be listened to, nor my speech, but Dr. Beatty would be carried off by the ladies, and caressed by them only. [*Laughter and applause.*] Of the points upon which he touched in his most interesting address, I shall name but one; and that I name, not because it is more deserving of our interest and consideration, but because it commands the sympathy of a larger public than that which I now address—a public outside the medical profession—which must have a deep and lasting impression in questions that connect the medical profession with social problems of the greatest importance. I have to thank, and I do thank with all my heart, my friend Dr. Beatty—and I thank him both as a physician and as a clergyman—for the manly and bold statement of his views which he put forward respecting the Dialectical Society. [*Loud applause.*] It is a question upon which, for obvious reasons, it is not convenient to enter on this occasion; but I am sure that I have with me the sympathy of this meeting—for those whom I address are gentlemen as well as physicians. The attempt made by the Society to degrade our noble profession to uses which I dare not mention, even in this room, will never be forgotten by the British Medical Association [*cheers*] so long as professional pride—I speak not of Christian honour—shall rule the profession to which I have the honour to belong. I shall say no more on this subject, but to remark that, if we had the President of the Dialectical Society amongst us in Ireland for one night, I cannot say what would happen him, for his mother would not know him when he came home. [*Loud laughter and applause.*] The speaker concluded amid loud applause.

Dr. BEATTY, who was received with applause, said there were two kinds of notice which were equally injurious to a man, who was called upon to speak or to write. There was the too short notice, and there was the too long notice. [*Laughter, and hear, hear.*] He had had the compliment paid to him of a long notice, asking him to give an address on midwifery; and that being the case, he wrote an address which he found too long for the miserable hour allotted to it. [*Cheers and laughter.*] The effect of that was to spoil his address by compelling him to cut out portions which he hoped they would all read when they saw the address in print. [*Cheers.*] Nobody knew better than he did the ill effects of turning over unread pages of a speech, and cutting short sentences. [*Hear, hear.*] He also laboured under the disadvantage of short notice, inasmuch as he expected that Sir William Jenner would have answered the toast now proposed by Dr. Haughton; and that therefore, he would not be called upon to speak on the present occasion. They would, if they pleased, take his excuse for his shortcomings on this occasion, as well as, he hoped, his excuse for too long notice, which he got in reference to the address he had delivered to day. [*Cheers.*] It was to him a great gratification to see an Irishman invited to take any part in the proceedings of the great British Medical Association. [*Hear, hear.*] He felt it as a great compliment. His address to day had been so badly delivered that he was thoroughly ashamed of it; but it was the inexorable rule of one hour. [*Laughter and cheers.*] He strongly advised Mr. Nunneley not to be bound by such a rule; and he recommended the Association not to limit a man when they asked him to give an address, as there were many points which might require an extra quarter of an hour; and upon which the time would make all the difference. He spoke this sincerely and honestly, and in the interest of the British Medical Association. He saw that Sir William Jenner had been hurried on the previous day. Every man who heard the excellent and admirable address must have felt that Sir William Jenner was speaking against time; and anybody who knew what speaking and reading was, must know that a man spoke at a disadvantage who spoke against time. He sincerely thanked the meeting, and the British Medical Association, for the compliment they had paid him in asking him to deliver the address. [*Loud cheers.*]

Dr. HUGHES BENNETT proposed the next toast. The Association had two great objects, one of which was to bring the members of the medical profession from all parts of the country into contact with each other on terms of friendship; and when they looked at the magnificent hospitality [*cheers*] they had received at Leeds, and the brotherly feeling with which they had all been welcomed, that object had been fully met. [*Hear, hear.*] He hoped, however, that they would never forget that after all the principal object of the Association was the advancement of medical science. [*Hear, hear.*] When, therefore, they considered the anxieties, the skill, the labours, and the research thrown into the numerous papers and scientific communications brought before them at their meetings, they must confess that they were deeply indebted to those gentlemen who laid various papers before them. [*Hear.*] It had devolved upon him to have to propose the thanks of the Associa-

tion to the authors of the papers read at this meeting. [*Cheers.*] He could only speak of what had occurred at one of the sections—the Physiological Section—of which he had the honour of being President. There, so splendid had been the papers brought before them, that the room had not been large enough to hold the concourse of people brought together, notwithstanding the seductions that had been put forth to draw them away, in excursions to neighbouring towns, and various entertainments. On the morrow they were going into a room that was twice as large, and no greater proof than that fact was needed of the success of the Association. [*Cheers.*] Under those circumstances, he thought they would willingly accede their thanks to the authors of the papers. He had been requested to give the name of Captain Galton in connection with the toast he had to propose. [*Cheers.*] All who had to-day heard Captain Galton's admirable address on the construction of hospitals, must feel satisfied that they had heard all that was to be said upon the subject from an engineering and architectural point of view, and they could not be too grateful to that gentleman for the pains he had taken to enlighten them upon the subject. [*Cheers.*] He concluded by proposing the health of the readers of the papers, and coupled with the toast the name of Capt. Galton. [*Loud cheers.*]

In the absence of Capt. GALTON, Dr. BROWN-SÉQUARD was called upon to respond. He briefly expressed his interest in the proceedings of the Association, and his thanks for the great honour done to him in asking him to respond on behalf of the readers of the papers.

Sir James SIMPSON, who met with a very hearty greeting, said that the meeting of the Association had been a great success, and the success had, in a great measure, depended upon the good men they had had as Presidents in the various sections. [*Cheers.*] He had to propose a toast to their honour, and he had been asked to select one of those gentlemen to respond. He had infinite pleasure in selecting Dr. Arthur Farre, [*cheers*] a gentleman who had done good scientific work in that department of the profession with which he was more immediately connected. Dr. Farre had raised himself to the head of his profession, and had done it in the most honourable way; he was respected by the profession generally, and was esteemed by every medical gentleman who had the honour of knowing him, as many of them had. He had sincere pleasure in coupling with the toast the name of Dr. Arthur Farre, knowing that he coupled with it the name of a true and leal physician. [*Loud cheers.*]

Dr. ARTHUR FARRE, replying, said that, in receiving such a compliment from such a body, brought before them by such a man as Sir James Simpson, and so utterly unexpected as it was, they could well suppose that he laboured under some difficulty. From the bottom of his heart, he thanked them for the way in which they had invited him to take the presidency of one of the sections; for the manner in which he had been supported by Sir James Simpson and all who had been in attendance at that section. He assured them most honestly that it would be one of the brightest recollections of his life that he had met them on that occasion. He had done his best to perform the duties assigned to him, and he hoped they were satisfied with him. He cordially thanked all present for the way in which the toast had been received, and he thanked Sir James Simpson for the kind and flattering manner in which he had brought his name before them on that occasion. [*Loud cheers.*]

Dr. WM. FARR remarked that a kind Providence had surrounded them ever since they set their feet down in the streets of Leeds. Their friends had thrown their houses open to them in the most hospitable manner, and the corporation had thrown open that grand and magnificent hall for their reception. As president of a section, he believed he might say that the sections were never so well accommodated as they had been at Leeds. They had been taken to the Philosophical Hall; and that morning they had been taken to the Great Northern Station Hotel, where they had been very handsomely entertained by Mr. Baines, M.P., a man who had, perhaps, done more for the cause of education by his efforts and his statistics than almost any other man in the country, and by his efforts for years he had very much helped on the cause which they, as medical men, had at heart. Mr. Baines had been good enough to hold himself out as an admirable specimen of a water-drinker for thirty years, and they had all been delighted to see him in admirable and blooming health; but they had the honour to have with them in that hall a gentleman who had gone through all the grades of the Town Council, and who might naturally rival their friend, Mr. Baines, for appearance and health. [*Laughter.*] It was indeed a happy state of things which enabled them to take breakfast with Mr. Baines, and to afterwards dine with his worship the Mayor. [*Laughter.*] To what did they owe all this success? They would agree with him that there must have been something behind the scene, something which Professor Bennett could discover without his microscope, the committee of management, with whom they had all been brought in contact, and

whose kindness and efficiency they had all experienced. [*Cheers.*] He could not give them the names of the whole committee; but he could give the names of gentlemen who were now well known to them all—Mr. Wheelhouse—[*cheers*]—and Dr. Eddison—[*cheers*]—and he asked them to drink the health of that providence which appeared to them in the shape of the Leeds committee of management and the local secretaries, coupling with the toast the name of Mr. Wheelhouse. [*Loud cheers.*]

The toast was drunk with enthusiasm.

Mr. WHEELHOUSE said that, when he heard himself spoken of in the terms just made use of by Dr. Farr, and connected with a providence that presided over Leeds, he felt that he was placed in circumstances of extreme difficulty. When it was first determined to invite the Association to Leeds, he went to Dublin, in conjunction with some of his colleagues; and he must confess that he came away with a feeling of utter depression; for, after the warmth and hospitality with which they were there received by every body, every unspoken thought being carried out for them before they had time to complete it for themselves, he felt that when the Association came to Leeds it would be difficult for them to follow such an example; he felt that they could only fall back upon the fact that Yorkshire was renowned for its hospitality—[*cheers*]—and the belief that they would be supported, not only by all in their own town being willing and ready to receive the Association, but that they would have the whole county with them, and that they would be able to offer the Association a reception that they need not be ashamed of. [*Cheers.*] He followed up the Association meeting in Dublin by going to the Association meeting in Oxford, where he felt that they would have another great difficulty to contend with, inasmuch as that city had a certain quietude of thought and retirement which could not be imitated. When, in conjunction with Dr. Chadwick and Mr. Nunneley, he went to offer the invitation to the Association, they felt that they would have great difficulty in following two such important places as Dublin and Oxford—one characterised by the warmth of its reception, and the other by the quietude of thought which they could not imitate. They stated, however, that they would do their best; and that, whilst Dublin and Oxford offered theoretical science, at Leeds they would try to show applied science, and to illustrate all that the two great centres of learning had taught in the production of those machines which scientific work alone could have brought about. When they decided to offer the Association the invitation, he felt bound to say that they had not a single dissident; but everybody said that it was their duty to receive the Association, and they would receive them as well as they could. [*Cheers.*] Not only the members of the Committee determined this, but a band of members of the profession in the town came forward and said that not only would they try to receive the Association as a body, but they were ready to work honestly and heartily so that the welcome should not have been surpassed anywhere. [*Cheers.*] He would feel that he was doing wrong if he sat down without saying that the committee of management and the whole of the local secretaries—Dr. Eddison especially—had thought no labour too great that they could devote to the service of the Association. [*Cheers.*] On their behalf, and on behalf of every member of the profession in the town, he thanked those present for the manner in which they had responded to the toast; and he sat down amidst loud cheers, after declaring that their work had only been a labour of sincere love to the Committee.

Dr. SIBSON proposed "The Health of Dr. Falconer, the Treasurer to the Association." He briefly spoke of that gentleman's worth, of his freedom from bias, of his sincerity of mind, and of his single desire to see the Association prosper in every way. [*Cheers.*]

Dr. FALCONER thanked Dr. Sibson very much for the manner in which he had been good enough to propose his health, and the gentlemen present for the way in which they had received his name. He could only say that his special desire was to perform the duties devolving upon him with the most perfect exactitude; that there was no desire on his part to conceal from any member of the Association the condition of the accounts; and that it was the duty of the treasurer of any body, and especially of the treasurer of this great Association, to render every part of the accounts. In dealing with figures, he should not be in the position of the gentleman who had lost his notes. [*Laughter.*] He thanked them most sincerely for that recognition of the small service which he had been able to render to the Association; and said they might rest assured that, as long as he was able, he would discharge the duties connected with the office of treasurer with openness, fidelity, and truth. [*Loud cheers.*]

Mr. SAMUEL HEY proposed "The Health of Mr. Watkin Williams, the General Secretary," who, he said, worked hard from the beginning of the year to the end of the year, and was, he thought, entitled to their best thanks. [*Cheers.*]

Mr. WATKIN WILLIAMS, in acknowledging the compliment, spoke

with satisfaction of the manner in which the Local Committee and Mr. Wheelhouse and the Local Secretaries had carried out the arrangements for the meeting. He then remarked that he could truly say that, however often he was abused, his work as Secretary of the Association was a labour of love. [*Cheers.*] The best friendships he had ever made were the friendships of the professional brethren whom he had met through the Society; and he trusted that, after the meeting, he would have the friendship of his professional brethren in Leeds and those who had met with them. [*Cheers.*] It had ever been his desire to serve the Association; and he promised that, as long as he remained their secretary, he would endeavour to follow Dr. Falconer in serving them with fidelity and truth. [*Cheers.*] When he ceased to serve the Association, he promised them that he should cease to be their secretary. He heartily thanked them for the manner in which they had received the toast, proposed in such flattering terms by Mr. Hey. [*Cheers.*]

Dr. BANKS was sure that the next toast would meet with a very cordial reception; for, although the last, it certainly was not the least. He might expatiate on the virtues of the gentleman who had presided over them that evening; but there was one point especially on which he claimed to speak, and that was his hospitality. [*Cheers.*] He had had the honour of being Dr. Heaton's guest; and a more hospitable, courteous host, it had never been his good fortune to have. [*Cheers.*] They must all deplore the sad event which had prevented the presence of their President, Dr. Chadwick; but he was sure that he spoke the sentiments of all present when he said that that gentleman's place had been most worthily filled. [*Cheers.*] He had the greatest pleasure in asking them to fill a bumper to Dr. Heaton. (The toast was drunk with much enthusiasm, the three cheers that were called for being very heartily responded to.)

Dr. HEATON, replying, said that, from the moment when his fellow-practitioners in Leeds first met to consider the question of preparation for the meeting of that great Association in Leeds, it had been the anxiety of his mind that, in the hands of the town of Leeds, the Association should suffer no derogation from the distinction which it had hitherto attained; and that Leeds should experience no discredit in their endeavours to give it a worthy reception. [*Cheers.*] It was little more than twenty-four hours from the time when he first entertained the idea that it would be his duty to preside over that distinguished meeting; and, if any success had attended their endeavours, it was not due to him, except in some small part, but to the friendly and hearty cooperation of all who had worked with him. [*Cheers.*] In their endeavours to procure the success of the Association, they had made warm friendships, which, he thought, would last throughout their lives. [*Cheers.*] He was especially glad that the Association included natives of the sister island, and said that they wished to feel themselves brethren and compatriots with them. [*Cheers.*] He had experienced great gratification from the toast having been proposed by a native of the sister island; and remarked that in Dr. Banks he was happy to say he had made a delightful friend. He was exceedingly obliged to all who had worked with him, and for the kindness with which the toast had been received. [*Loud cheers.*]

The proceedings of the dinner then terminated.

THE ANNUAL MUSEUM AND LIBRARY.

THE idea of forming a temporary museum and library for the inspection of members during the Annual Meeting originated last year with Mr. Jonathan Hutchinson, and was carried out at the Oxford meeting with as much success as was permitted by the shortness of the time within which it was possible to make the necessary preparations. This year, the local Committee at Leeds decided on following out the scheme; and made arrangements for the exhibition of new instruments, drugs, and books, pathological preparations, etc. The Museum was placed in the Leeds School of Medicine, in the vicinity of the Infirmary and Town Hall, and therefore within easy access. A classified list of the articles exhibited was inserted in the programme of the meeting. The following is an outline of the contents.

Under the heads of Drawings, Photographs, etc., were:—Photograph of Case of so-called Muscular Paralysis, with Hypertrophy (Dr. Clifford Allbutt); Drawings and Photographs illustrating Animal Vaccination (Dr. H. Blanc); Photographs of Stumps, showing the Results of Rectangular flap Operations, and Casts of Stumps after the same Operation (Mr. T. P. Teale); Coloured Drawings, illustrating the

principal forms of Syphilis; in eight groups (Mr. Victor de Méric); Photographs of a fatal case of Elephantiasis Græcorum, occurring in England (Mr. T. Nunneley).

The department of Pathological Preparations contained: a Case of Hermaphroditism; Peculiar Disease of the Cranial and Hyoid Bones; also, from the same case, a Transverse Section of the Fibula, a Cast of the Head, a Sketch from Life, and two Plates—exhibited by the Liverpool Royal Infirmary School of Medicine; Casts of Sections of Kidney, Monstrosity, Intus-susception of Colon, Lobulated Kidney, and six others—exhibited by Dr. McLaren; three Casts of Heads of Children delivered by the Cephalotribe, by Dr. G. H. Kidd; Skull Cap, showing the effects of Hydrocephalic Pressure, after the Sutures had been firmly united—by Dr. W. Murray; two examples of Colles' Fracture of the Left Wrist—by Mr. Vincent Jackson; Calculus removed from the Female Bladder without incision; a Sequestrum from the Upper Jaw of a Child, and a Model of the same Jaw after Recovery—by Mr. Hemingway; a Biliary Calculus, with photograph—by Mr. Williams; two preparations from a case in which the External Iliac was tied; five Specimens of Fractured Spine; and three Calculi—by Mr. Nunneley.

Next came a number of Preparations selected from the Museum of the Leeds School of Medicine. They consisted of Human and Comparative Anatomical Preparations; and Pathological Specimens of Dislocation of first Lumbar Vertebra (T. P. Teale); Scrofulous Kidney, containing Calculi (Chadwick); Brain, with subarachnoid effusion of blood (Wheelhouse); Clot of blood upon Dura Mater (Wheelhouse); Trachea and Bronchi filled with peas (C. J. Wright); large Dilated right Kidney (Trewhella); Aneurism of Axillary Artery, Ligature of Subclavian (Wheelhouse); Deposit of Cancer in Intestine (Allbutt); Caries of Foot (S. Hey); Fibro-Muscular Tumours of Uterus (Jessop); Stomach, after Poisoning by Prussic Acid (Nunneley); Ulcer from front of Knee (Nunneley); Enchondroma of Foot, with Photograph of Patient after Amputation (S. Hey). There were also fifteen specimens of Urinary Calculi.

In the department of New Drugs, Preparation of Food, etc., Messrs. Hopkins and Williams exhibited Apomorphia and Turacine; Messrs. Southall and Co., three cases of Materia Medica Specimens; Mr. E. Yeardall, Special Pharmaceutical Preparations; Messrs. Gillon and Co., Extractum Carnis; the Harrogate Commissioners, Preparations of Saline Residues of Harrogate Waters; Messrs. Duncan, Flockhart, and Co., Pharmaceutical Preparations; Mr. H. B. Brady, several Pessaries, and Liquor of Raspberry Leaves. Messrs. Harvey and Reynolds of Leeds also exhibited a number of preparations, and liberally placed in the Museum a supply of iced Mineral and Aerated Waters for the gratuitous use of members of the Association.

Of Instruments, the principal exhibitors were Messrs. Mayer and Meltzer, who shewed Mr. Spencer Wells's new Ovariectomy Clamp; Dr. Barnes's Embryotomy *Écraseur*; Dr. Tanner's Galvanic Pessary; Uterine, Laryngeal, Eye, Ear, and Amputating Instruments, etc.;—and Messrs. Harvey and Reynolds, among whose specimens were a Thermoterion for maintaining the heat of food, Clinical Thermometers, Electro-Medical Apparatus, etc. The list contained also the following:—An Improved Stethometer (Dr. Ransome); Solid Cane Stethoscope (Dr. Foster); Endoscope (Dr. Archer Warwick); Machine for rapidly preparing Antiseptic Cere-cloth (Dr. Edward Lund); a Modification of Dr. Junker's Apparatus for administering Chloroform, with Nose-cap and Nostril Tubes; New Inhalers, for the administration of Bichloride of Methylene; and a new form of Truss (Mr. Richard Rendle); A New Truss, without Understraps, and an Apparatus for Transverse Fracture of the Patella (Mr. W. Miller); Inhaling Pipe (Mr. James Bird); Cephalotribe, Uterine Sound, and Vulcanite Syringe (Dr. Matthews Duncan); Pelvic Band (Dr. Protheroe Smith); Cephalotribe (Sir J. Simpson's, modified) (Dr. G. H. Kidd); a Yoke for the Back, as an aid in the Reduction of Dislocation of the Shoulder, and a new and Special form of Long Splint (Mr. R. T. Leeming); Leg Suspender, Bed-guard, and Ophthalmoscope (Mr. H. Greenway); new Lever Lithotrite, and new Catheters (Dr. Watson's,) (Mr. Young, Edinburgh); Thermometers and Stethoscopes combined (Dr. C. B. Fox); Mr. Gustav Ernst shewed also a large collection of Orthopædic and other Instruments.

Books were exhibited by Messrs. Longman and Co.; Messrs. Churchill and Sons; Messrs. Macmillan and Co.; and Messrs. Williams and Norgate (Foreign). Dr. Oppert contributed the Sessional Papers of the Institute of British Architects, containing short descriptions of some new Hospitals; Dr. Mackinder, an Obstetrical Register; and Mr. C. A. Hemingway, some old Medical Books.

MISSION FROM THE UNITED STATES.

THE subjoined letter from Dr. Pinkney of the United States, and Dr. Chadwick's reply, need no explanation. It was unfortunate that, through a mistake, Dr. Pinkney arrived too late to attend the meeting, where he would have had a cordial welcome.

Leeds, August 2nd, 1869.

DEAR SIR,—You will perceive by the enclosed letter from Professor W. O. Baldwin, the highly distinguished President of the Medical Association of the United States of America, that, in repairing to Leeds on the 2nd of August, I had manifested a laudable determination to be in time to meet you in your deliberations. I regret to find that he was in error as to the period of your assembling; and I take this, the only available means of expressing to you, and through you to the body over which you presided, the gratification which my appointment to represent the Medical Department of the Navy of the United States, and in part the members of the medical profession in my country, afforded me.

Though a day too late for the rich intellectual feast, I may be permitted to say that your brethren on the other side of the ocean are not strangers to the light you have shed on medical science. The home of Sir Astley Cooper and Hunter must be the abode of genius: Hunter, the great anatomist; Sir Astley Cooper, the greatest surgeon of the world—two stars in the firmament of medical science, which walked the zenith in their day, and which helped to make up the milky way, where stars from other hemispheres are gathered; among which I may, without national vanity, place Physic and Harris—the one the just pride and boast of the civil department of his government, the other the pride of our navy.

Thirty years ago, it was my privilege to make the acquaintance of Sir Astley Cooper. His calm and modest deportment impressed me deeply; while his eloquence and professional learning, and almost exhaustless originality, satisfied me that he was born, like the bard of Avon, to be the boast not of Britain only, but the boast of the world. The pioneer in a region of thought that lay, at that distant time, a huge uncultivated waste, he brought order out of confusion, and light out of darkness, with something of the majesty that first reduced chaos to order and set the sun in the firmament. His works are as invaluable to-day as they were when he bequeathed them to the world. The advances made in history, poetry, and oratory, as well as in the arts and sciences, have not been more remarkable than in the science of medicine.

Though, by an accident not under my control, denied the privilege of participating in your wise deliberations, I share freely with you the pride of England's fame. In a spirit of generous rivalry, we from the other side of the waters are striving to keep pace with you. Your works are ever greeted by us. Not satisfied with always receiving, we place occasionally one of our own by the side of yours.

We would draw closer the bonds that unite us in a common brotherhood. The world's peace is dear to us. If this be true of the great family of nations, what may we not say of Great Britain and the United States, the mother and the daughter, between whom but one language is spoken, who share a common literature, who repose under the shadow of the same great Magna Charta, and enjoy the same benign influence of constitutional government? Renowned in the arts of war, greater in peace, with flags that wave in every breeze, and ships that float on every billow, Great Britain and the United States will be wise enough to see that, as the cable transmits thought as it lies on its ocean bed, so along its mystic wires the pulsations of kindred hearts, that beat in the closest commercial, agricultural, and social fellowship, will be transmitted—an electric spark of a mutual good-will, to be kept alive until the last billow shall cease to lave either shore.

I was deputed by my Government to represent the Medical Department of the United States Navy; and it gives me pleasure to assure you that we remember the hero of Trafalgar and the incomparable Collingwood, and exult with you in the pride you feel in these first of naval heroes. To the list of gallant men who have lighted up the seas with the splendour of the past, we may add those of Porter and Farragut, satisfied that a nation which has made the ocean her mountain home will recognise in these honoured names the truest representatives of her own gallant sons. The Britain of the past and the present, the nursing mother of Sir Astley Cooper, Bell, and Hunter, still consecrated to genius and learning, will, we trust, ever bask in the sunshine of prosperity, and stand as true to the interests of a large-hearted humanity as her own Gibraltar Rock, and prove herself as faithful a sentinel in the future as she has been in the past.

I would not obtrude upon you these sentiments of regard, if I were not placed in the position of seeming to be derelict to duty, while in re-

ality I am fully obeying the instructions of my Government and those of the President of the American Medical Association. On the 2nd of August, I repaired to Leeds, to meet you on the 7th; and I regret to find that the session of your distinguished body has closed. Having crossed the ocean, you may well imagine the disappointment I feel in the great loss I have sustained by being precluded from the privilege of meeting in brotherhood the physicians and surgeons of Great Britain, who occupy so prominent a place in the medical profession of the world. It is too late to repair the loss, but not too late to prove that I was not in the slightest degree to blame. Dr. Baldwin, who has shed lustre on medicine, will be grieved to hear that I was not in time; and the Navy of the United States will, I am sure, approve this humble expression of my appreciation of English physicians and surgeons.

Very respectfully, your obedient Servant,

NINIAN PINKNEY, Surgeon, United States of America.
Dr. Charles Chadwick, M.D., F.R.C.P., *President of the British Medical Association.*

Leeds, August 8th, 1869.

MY DEAR SIR,—I hasten to acknowledge the receipt of your interesting letter, and, on behalf of the Association, over which I have the honour to preside, express to you our regret that, by an accident, you should have arrived too late, exactly, to fulfil your important mission.

That such a mission was about to honour us was, in some way or other, known to our recent meeting, and its arrival was anticipated with lively satisfaction.

Had you been present, you would have found that the signal and unexpected honour conferred on our Association by the graceful recognition of the United States Government, of which you were the bearer, would have been duly estimated; and, in the cordiality of your own personal reception, you would have discovered how thoroughly we in England reciprocate those sentiments of patriotism and good-will, to which you so eloquently give utterance. You would likewise have found that your numerous pioneers, in the improvement of medical and surgical science and art, are well known here, and their labours duly estimated. I abstain from naming them individually—even that of our illustrious visitor to the Oxford meeting, whose presence there gave additional brilliancy to that already remarkable gathering—lest I should, by unintentional omission, do injustice to many others equally deserving mention, hundreds of whom adorn the American profession. Had you arrived in Leeds in time for the meeting you would have discovered that, whether on this or on that side of the Atlantic, or in any other country, the ardent cultivator of medical science is, without envy and without jealousy, duly honoured by us, and that the only warfare we recognise as justifiable between our kindred races is that bloodless encounter, the result of which secures the advancement of our common profession, and the more perfect alleviation of the ills of suffering humanity.

I shall not fail to inform, through the medium of our JOURNAL, not only the five hundred members who were present at the Leeds meeting, but our four thousand Associates, and through them the entire profession of Great Britain, of the honour done them by the Government of the United States, and by the President of the American Association.

It is fully intended that delegates shall attend, on our behalf, the next meeting of your Association in America. They will be charged to acknowledge, as opportunity may serve, the condescension of the United States Government, and the cordial good will of the American profession, as evidenced in your mission here; and they will likewise express our entire sympathy in those sentiments of which you have proved yourself so able an exponent; and thus, by the interchange of these kindly courtesies, we shall draw closer those bonds of amity and good feeling which should ever animate the members of a common calling.

I have the honour to remain,

Your very faithful and obedient Servant,

CHARLES CHADWICK.

To Ninian Pinkney, Esq., Surgeon United States Navy, etc.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

THE Committee of Council will meet at the Queen's Hotel, Birmingham, on Tuesday, the 24th of August, 1869, at 3 o'clock *precisely*.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary.*

13, Newhall Street, Birmingham, August 9th, 1869.

MEDICAL NEWS.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE twenty-fourth annual meeting of this Association has lately been held in York. On the morning of Saturday, July 31st, the members visited the North Riding Asylum at Clifton, having been invited by the able superintendent, Dr. Christie. After having been conducted over the gardens and farm, with the management of which much satisfaction was expressed, they sat down at one o'clock to a luncheon; and afterwards visited the wards and offices of the Asylum, under the guidance of Dr. Christie. Dr. Clifford Allbutt of Leeds then gave, in one of the wards, an interesting ophthalmoscopic demonstration of the changes undergone by the optic disc in the eyes of the insane. The patients had a holiday in the afternoon, and took part in various games and sports.

The business of the meeting commenced on Monday, August 2nd, in the theatre of the Museum of the Yorkshire Philosophical Society, with a brief address from the retiring President, Dr. W. H. O. Sankey of Cheltenham, who introduced his successor, Dr. Laycock of Edinburgh. Dr. Laycock, having taken the chair, delivered an address on the objects and organisation of the Medico-Psychological Association. A vote of thanks was given to Dr. Laycock; and twenty-one new members were elected. The subject of the proposed amalgamation of the Society into the Royal Society of Medicine was then considered. Dr. Tuke proposed, and Dr. Robertson seconded, the formation of a committee with instructions to carry out the amalgamation. To this Dr. Christie proposed as an amendment, and Dr. Laycock seconded, that a committee be appointed to consider any proposals for union and to report thereon to the council at a special meeting, and to consider and report what changes, if any, were desirable in the organisation of the Society and the management of its journal. The amendment was carried. It was decided to hold the next annual meeting in London. Dr. Christie, Dr. Boyd, and Dr. Bucknill, were nominated for the office of president. At Dr. Christie's request, his name was withdrawn; and Dr. Boyd was elected. Dr. Paul was reappointed treasurer, Dr. Harrington Tuke secretary, and Drs. Robertson and Maudsley editors of the Journal. After an adjournment, during which many of the members visited the cathedral, the afternoon meeting was held. The following gentlemen were elected honorary members: B. W. Richardson, M.D., F.R.S.; J. Lockhart Clarke, M.D., F.R.S.; T. B. Woodd, Esq.; E. Vernon Harcourt, Esq.; Sir James Clarke, M.D., F.R.S.; W. A. Guy, M.B., F.R.S. The President then delivered an address on the Position and Prospects of Medical Science, in which he referred to the results that might be expected from investigation of the action of physical agencies on the brain. Dr. Richardson next read a paper on Physical Degeneracy from Excessive Mental Strain. He expressed his belief that "intellectual work, even hard intellectual work, did not of itself produce insanity; while it would produce, and did produce, physical disease of the body. Insanity, in fact, as a primitive disease, came rather from inactivity of the brain; so that in our community the cloddish or unintellectual population were the general breeders of insanity, while the higher and intellectual populations were more distinctly the promoters and intensifiers of the most fatal physical diseases." The President and several other members coincided with Dr. Richardson's views; Dr. Sankey observing that the proportion of insanity in the lower classes was 1 in 450 or 500, and in the upper classes 1 in 3500. Dr. Sabben of Stoke Newington read a paper on the Relation of Ritualism to Insanity, in which he expressed an opinion that insanity was liable to be produced by the mental engrossment and the rigid observances of Ritualism. The paper led to a discussion, in which several members objected to the idea that Ritualism could be a special cause of insanity, though several admitted that it might be an exciting cause. The business of the meeting concluded with a vote of thanks to the President.

In the evening, the members dined together, Dr. Laycock being in the chair, and Dr. Tuke in the vice-chair; and a *conversazione* was afterwards held, at which Dr. Porter gave some experiments with Ruhmkorff's coil, and Dr. Richardson demonstrated the action of his painless operating-knife, a description of which will appear in our report of the Surgical Section of the British Medical Association. On the following morning, Dr. Richardson demonstrated the method of resuscitating animals after apparent death from the inhalation of poisonous gases.

LUNATIC ASYLUMS (IRELAND).—Colonel French has given notice that next Session he will move for a Select Committee relative to Lunatic Asylums in Ireland.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At a meeting, held on July 29th, the following gentleman, being an extra-Licentiate, was admitted a member.

Baller, Joseph Hogg, M.D. St. And., Gilston Road, West Brompton

At an extraordinary meeting of the College, on Wednesday, August 11th, the following gentlemen were admitted Fellows.

Alexander, William, M.D. Edin., Halifax

Arlidge, John Thomas, M.D. Lond., Newcastle-under-Lyme

Blandford, George Fielding, M.B. Oxon., Clarges Street, London

Cockle, John, M.D. Aberd., Brook Street, London

Daly, Owen, M.D. Dubl., Hull

Day, Henry, M.D. St. And., Stafford

Down, John Langdon Haydon, M.D. Lond., Welbeck Street, London

Maudsley, Henry, M.D. Lond., Queen Anne Street, London

Ransom, William Henry, M.D. Lond., Nottingham

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following candidates, having passed the necessary examinations, received their diplomas in Dental Surgery at a meeting of the Board of Examiners, on August 4th.

Baylis, George William, Cheltenham

Chisholm, William, Edinburgh

Scully, John, Grenville Street, W.C.

Tomes, Charles Sissmore, M.R.C.S. Eng., Cavendish Square

Washbourn, Edward Norman, South Gate, Gloucester

White, Richard Wentworth, Norwich

UNIVERSITY OF LONDON.—The following is a list of the candidates who have passed the recent first M.B. Examination.—First M.B. Examination. (Entire.) Pass Examination.

First Division.

Ball, James Barry, University College

Burn, William Barnett, St. Bartholomew's Hospital

Carr, William Ward, University College

Carter, Alfred Henry, University College

Edger, Ebenezer Rust, B.A., University College

Elkington, Ernest Alfred, Queen's College, Birmingham

Harding, Alfred William, B.A., University College

Harris, Michael, Guy's Hospital

Hayes, Thomas Crawford, B.A. Dublin, King's College

Ingoldby, Joseph Theodore, Guy's Hospital

Jones, Thomas, Guy's Hospital

Southey, Henry Edward, Guy's Hospital

Warner, Francis, King's College

Second Division.

Buckley, Samuel, Royal Manchester School of Medicine

Humphreys, John H., Sydenham College, Birmingham, and University College

Hunt, Thomas Henry, Royal Manchester School of Medicine

Perkins, Charles Edward Steele, Guy's Hospital

Petch, Richard, King's College

Pope, Harry Campbell, Liverpool Royal Infirmary

Scott, Peter Thomas, Guy's Hospital

Skrimshire, Frederick William, King's College

Stanger, William, Guy's Hospital

Westcott, William Wynn, University College

Wood, Robert Arthur Henry, Liverpool School of Medicine

Yate, Edward, St. Bartholomew's Hospital

Physiology only.

First Division.

Beach, Fletcher, King's College

Burgess, William Frederick Richardson, Guy's Hospital

Gibbins, Alfred Thomas, King's College

Smith, Arthur William, Guy's Hospital

Second Division.

Joubert, Charles Henry, St. Mary's Hospital

Excluding Physiology.

First Division.

Owen, Edmund Blackett, St. Mary's Hospital

Second Division.

Betts, Arthur Raymond, Guy's Hospital

Branfoot, Arthur Mudge, Guy's Hospital

Davison, William John, College of Medicine, Newcastle-upon-Tyne

Eardley-Wilmot, Robert, King's College

Moss, Herbert Campbell, King's College

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, August 5th, 1869.

Allchin, William Henry, Bayswater

Hobley, Simon Halford, Carnarvon

Keefer, William Napier, Galt, Canada

Mason, Hugh Herbert, Burton-on-Trent

Murdoch, David Beatson, Rotherhithe

Renshaw, Edwin, Lee, Kent

Tobin, George, Rainford, St. Helen's

At the same Court, the following passed the first examination.

Barrow, Arthur Haynes, St. Thomas's Hospital

Day, Gordon C., St. Mary's Hospital

Law, William T., Guy's Hospital

Leake, George D. N., St. George's Hospital

Westcott, William W., University College

Wilson, John H. P., St. George's Hospital

MEDICAL VACANCIES.

THE following vacancies are declared:—

- ABERDEEN, St. NICHOLAS PAROCHIAL BOARD—Medical Officer: 17th.
- APOTHECARIES' HALL—Member of the Court of Examiners.
- ATHERSTONE UNION, Warwickshire—Medical Officer and Public Vaccinator for the Polesworth District (£60 per annum, including medicine and appliances, and extra fees): applications, 21st.
- BOURNEMOUTH GENERAL DISPENSARY—Resident Surgeon (£100 per annum, with furnished apartments, coal, gas, and attendance): applications, 9th September; duties, 18th October.
- CASTLECOMER UNION, co. Kilkenny—Medical Officer for the Workhouse (£70 per annum): 16th.
- DROVERS' SICK AND BENEVOLENT SOCIETY, "Butchers' Arms"—Medical Officer: applications, 30th.
- GLASGOW ROYAL INFIRMARY—An extra Surgeon to the Dispensary: election, 2nd September. Pathologist and Curator of Museum, (£50 per annum): applications, 20th.
- GLASSARY, Argyllshire—Medical Officer for the Kilmichael District: applications, 1st September.
- ISLE OF THANET UNION—Medical Officer for the Union Workhouse and the Minster District (£145 per annum—to include all drugs, etc.—and extra fees): election, 19th.
- KENT AND CANTERBURY HOSPITAL—Assistant House-Surgeon and Dispenser (£50 per annum, with board, lodging, and washing): election, 27th.
- KILKEEL UNION, co. Down—Medical Officer for the Kilkeel No. 1 Dispensary District (£90 per ann., and Registration and Vaccination Fees): election, 23rd.
- LONDONDERRY COUNTY INFIRMARY—Surgeon.
- LONDONDERRY GAOL—Surgeon.
- MILE END OLD TOWN UNION—Medical Officer for the East District: about 18th.
- NEW FOREST UNION—Medical Officer for the Workhouse (£50 per annum, and extra fees); Medical Officer and Public Vaccinator for the Lyndhurst and Minestead District (£76 per annum, and extra fees): applications, 13th; elections, 16th.
- PETERSFIELD UNION—Medical Officer and Public Vaccinator for District No. 3 (£40 per ann., and Vaccination Fees): applications, 14th; election, 19th.
- PRESCOT UNION, Lancashire—Medical Officer for the Prescott District (£55 per annum). Medical Officer for the Workhouse (£60 per annum).
- ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road—Physician: applications, 23rd inst.; election, 7th September.
- ST. GEORGE AND ST. JAMES DISPENSARY, King Street, Regent Street—Physician; Surgeon: applications, 19th.
- TAUNTON UNION—Medical Officer and Public Vaccinator for the Bishops Lydeard District (£99: 10 per annum, inclusive of fees for Surgery; but exclusive of extra fees for Midwifery, Vaccination, and Quarterly Visits to Lunatics): applications, 14th; election, 19th.
- WESTPORT UNION, co. Mayo—Medical Officer for the Louisburgh Dispensary District (£100 per annum, with Registration and Vaccination Fees, residence, and two acres of land): 16th.
- WORKSOP DISPENSARY—House-Surgeon to dispense, visit out-patients, and act as Honorary Secretary (£100 per annum, with coal, gas, attendance, and furnished apartments): applications, 31st instant; duties, 1st November.
- YORK UNION—Medical Officer for District No. 7 (£32 per annum, and extra fees): applications, 18th; election, 19th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

- *BANKS, W. Mitchell, Esq., appointed Pathologist to the Royal Infirmary, and Demonstrator of Anatomy at the School of Medicine, Liverpool.
- *COOMBS, Rowland H., Esq., appointed Medical Officer to the Bedfordshire Middle Class Public School.
- HARTREE, J. P., M.A., M.B., appointed Physician to the Royal Infirmary for Children and Women, Waterloo Road, *vice* J. Braxton Hicks, M.D., F.R.S., resigned.
- MOON, H., Esq., appointed Assistant Dental Surgeon to the Dental Hospital of London, *vice* C. J. Fox, Esq., promoted.
- WRIGHT, Henry R., M.B., appointed Resident Medical Officer to the Darlington Hospital and Dispensary, *vice* A. O. Haslewood, Esq., resigned.

BIRTHS.

- CÆSAR.—On July 30th, at Downton, Wiltshire, the wife of *R. T. Cæsar, Esq., Surgeon, of a daughter.
- COGHILL.—On August 1st, at Newington, Edinburgh, the wife of J. G. Sinclair Coghill, F.R.C.P.E., of Shanghai, of a son.
- FEGAN.—On August 6th, at Old Charlton, Kent, the wife of *Richard Fegan, M.D., of a son.
- HAMILTON.—On July 27th, at Liverpool, the wife of Robert Hamilton, Esq., Surgeon, of a daughter.
- ILES.—On July 29th, at Watford, the wife of *F. H. W. Iles, M.D., of a daughter.
- LATHAM.—On August 4th, at Cambridge, the wife of *P. W. Latham, M.D., of a son.
- THURSFIELD.—On July 29th, at Leamington, the wife of *T. W. Thursfield, M.D., of a son.
- WATSON.—On July 23rd, at Little Huthwaite, Wortley, near Sheffield, the wife of Alfred M. Watson, M.D., of a son.

MARRIAGES.

- BRYAN, John M., jun., Esq., of Northampton, to Margaret Davis, only daughter of the late Lewis GILLARD, Esq., at Clevedon, Somerset, on July 29th.
- CHEESMAN, John, M.D., of Buckingham, to Lucie S. M., only child of the late William Hallam, M.D., of Newcastle-under-Lyme, on August 4th.
- FRERE, John Tudor, Esq., B.A., of the Inner Temple, to Constance, youngest daughter of *Forbes WINSLOW, M.D., D.C.L., of Cavendish Square, on July 29th.
- HAZELDINE, George John, Esq., of Godstone, to Katherine Vane, youngest surviving daughter of the late *Edward RAY, M.D., of Dulwich, at Camberwell, on August 5th.
- HEWLETT, Richard W., M.D., of Naples, second surviving son of *Thomas Hewlett, Esq., of Harrow, to Emily Mary Charlotte, third daughter of the late Lieutenant-Colonel Richard M. OAKES, 1st Life Guards, at Harrow, on July 28th.

- JEAFFRESON, W. Julius, Esq., eldest son of *S. J. Jeaffreson, M.D., of Leamington, to Emily Sundius, relict of the Rev. J. SUNDIUS, at St. Stephen's, Bayswater, on August 5th.
- PYWELL, William H., Esq., Surgeon, to Agnes, youngest daughter of E. DODD, Esq., of Westminster Bridge Road, at Lambeth, on July 29th.
- *SNAPE, George H., Esq., Surgeon, of Liverpool, to Julia Caroline, eldest daughter of J. G. NASH, Esq., Surgeon, of Cheltenham, at Beaumaris, on August 3rd.
- *STOKES, William, jun., M.D., of Dublin, to Elizabeth, eldest surviving daughter of the Rev. John Lewis MOORE, Vice Provost of Trinity College, Dublin, at Clontarf, on August 3rd.
- *WELSH, Francis F., Esq., Surgeon, Saffron Walden, to Silvia M., widow of the late William EMSON, Esq., at Great Ilford, on August 5th.

DEATHS.

- BABINGTON, Thomas H., M.D., at Derry, on August 2nd.
- BARLOW.—On July 27th, at Sydenham, aged 54, Lydia Martha, widow of George H. Barlow, M.D., Physician of Guy's Hospital.
- COWELL.—On July 29th, at Piccadilly, Thomas W. Cowell, Esq., Surgeon.
- HACKNEY.—On August 9th, at Myddelton Square, Islington, Elizabeth, wife of John Hackney, Esq., Surgeon.
- JONES.—On July 21st, at Lancy, Pembrokeshire, aged 65, Ann, widow of W. D. Jones, M.D.
- *LEETE, Edward S., Esq., Surgeon, at Newton-le-Willows, aged 55, on August 4th.
- O'GRADY, E. H., M.D., late Physician to the British Embassy in Paris, at Carativo, Ceylon, aged 80, on June 15th.
- WHEELER, Lowe, Esq., Surgeon, at Lionel Villa, Brixton, aged 71, on July 31st.
- WRIGHT, Constantine, Esq., Surgeon, at Malvern Road, Dalston, aged 59, on August 4th.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—The Library will be closed from Monday, August 16th, to Saturday, September 11th, both days inclusive.

THE MEDICAL SCHOOLS of the Metropolis will be opened, according to custom, on the 1st of October (except University College, on Monday the 4th) with addresses—at Charing Cross, by Dr. Alexander Silver; at Guy's, by Dr. Charles Hilton Fagge; at King's College, by Dr. George Johnson; at the London Hospital, by Dr. Charles Meymott Tidy; at the Middlesex, by Dr. Robert Liveing; at St. George's, by Dr. William Wadham; at St. Mary's, by Dr. Walter Butler Cheadle; at St. Thomas's, by Dr. William Henry Stone; and at University College, by Sir Henry Thompson. At St. Bartholomew's, it has been decided not to give a special introductory address this year; and at the Westminster, no one has yet been appointed for the purpose.

OPERATION DAYS AT THE HOSPITALS.

- MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
- TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.
- WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.
- THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
- FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
- SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE length of the Report of the Annual Meeting at Leeds obliges us to defer the publication of various communications to which insertion would otherwise have been given.

ERRATUM.—Dr. Martin of Warrington was last week, by mistake, stated to have seconded the Rev. Dr. Haughton's motion on the representation of the profession in the Medical Council. It was Dr. Martin of Portlaw, Ireland, who seconded the motion.

NEMO should apply to the Registrar-General.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. Richards, not later than *Thursday*, twelve o'clock.

A REMARKABLE INJURY.

SIR,—I beg to give you an account of a singular accident that happened here on the 25th July last, whereby a person met with his death. As I cannot find any account of a similar accident, I shall feel obliged by an insertion of it in the pages of the JOURNAL. I should be glad to hear whether any associate has ever met with a similar case.

I am, etc., T. EYTON JONES.

The Priory, Wrexham, August 7th, 1869.

T. R., aged 50, a fat and well nourished person, in a struggle with a neighbour whilst intoxicated, fell over his shoulder on to the edge of the curb-stone, the side of his neck coming violently into contact with it. Whilst on the ground, this neighbour (also down) kicked him several times in the neck. In a few minutes, he died. Upon examining the body, I found externally considerable ecchymosis on both sides of the neck, and on the right side a large diffuse swelling, which, on an internal examination, was found to be emphysematous, and consist of extravasated blood. Underneath this was found a fracture of the first rib, close to the spine; and a piece of the rib, about two inches in length, was broken off, detached, lying below the clavicle, and imbedded in the upper part of the right lung (whence the emphysema). It had also torn through the subclavian artery and brachio-cephalic (whence the extravasation). The probabilities are, that the fracture in the first instance was caused by the fall, and its detachment and separation were due to the kicking of his opponent. Such, at least, was the opinion I gave on August 3rd, before the Lord Chief Justice at the Assizes.

THE SALE OF POISONS.—Mr. G. C. Coles, a member of this Association, complains that, on applying to one of the principal chemists in London for half a drachm of bichloride of mercury, the druggist refused to let him have it, although he offered his card, saying that he (Mr. Coles) must be introduced by some one. He thinks it a great piece of absurdity in the Pharmacy Act; and should have thought it sufficient to give one's card, and state the appointments held.

*** Our correspondent must see that very stringent provisions are necessary to prevent the sale of poisons to improper persons. The druggist only did his duty. There is a possible fallacy attending the proofs of identity which Mr. Coles thinks sufficient.—EDITOR.

PRURIGO SENILIS.

SIR,—I shall be glad if you will kindly let me have a small space in your JOURNAL to ask the following question: How to cure prurigo? I have a patient, on whom, during the last eight months, the following remedies have been tried. *Internally*, arsenic, iodide of potassium, alkalies, tonics, and purgatives. *Externally*, as *lotions*, carbolic acid, sulphurous acid, sulphuret of potassium, hydrocyanic acid, and lead. Nitrate of silver and belladonna. *As ointments*, carbolic acid, sulphur, white and red precipitate, and blue ointment; and, lastly, sulphur baths. The itching is something awful; nothing seems to alleviate it. Each of the above have had a fair trial. Should any of your readers have met with an equally obstinate case, by communicating the useful hint to your JOURNAL, they will confer a great favour upon

August 1869.

A MEMBER OF THE BRITISH MEDICAL ASSOCIATION.

We are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, August 11th; The New York Medical Gazette, July 24th; The Parochial Critic, August 4th; The New York Medical Record, July 24th; The Scotsman, August 10th; The Boston Medical and Surgical Journal, July 8th, 15th, and 22nd; The Birmingham Daily Gazette, August 4th; The South Durham Herald, July 5th; The Harrogate Herald, August 4th; The Manchester Guardian, August 6th; The Londonderry Guardian, August 5th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Sir William Jenner, Bart., London; Dr. Eddison, Leeds; A. B., Southampton; A Pharmaceutical Chemist, London; L. F. P. S. G., Weobley; Mr. Birt, Stourbridge; Dr. J. Cuming, Belfast; Mr. A. Godfray, St. Heliers, Jersey; Dr. H. Power, London; Mr. Hulke, London; Dr. J. Martin, Woodview, Ireland; Mr. P. C. Little, Dublin; Mr. R. B. Carter, London; Dr. H. G. Stewart, Newcastle-upon-Tyne; Dr. H. Simpson, Manchester; Dr. Murray, India.

LETTERS, ETC. (with enclosures) from:—

Mr. F. Le Gros Clark, London; Dr. C. H. F. Routh, London; Dr. J. Braithwaite, Leeds; Mr. R. T. Caesar, Downton; Mr. R. H. Coombs, Bedford; Dr. Suffield, Galway; Mr. T. Watkin Williams, Birmingham; Dr. Chadwick, Leeds; Dr. A. Wahlutuch, Manchester; Dr. J. Murray Lindsay, Hanwell; Mr. J. Jackson, Birmingham; Mr. Thorp, Todmorden; Dr. S. Gourley, West Hartlepool; Dr. W. Bennett, Harrogate; Sir Duncan Gibb, Bart., London; Mr. Lansdown, Bristol; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Lomas, London; The Registrar of the Medical Society of London; Dr. J. Hughes Bennett, Edinburgh; Dr. Blanc, London; Mr. J. Birkett, London; Mr. T. Brown, Fortune Bay, Newfoundland; Mr. E. Bewley, Edington; Mr. R. Ellis, London; Dr. J. D. Gillespie, Edinburgh; Dr. E. Kennedy, Dublin; Mr. T. C. Peskett, Liverpool; Dr. Pinkney, Leeds; Victor, Bristol; Dr. A. Wiltshire, London; Mr. R. B. Wheatly, London; Dr. Treutler, Kew; A Would-be M.D.; A Member of the British Medical Association; Dr. Andrew Clark, London; Dr. Mapother, Dublin; Dr. E. Crisp, London; Dr. J. B. Hicks, London.

BOOKS, ETC., RECEIVED.

Further Observations on the Treatment of Aneurism by Iodide of Potassium; with Additional Cases. By George W. Balfour, M.D. Edinburgh: 1869.
The Annual Report of the York Lunatic Hospital for the year ending May 31st, 1869. York: 1869.
Scientific Associations, their Rise, Progress, and Influence; with a History of the Hunterian Society. By H. I. Fotherby, M.D. London: 1869.
Report of the Medical Officer of Health of the Merthyr Tydfil District.

Results of Meteorological Observations, for the week ending Saturday, August 7th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.							WIND.												RAIN.		
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.	Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell.	Amount in inches.
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm, etc.				
BATH	30.027	0.554	60.3	56.8	53.8	79	71.1	49.2	21.9	69.2	53.2	124.0	..	7	3.5	0.4	0.6	..	..	0.6	3.4	..	0.4	1.6	2.3	6	0.88
Dr. Barter, F.M.S.																												
BOURNEMOUTH	30.080	0.500	59.2	55.7	52.5	79	68.4	48.2	20.2	66.6	52.9	141.0	45.8	3.9	2.9	2	..	..	0.7	..	1.7	2.3	..	0.3	2	5	0.47
Dr. Compton, F.M.S.																												
DUBLIN	29.983	0.747	57.3	53.7	50.4	78	67.4	48.9	18.5	64.2	51.6	..	41.5	5.9	..	1	..	..	1.2	0.3	0.8	2.4	1.3	..	2.1	5	0.85
Dr. J. W. Moore.																												
KEW	30.060	0.559	59.7	55.7	52.2	77	71.7	47.7	24.0	68.1	52.9	136.7	41.9	5.8	6.3	..	0.7	..	..	..	2.3	2	1.7	0.7	3	3	0.34
Dr. Treutler, F.L.S., etc.																												
LLANDUDNO																												
Drs. Nicol and Dalton.																												
MALVERN																												
Messrs. W. and J. Burrow.																												
SCARBOROUGH	29.964	0.735	55.0	54.0	53.0	93	68.1	46.1	22.0	62.8	50.5	139.8	42.7	7.5	2.5	1.3	..	..	0.3	..	2	1.3	0.7	1.3	3.3	6	0.94
Dr. Fox, M.R.C.P.																												
SIDMOUTH	30.088	0.494	59.0	55.3	52.0	78	69.3	48.0	21.3	67.5	53.9	..	..	2.4	7.0	1	1	..	..	..	4	1	..	0.6	3	0.25	
Dr. Mackenzie, F.M.S.																												
WORTHING	30.057	0.506	60.1	56.7	53.7	80	73.1	48.4	24.7	67.3	52.8	132.6	42.4	5.9	4.0	0.7	..	0.7	..	0.3	2	2	1.3	..	2.4	5	0.59	
W. J. Harris, Esq., M.R.C.S.E.																												

REMARKS.—Atmospheric pressure has been on the whole slightly above that of the previous week, and the range has been rather greater. Temperature has diminished at all stations,—the maximum of the week, which occurred at Worthing, being only 73.1, while the minimum was 46.1, at Scarborough; the range has not been much different from that of last week. Winds have still been chiefly W. and S.W., though N. and N.W. currents have also been pretty frequent,—to these latter we must attribute the depression which has occurred in the temperature. The amount of clouds has not varied much,—having been greater at some stations and less at others; generally speaking, the sky has been rather more than half covered. Rain has fallen at all stations,—almost daily at Bath and Scarborough. At Dublin on the night of the 5th,—this was subsequently ascertained to be a thunderstorm which passed over the mouth of the Thames at the time. At Worthing squalls of wind and rain occurred on the 2nd, 3rd, and 6th. The weather of the week has been on the whole more unsettled, rain and squally weather being more frequent, while the temperature has been below the average for the season. The general health is everywhere reported as good.

The Llandudno, Malvern, and Ventnor reports have not been received.

Plants first observed in flower during the week at Kew and in its vicinity.—Polygonum Convolvulus; Solanum nigrum; Verbena officinalis; Mentha sativa; Sagittaria sagittifolia; Scirpus lacustris; Sium latifolium; Lysimachia vulgaris; Chenopodium Bonus-Henricus; Datura Stramonium.

Kew, W., August 11th, 1869.

W. J. TREUTLER.

THE PRIZE MEDAL, PARIS EXHIBITION, 1867.

SAVORY & MOORE'S PANCREATIC EMULSION

Readily miscible with
Milk, Water, and Wine.Not deteriorated by
keeping.

The only kind used at the Royal Hospital for Diseases of the Chest.

N.B.—The Reports on the Treatment of Consumption and Indigestion by means of Pancreatic Emulsion and Pancreatine, published in *The Lancet*, *British Medical Journal*, and *Medical Press and Circular*, relate only to Savory and Moore's preparations.

PANCREATINE POWDER.

(THE ACTIVE PRINCIPLE OF THE PANCREATIC JUICE.)

Effects the digestion and assimilation of Cod Liver Oil, solid fat, and food generally
As a Remedy for Indigestion, vastly superior to Pepsine."—THE LANCET.

IMPROVED LIEBIG'S FOOD FOR INFANTS.

"Resembles mother's milk as closely as possible."—Dr. H. BARKER.

No boiling or straining required.

SAVORY & MOORE, 143, New Bond Street, London.



Harvey and Reynolds, 13, Briggate, Leeds, Original Makers
of DR. CLIFFORD ALLBUTT'S SHORT CLINICAL THERMOMETERS, now offer the following choice to the Practitioner, viz.:—

1. A 6-inch Self-Registering Thermometer, in velvet-lined Boxwood Case, Fahrenheit Scale.
2. A 6-inch Self-Registering Thermometer, with both Fahrenheit and Centigrade Scales.
3. A 3-inch Self-Registering Thermometer in Strong Metal Case—size of a caustic case.

Each Instrument is divided into fifths of a degree Fahrenheit, and its accuracy is guaranteed, the readings having been compared with a standard verified at Kew. They contain the latest *real* improvements.
Any of the above, with directions for use, sent carefully packed, post free, on receipt of P.O.O. or Stamps or ros. 6d. Please say which instrument preferred.

CLINICAL CHART-FORMS OF TEMPERATURE.

"We strongly recommend our readers to possess themselves of one of these useful and highly interesting adjuncts to Clinical Study and Practice."—*Brit. Med. Jour.*, Oct. 24, 1868.

Books of 50 Charts, 5s. 6d.; 100 ditto, 10s.; loose sheets, 1s. 6d. per dozen.

PLASTIC SPLINTS.

In sets or by the yard, thus enabling the surgeon in *special cases* to cut any shape or size required. They are wonderfully light, combined with great comfort; require no padding; and mould themselves to any shape. For Field Service, on Shipboard, in Railway Accidents, Hospital and General Practice, they are incomparable. Price 12s. per yard, 18 inches wide.

Manufactured only by J. RORKE, 47, Mortimer Street, London, W., for the Patentee, H. HIDES, M.R.C.S. Eng.—London Agents: MAW and Co., Aldersgate Street, and GALE and Co., Bouverie Street, E.C.

OLD MARSALA WINE

Guaranteed the finest imported; free from acidity or artificial heat, and much superior to low-priced Sherry. One Guinea per dozen. Bronte Madeira, a full, soft, golden Wine, 30s. per dozen. Mazzara, a stout, brown Wine, with Sherry character, 28s. per dozen. 3 dozen and upwards carriage free by rail to all England and Wales. For highly favourable opinion of W. D. WATSON'S Old Marsala Wine, see *British Medical Journal*, Dec. 26, 1868; *Medical Times and Gazette*, No. 770, April 1st, 1865, p. 345, or Dr. Druitt's "Report on Cheap Wines", p. 174.
W. D. WATSON Wine Merchant, 72 and 73, Great Russell Street, corner of Bloomsbury Square, London, W.C. Established 1841. Terms Cash.

Hickory and Steel Carriages.

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Again *The Times*, April 10th, 1869, in its leading article on the Budget, says:—"A crowd of consequences lurk in Mr. Lowe's recommendations. The change, for instance, in the graduation of the tax on carriages will undoubtedly stimulate the use of American wheels of spider-like lightness."

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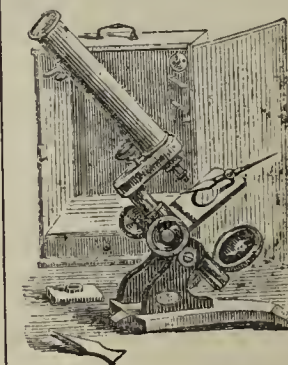
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LECTURES

ON THE

PRINCIPLES OF SURGICAL DIAGNOSIS:

ESPECIALLY IN RELATION TO SHOCK AND
VISCERAL LESIONS.*Delivered at the Royal College of Surgeons of England.*

By F. LE GROS CLARK, F.R.C.S.,

Hunterian Professor of Surgery and Pathology in the College; Surgeon to
St. Thomas's Hospital; and Examiner in Surgery at the
University of London.

LECTURE III.—LESIONS OF THE NECK AND THROAT.

*Penetrating Wounds.—Cut Throat.—Shock.—Contusion of the Larynx.
—Scalded Throat.—Foreign Bodies in the Larynx and Trachea.—
Tracheotomy.—Foreign Bodies in the Pharynx and Œsophagus.—
Wounds of the Heart.—Parallel between Injuries of the Brain and
Lungs.*

MR. PRESIDENT AND GENTLEMEN,—The diagnosis of traumatic lesions of the air-passages, either from accident or by design, is, generally speaking, simple and evident, in consequence of the palpable character of the injury, or of the unequivocal nature of the attendant signs and symptoms. The same may be said, with some qualification, of the pharynx and Œsophagus; and of all it may be remarked that an early fatality often attends the lesions of parts so essential to life.

The proximity to each other of the organs referred to, associates them in some respects in the performance of their functions, and renders them obnoxious to injuries affecting them simultaneously. Thus, the special provisions existing for the security of the larynx and trachea are imperilled by the ingestion of food, when the functions of either part are interfered with by wound or other injury; and the arrangements for modifying the asperity of the external air, and of filtering from it the floating particles which abound in it, are likewise suspended when that air is admitted to the lungs by an artificial and more direct channel; and a source of irritation is thus occasioned, which is often productive of serious evil.

The various and important structures which are packed in so small a compass in the neck and upper outlet of the chest, are all liable to injury from external violence; and the consequence of such violence is, therefore, not infrequently of a complex character. The wound inflicted by the would-be suicide, or the stab of the assassin, may thus involve the air-passages, the great vessels, and the nerves of the neck; and the well-known fatal plunge of the dagger behind the clavicle may not only sever nerves and vessels, but penetrate the lung itself.

The treatment of penetrating wounds of the neck, accompanied by profuse arterial hæmorrhage, is dependent on the correctness of the diagnosis as regards the wounded vessel or vessels; and this diagnosis is by no means easy, when a pointed weapon with a cutting edge has passed obliquely and deeply into the cervical region behind the angle of the jaw. By such a wound, either the external or internal carotid may be laid open, or some branches only of the former may yield the blood. A careful dissection might, no doubt, display the source of hæmorrhage; but the circumstances are not such as to admit of this investigation; and I know of no other means of acquiring with certainty the required information.

Two such cases have come under my care, and in each I pursued the same course, in placing a ligature on the common carotid trunk. The injury was inflicted in the same way, and with the same form of instrument, in both instances; a pointed table-knife was plunged downwards and inwards behind the angle of the jaw. The bleeding was in each case controlled only by direct pressure with the finger in the wound; and whilst this pressure was maintained, I tied the artery. Not an untoward symptom accompanied or followed either of these operations. In one, a salivary fistula continued open for some time, in communication with the original wound; but this was closed by a single application of heated wire. The only other point of interest which struck me, in connection with one of these cases was, the sudden and profuse gush of arterial blood, which immediately followed the removal of the pressure, after the ligature was applied; but this was only a single rush, and then it ceased. The absence of any symptoms indicating such lesion, led me to conclude that no nerves of importance were implicated in these injuries; and no cerebral symptoms were observed during the period of convalescence or subsequently.

It is somewhat remarkable how constantly the large vascular trunks of the neck escape injury in self-inflicted wounds of the throat. The prominence of the larynx in the median line and of the sterno-mastoid laterally contribute to this result; and the protection afforded by the muscles is probably favoured by their excited spasmodic action during the suicidal attempt. No doubt the popular conviction that the speediest mode of destroying life is to open the wind-pipe, aids in producing this result; yet, I have known many instances in which the wound was both long and deep, where similar immunity has existed in behalf of the large vessels and nerves. The thyroid and lingual branches of the carotid are most frequently wounded; yet, without these being implicated, the venous bleeding is often very profuse, and is succeeded by syncope and suspension of the hæmorrhage. It is at this stage that these cases are usually brought under the notice of the surgeon; and it behoves him not to be deceived by the signs of arrested bleeding. It is rarely that patients succumb to the first loss of blood, unless a large trunk is involved: but if this interval be lost, and recurrent hæmorrhage come on with reaction, the second collapse is often fatal. The track of these wounds, and the parts implicated, are rarely doubtful, except in respect of the minor vessels involved; and the thyro-hyoid space is the most common line of incision; but its position may be either above or below this point. It is very rarely, in my experience, that the trachea is laid open, although I have frequently seen the throat, or rather the cavity of the mouth, exposed by an incision above the hyoid bone; and other cases in which the determined hand of the suicide has partially divided the posterior wall of the pharynx. The hæmorrhage is generally greater when the incision is above the hyoid bone, one or both lingual arteries being severed with the base of the tongue: the epiglottis is not necessarily implicated, the line of separation usually leaving it below; but the injury of this valve does not entail the serious consequences which a consideration of its functions would suggest.

The intrusion of blood into the air-tubes is indicated by irritation and a sense of suffocation, requiring the precaution of leaving the wound freely open: and the diminished sensibility of the glottis, under these circumstances, is manifested by the occasional introduction of food into the larynx—a sign which, therefore, is not to be accepted as a proof that the pharynx is implicated, when the wound is below the entrance to the air-tube. If the wound be above the thyroid cartilage, symptoms of apnoea may be due to œdema of the glottis; but this is a rare complication so far as my observation enables me to judge.

Difficulty in deglutition is often superadded to the other consequences of these wounds, and necessitates artificial feeding for a time. Not infrequently the suicidal attempt is frustrated by cutting on the thyroid cartilage, which may be notched and jagged in the effort to divide it: and if any doubt exist as to whether the air-tube is implicated, the exit of air or the occurrence of emphysema sets the question at rest.

The later occurrence of bronchitis and pneumonia is indicated by the usual symptoms attending these affections, and is a common cause of mortality, when patients have survived the earlier risks consequent on exposure of the air-tube to the direct ingress of air. I do not mean that a fatal issue from this cause is a common occurrence, for these cases, as a rule, recover, if the patients survive the first few days; but when death does occur at a later period, it is usually the consequence of lung-mischief.

When the wound is low down, just above the outlet of the chest, the contiguity of the thoracic viscera may determine their implication in the resulting inflammation. This circumstance is exemplified in a case which occurred during last year in St. Thomas's Hospital. The cricoid cartilage was cut partially through and wounded in several places, and the connecting membranes were divided above and below it. The patient died on the fourth day from pleurisy; the areolar tissue behind the trachea was infiltrated with pus from the wound in the throat, and the pleuræ had become inflamed from contiguity to the burrowing abscess. In another case which occurred about two years since, and in which the incision extended deeply above the hyoid bone, death resulted in about twenty-four hours—dyspnoea, from some unexplained cause during life, coming on gradually, and increasing until life was extinct. At the autopsy, the blood in the heart was found churned up and frothy, and there were several isolated patches of recent hæmorrhage and consolidation in different parts of the lungs. Further investigation at the seat of injury suggested that a half-divided vein, which had been ligatured only on its distal or bleeding side, had slowly absorbed air, the admixture of which with the blood had proved fatal.

The amount of shock which accompanies these wounds varies very considerably; and this is due to circumstances which demand the consideration of the surgeon. The previous mental condition and habits of the patient greatly influence this result; and neglect in attending to these antecedents may seriously mislead the surgeon in his subsequent treatment. Thus, in a case in which, during a drunken frolic,

the throat of a patient of mine was severely wounded by one of his comrades who attempted to cut off his beard with a table-knife, though the bleeding was profuse, the shock was trivial; and, as no important parts were injured, he soon recovered. Yet, in other cases I have known death to result from shock where the hæmorrhage was not abundant: but, in these instances, the moral depression of the patient, complicated, as is often the case, with habits of intoxication, leaves him a prey to shock which is, no doubt, due partly to loss of blood, but chiefly to depressed vital power. A remarkable case, belonging to this class, was referred to in my former course of lectures, when I was discussing the subject of shock generally. The patient was a middle-aged man, and we had no proof of his having lost very much blood from the wound in his throat, no vessel of sufficient size to require a ligature having been opened. Yet, one hour afterwards, the temperature had sunk to 91.2 deg., and all the symptoms of collapse were well-marked. In eight hours the temperature had regained its normal standard; and, after the lapse of twenty-four hours, it had risen more than two degrees above that standard. This patient's mental condition was very depressed and desponding; but he recovered.

In the other cases which I have collected, belonging to this category, I find that although, in almost all, the general symptoms of shock were pronounced, the temperature did not descend below 96 deg., and never exceeded 101.5 deg., the maximum being attained in about twenty-four hours; with the exception of one fatal case, in which the trachea and half of the œsophagus were divided. In this instance, the temperature rose to nearly 103 deg. at the expiration of thirty-two hours; but the patient died eight hours afterwards.

The accidental concurrence of certain states of the system with these self-inflicted injuries should not, therefore, be lost sight of, as the actual state of the patient may be thereby importantly influenced, and the diagnosis rendered perplexing. Sometimes long-continued and concealed bodily suffering may determine the suicide to take the rash step of striving thus to end his suffering, of which I have seen many examples: and moral depression in most cases aggravates the consequences of the deed. In a recent instance where the wound was superficial—had implicated neither larynx nor trachea, the patient died with symptoms of pericarditis: and it was this disease which actually destroyed life, as was verified *post mortem*. But it had also been ascertained, before death, that the precordial pain was so intense as to induce the poor fellow to seek relief in suicide. The seat of suffering, in these cases, is not infrequently selected for the self-inflicted injury.

An analysis of eighteen cases of cut-throat which have been admitted into St. Thomas's Hospital during the last three years, fairly represents the results of my observation extending over a lengthened period. Fifteen of these patients were male, and three female: eleven recovered, and seven died. In five the wound was only superficial, neither trachea nor larynx being involved. One of these is that to which I have just alluded, as complicated with pericarditis, and the only one of them which proved fatal. In six cases the wound was above the hyoid bone, and in four of these the injury was fatal: and of the remaining two, one was a case in which only the muscles of the tongue were divided, but neither larynx nor mouth was laid open. Of the four fatal cases, one died from shock and delirium one day after admission; two died from hæmorrhage soon after they were received into the hospital. In one of these, a patient of my own, the left lingual artery was divided, the right just escaping; in the others, only some smaller branches required ligatures. One was the case referred to, in which air was imbibed by the open mouth of a partially divided vein. In five cases the wound was through the thyro-hyoid membrane, and all the patients recovered. I may remark that, in one of these, which was under my care, the primary hæmorrhage was very profuse, though no artery of importance was cut; and being, therefore, principally venous, there was no recurrent bleeding. The wound in this case extended obliquely upwards, and severed a portion of the epiglottis; but, the skin overlapping, the patient soon began to breathe by his mouth, and recovered his voice in about a week; though deglutition continued, for a time, painful and embarrassed, and he had a distressing cough, but no bronchitis.

In one case, the thyroid cartilage was notched in several places; and the patient, a woman, died on the second day from shock, combined with previous loss of blood. The last case was that in which the cricoid cartilage was cut, and which proved fatal from pleurisy. In no one of these cases was any fistulous opening left in communication with the air-passage. Indeed, according to my observation, such consequence is very rare.

I may observe that the general remarks which precede these very limited statistics were founded upon a much wider basis than the foregoing cases afford; but the analysis I have given supports these remarks, which were written before I obtained it.

Severe contusions or fracture of the larynx are not of frequent occurrence. The protection afforded by the symphysis of the lower jaw, and the mobility of the air-tube on the front of the neck, probably account for the rarity of such injuries as entail serious interference with the functions of the parts. A female, of middle age, was admitted into the hospital under my care about two years since, whose case exemplifies this condition. She had been struck violently on the chin with a fist—I am afraid it was that of her husband; she did not know whether she was struck on the throat. The chin was bruised, and there was great tenderness over the temporo-maxillary articulation. Manipulation of the larynx caused great pain, and so likewise did the effort of deglutition: aphonia was complete. No irregularity could be detected when the thyroid cartilage was examined; but, during deglutition, a peculiar sensation was communicated to the fingers, as if a piece of the cartilage were detached towards its upper part; and at the same time the saliva was heard to gurgle loudly in the throat. There was no blood in the sputa. In about ten days she began to recover her voice; and in three weeks was quite well. I am disposed to doubt whether there was in this instance more than severe contusion, though I believe it quite possible that severe injury may be inflicted on the larynx by the lower jaw being violently forced back against it. But the patient recovered rapidly; and functional disturbance would account for most of the symptoms, including loss of voice. As regards the sensations communicated to the touch, in moving the larynx from side to side on the cervical spine or in deglutition, the manipulator may be deceived, especially when the larynx is large and in elderly persons, by the peculiar feeling of roughness or inequality which is thus elicited. This simple circumstance should not be lost sight of in the diagnosis of these injuries.

Another form of lesion which I may notice here as of not infrequent occurrence, is that produced by the contact of hot water with the fauces and throat. This accident occurs in young children, who attempt to drink from the spout of a tea-kettle. Whether, under these circumstances, the mischief primarily affects the lower part of the pharynx, or whether, indeed, any of the scalding water is actually swallowed, I have not been able to satisfy myself, but I think not. The condition of the mucous membrane of the mouth, fauces, and tonsils, which is produced by the contact of water at a high temperature, is neither aphtha nor vesication, but a white, patchy appearance, indicating destruction of the surface of the membrane. The local suffering is not commensurate with the extent or amount of lesion; but the shock is generally considerable. The fatality of this lesion is due to obstructed respiration from inflammatory swelling in the neighbourhood of the glottis, or from subsequent pneumonia.

Of the beneficial effect of tracheotomy in these cases I am very sceptical, judging by the results of such as have come under my observation; although I do not doubt that, in threatening suffocation from œdema, it may be the only expedient by which life can be saved. Of the actual condition of the lungs, and of the cause of that condition, I am not prepared to speak positively; but I am disposed to call in question the commonly received opinion, that extension of inflammation from the injured parts is the true explanation of the pulmonary symptoms. As these points are well illustrated in the last case of the kind under my care, I will relate its history.

About half-past one in the day, a little boy, rather more than four years old, attempted to drink some water at boiling heat from the spout of a tea-kettle. After much crying he went to sleep, and in about an hour the mother noticed a rattling in his breathing; he had much dyspnoea, and was brought to the hospital. The House-Surgeon did not think the symptoms sufficiently urgent for the child's admission, but he was received on the following morning, and I saw him immediately afterwards, and twenty hours after the occurrence of the accident. His feet and hands were cold, pulse 156, temperature 99 deg. The breathing was hurried, and there was excessive action of the muscles of inspiration, but the chest was not filled, as shown by the falling in of the epigastrium and intercostal spaces. The lips and nails were slightly dusky, the nostrils dilated, and the eyes staring and dull. The little patient was not insensible but listless. There was a white, soddened appearance, in patches, of the mouth and fauces, with some swelling of the latter. I carefully examined the chest, and found much rattling and loud rhonchus in the trachea; and these sounds seemed to be transmitted to all parts of the chest; there was also large crepitation, especially on the right side; vocal sounds normal; breath-sounds puerile on both sides, and resonance nearly equal. Inspiration was suddenly checked by a croupy catch as the breath was drawn.

During the examination, and subsequently, whilst I remained in the ward, these symptoms became aggravated, the temperature rising to 102.8 deg.; and, though not entertaining a favourable opinion of tracheotomy, I felt compelled to offer this alternative to the parents, who were present, fearing the child might speedily succumb, in consequence

of the obstruction to the ingress of air. Their consent was refused; I therefore ordered beef tea and wine to be immediately administered, and these were swallowed without difficulty. I also directed that a large linseed poultice, with a twelfth part of mustard, should be placed over the chest, and hot bottles to the feet. Very speedy relief followed these remedies: in two or three hours, the child was able to speak easily, to cough with strength, and to breathe more freely.

The croupy catch in inspiration continued, except after coughing, which seemed to clear away the obstruction in the larynx. The pulse, however, was so rapid that it could scarcely be counted, and the temperature had risen to 104.3 deg. Small doses of liq. ammon. acet. and nitric ether were given with some ipecac. wine at intervals. On the following morning, both the pulse and temperature had sunk; but the face was flushed and there was small crepitation over the right lung. On the fourth day, all the symptoms were subsiding, and the child seemed cheerful and disposed to take food; but on the sixth, he had a renewal of the previous condition, suggestive of broncho-pneumonia, which soon disappeared under the application of linseed meal and mustard, as before. On the seventh day, there was only slight dulness and deficiency of breath-sounds, and movement of the ribs on the left side, but there was neither crepitation nor evidence of bronchitis on either side, though he had a hacking cough. From this date he rapidly recovered, and was dismissed well on the fourteenth day. The mouth required no special treatment.

I have narrated this case somewhat at length, because some important practical considerations suggest themselves, in connection with the diagnosis of this class of injuries. Was there, at any time, inflammation, properly so-called, of the lung-tissue or of the bronchial membrane? and, if so, how was it produced? If propagated by continuity of surface, the larynx would have been first affected, and the symptoms and signs would have been longer delayed and more persistent. But the crepitation was never very marked, and the dulness and indistinctness of breath-sounds shifted from one side to the other. It was evident that a severe shock had been sustained, and fell principally on the lungs. I am disposed, though I speak with diffidence on this *Medical* subject, to regard the condition of the little patient as denoting nervous shock to the lungs—by which I mean that the vaso-motor nerves, and probably the pneumogastric filaments, were so impressed, and their functions so disturbed, as to cause congestion and its consequences, with other functional derangements which induced the condition noticed, and which was relieved in so marked a manner by the simple means employed. The croupy catch in inspiration seemed to be due, in part, to spasm, and partly, at a later period, to accumulation of tenacious mucus in the larynx.

I have the record of a similar case in a younger child, which occurred about five years since, and which I treated in a similar way, with success: the breathing was rapid and noisy, and the little patient half comatose; but he rallied after remaining two or three days in a critical condition, and was soon convalescent. I think it very probable that if tracheotomy had been performed at the time I contemplated it in the former case, it would have proved fatal, as it has been under similar circumstances, from the entailed consequences of broncho-pneumonia. I cannot regard the opening of the air-tube, especially in children, as an unimportant operation, or as expedient except under urgent circumstances; but I shall return to this subject presently.

Foreign bodies are sometimes introduced into the nostrils, and may remain, entangled in their sinuosities, for an indefinite time, giving rise to irritation and symptoms resembling ozæna. I am acquainted with one instance of this sort, in which a button remained so lodged and impacted for years, producing irritation which was subject to aggravation from accidental causes; it was ultimately discovered and removed. In another instance, a gentleman brought to me his child, who was suffering from a suppurative discharge from the nose, which could not be accounted for. I concluded that it was due to a strumous tendency in the child, and directed that a mild astringent injection should be used. A few days afterwards, a black mass was washed out, which proved to be part of a skein of floss silk; and then the little fellow acknowledged that, having watched his grandfather take snuff, he was ambitious to imitate him, and selected the above material, which he introduced into his nose in the same way as he had watched the old gentleman take his snuff.

Both my hospital and private practice have been singularly unproductive in cases in which foreign bodies have been introduced into and retained in the air-passages. Indeed, I think I may say from my personal knowledge that, during the last forty years, not more than two or three cases, coming strictly within this category, have been under treatment within the walls of St. Thomas's Hospital.

I do not include cases in which speedy relief has been obtained without surgical interference—cases in which the inhaled extraneous body,

of whatever nature, has been speedily expelled. With such a limited personal experience, I must content myself by making a few observations which occur to me, in illustration of the diagnosis in this serious class of lesions.

It is well known that death may be the immediate consequence of the impaction of a foreign body in the air-passage, or that the fatal issue may be delayed until after the lapse of weeks, or months, or even of years. In the former case, a large body is usually lodged and immovably in the larynx; and death results from apnoea, partly, though probably not wholly, due to the direct obstruction to respiration thus occasioned; but, probably, also in a measure, the consequence of superadded spasm in the orifice of the larynx. The delayed fatality of these cases is owing to a variety of causes; of which the site and form of the foreign body, as well as its magnitude, are the most important. Thus, impaction of a body in the lower part of the larynx, when not of sufficient size seriously to impede respiration, nor of such form nor asperity of surface as to produce mechanical injury where it is located, may remain quiescent for a considerable time, without producing much irritation; for the lining membrane of the larynx is by no means so sensitive here as it is higher up. Again, the constantly shifting position of a smooth object prevents early local irritation from resulting, and gives rise to symptoms which vary according to the position of the intruder—sometimes threatening immediate suffocation, at others leaving the patient tranquil and almost free from inconvenience. In dealing with these cases, it should not be forgotten that inflammatory and spasmodic affections of the larynx are often, in many of their symptoms, allied to the consequences of these accidents; and that the converse is also true: but it must very rarely happen that a careful examination of all the signs, as well as symptoms, and an investigation into the history of the case, can deceive the [intelligent] surgeon. Yet, there are, sometimes, perplexing and complicating circumstances which may mislead even the most wary. Food may pass into the larynx during intoxication, or, as occurred in a case of my own, which I narrated in one of my Lectures last year, the same accident may complicate the consequences of injury to the head. The patient to whom I refer, was buried by a fall of earth in a drain. As soon as he was dug out he was brought to the hospital. I extract the report of this case from the Lecture to which I refer. "When admitted, he was insensible; his pupils were contracted and sluggish; his breathing was stertorous, and he was convulsed. His respiration became intermittent, and at shorter intervals; and he died comatose after six hours—his heart continuing to beat for some time after respiration ceased. There was not any injury found in the brain or spinal cord; but a part of the contents of the stomach, identified by comparison, had found its way into the trachea, and had blocked up many of the bronchial tubes." This case appeared to be one of suffocation complicated with concussion. How and when the contents of the stomach were transferred thence to the lungs, we have no evidence to show. It might have occurred at the moment of the injury, in consequence of the pressure to which the distended stomach was then subjected; or it might have occurred in the act of vomiting before he reached the hospital. But certainly the rarity of such a coincidence might excuse the erring diagnosis which failed to identify the cause with the symptoms. Happily, the oversight could not affect the issue.

Pressure, from any cause, on the exterior of the larynx or on its supplying nerves, may occasion symptoms similar to those produced by the presence of a foreign body in the air-passage. Again, the lodgment of a morsel of food in the upper part of the gullet, may so obstruct the aperture for the ingress of air, as to threaten suffocation. I remember a young child, who was brought to the hospital many years since, being almost immediately relieved by a dose of ipecacuanha wine, which I, then a student, administered under the direction of Dr. Williams; a large fragment of meat was ejected, and the lividity and struggling immediately ceased. I shall presently refer to a fatal case of the same nature.

It is a dangerous practice to permit patients to inhale chloroform in operations involving the interior of the mouth; although the risk is diminished if the sitting posture can be maintained. The intrusion of blood into the larynx, in any quantity, can scarcely fail to prove fatal under these circumstances; the admission of even a small quantity is sufficient to excite apprehension.

In forming a diagnosis in the class of lesions to which I am now referring, particular inquiry should be made into the history of the case, and the circumstances under which the alarming symptoms first made their appearance; and this should be succeeded by a careful scrutiny of the chest. The actual position of the foreign body, if present, may be thus ascertained. It is possible that one lung may retain its normal resonance, whilst the absence of breath-sounds proves that air is not passing into and out of it. In such case, the conclusion would be that one bronchus is blocked. Or these signs may be limited to a portion

only of one lung; and thus the site of the extraneous body may be still more accurately determined; at the same time that all doubt may be removed as to its actual presence, by the shifting character of these indications. It is an unquestionable fact, explained by the relative anatomy of the parts, that the right bronchus is very commonly, and the left very rarely, the seat of such obstruction, a foreign body passing more readily into the former than into the latter. But the size and form of the body have much to do with the resulting symptoms; thus, a coin, when impacted edgewise, may allow of respiration being readily performed; but with a change of position, by which its circumference becomes adapted to that of the trachea, symptoms of impending suffocation may immediately declare themselves. Other unnatural sounds are heard in breathing, which are due either to the passage of the air over the intruding object, or to the accumulation of mucus around or behind it.

The later history of these cases, where a fatal issue is delayed, is replete with variety in its details, though all pointing to those structural changes which mark the abortive effort which nature makes to repair the lesion, but which proves destructive in their issue; for it is rarely that she succeeds in so enclosing the extraneous object, whatever it may be, in a capsule of low organisation, as to secure to the rest of the lung immunity from the effects of its presence.

The following case was watched by me with much interest whilst the man was an inmate of St. Thomas's Hospital; and I am indebted for the autopsy to Mr. Solly, under whose care the patient remained until he went home.

J. S., aged 49, an excavator, of tall and robust frame, was at work with a pebble in his mouth, about the size of a marble. This was drawn into the trachea during a fit of laughter, and he imagined he had swallowed it.

When he applied first to a local medical man, his symptoms were not of a character to excite alarm; his breathing was more frequent than natural, and sonorous, and the period of each respiration was diminished; he was also troubled with a short, hacking cough. The expansion of the chest, viewed both anteriorly and posteriorly, appeared to be uniform on both sides. At a spot behind the sternum, he complained of a dull pricking sensation; and when the stethoscope was applied here, a whistling and cooing rhonchus was heard; the breath-murmur was described as heard, at that time, over most parts of the chest; but masked by the other loud sound.*

He was sent to the hospital; and, when admitted, it was observed that, whilst recumbent and at rest, he suffered no inconvenience; but, when turned on the left side, great dyspnoea and cough were induced. Respiration was loud, but otherwise natural, on the *left* side; there was a loud cooing sound about four inches below the *right* clavicle; below this, over three square inches, the breath-sounds were inaudible; but percussion elicited a clear resonance; sometimes air entered the chest at all parts.

The patient was bound to a plank, inverted, and struck on the back and chest, but without effect. Tracheotomy was subsequently performed, and the above experiment repeated; bronchitis succeeded. He afterwards left the hospital, and suffered from severe fits of dyspnoea and suffocating cough; and the expectoration was profuse during the last week of his life. There were physical signs which indicated that, subsequently to his leaving the hospital, and after a violent fit of coughing, the pebble had changed its position from the right to the left side of the chest.

At the *post mortem* examination, a large collection of pus was found in the *left* pleura, whereby the lung was compressed, but it was not otherwise diseased. The right pleura was healthy; but there was a circumscribed abscess in the anterior part of the middle lobe of the corresponding lung, containing three ounces of pus; the bronchial tubes on the same side were inflamed. Just at the first division of the *left* bronchus the pebble was found firmly impacted; in the division of the right bronchus, the spot where the foreign body had previously lodged could be identified; the mucous membrane throughout the larger bronchi on both sides was free from ulceration. The patient survived the accident two months; and died about a week after leaving the hospital.

The importance of *Tracheotomy* is very differently estimated by surgeons—I do not mean in regard to its applicability in various conditions suggestive of its employment; but I speak of the operation and the risks which it may entail. My experience has induced me to regard it as, in itself, fraught with much danger, and as involving, therefore, a serious complication in diseases of the air-passages, especially where, by continuity of surface or otherwise, the lungs are disposed to sympathise in the morbid action. I have already remarked on broncho-pneumonia

being a frequent cause of secondary fatality in attempted suicide by cutting the throat; and this arises, apparently, from the direct ingress of air by an artificial inlet. In children, probably from their greater susceptibility, the results of tracheotomy, performed for various reasons, are far from satisfactory or encouraging, so far as I can gather from the various sources of information at my command. I may speak more favourably, from my own personal experience, of tracheotomy in adults; the result has certainly been, in a great many instances, the protraction, in not a few the preservation, of life, and, in two or three, the restoration of suspended animation. Yet, these have been, for the most part, cases of acute or syphilitic laryngitis, or other conditions in which the lungs were in no way implicated. I am, therefore, quite prepared to admit, to its fullest extent, the value of this operation; but I do not the less appreciate the risks attending it, under the conditions alluded to. It is my conviction that an artificial opening into the air-tube should not be made except under circumstances of urgent necessity; and that, in all cases, the condition of the lungs should be ascertained before resorting to it. I am aware it may be objected that the physical signs are masked by the obstructed ingress of air; yet, I have not found it so, to an extent sufficient to preclude the detection of abnormal sounds, either in the bronchial tubes or air-cells; and by such physical examination, the fault may, perchance, be found to exist chiefly in the lung itself. The hasty performance of this operation, in anticipation of evil which may occur, is to be deprecated. Indeed, I think that every available expedient should be resorted to, before this ultimatum is adopted. The attendant risks of the operation are not limited to the manipulative procedure itself, nor to the direct admission of air to the lungs. The presence of the tube often excites mischief externally as well as internally; and the wound becomes unhealthy, and ulceration and suppuration extend, even to the lung itself. Cases of scalded throat, treated by tracheotomy, are very far from being uniformly successful, even though temporary relief be obtained; the actual cause of death being due to pulmonary changes, which may be referred with more show of reason to the operation than to the original lesion. Since writing the above remarks, I have had the opportunity of witnessing the autopsy of a child on whom tracheotomy had been performed for scalded throat. I saw the patient, apparently doing well, some days after the operation, whilst the tube was still worn. Subsequently the tube was removed, and the child died with symptoms of broncho-pneumonia. On examining the air-tubes and lungs, there was found ulceration at the front of the trachea, corresponding to the spot where the extremity of the tube would impinge. There was inflammation, with some deposit of lymph, extending thence throughout the bronchial tubes, with infiltration and consolidation of the lungs generally. The child died evidently of broncho-pneumonia, the consequence, I have very little doubt, of the operation and not of the original lesion. The mechanical irritation caused by the presence of the tube accounted, in part, for this result, which is suggestive of the need of some change in the form of the tube, or in the mode of keeping patent the opening for the admission of air. Indeed, two or three instances have come to my knowledge where fatal hæmorrhage, in children, was consequent on ulceration extending through the trachea into the innominate artery. In the above case, the general infiltration of the lung could scarcely be attributed to irritation propagated from the inflamed trachea; though there was no interruption to the continuity of the inflammation, as it spread thence throughout the bronchial tubes.

If, in these cases of scalded throat, it be ascertained that life is threatened by oedema of the glottis, and the risk is imminent, relief must be given; but the surgeon should first satisfy himself that the dyspnoea is not due to any other cause. Probably spasm, superadded to inflammatory swelling, is often the immediate cause of death. If introduced, the tube should be dispensed with as soon as possible; though it is an unquestionable fact, that the opening of the trachea necessitates the retention of a tube for a much longer period than would have been requisite for the recovery of the glottis without such opening. The comparative insensibility of the glottis, when the trachea is opened, seems to render it less inclined to fulfil its normal functions when the most important of them is thus artificially and vicariously performed.

The value of antimonials, without tracheotomy, in these cases of scalded throat, has been repeatedly tested, as well as in other inflammatory conditions of these parts, and with a favourable result.

I may notice a rare interference with the completion of tracheotomy, which, however, nearly proved fatal in one of my patients, whose condition did not admit of delay. He was an old man, in whom the rings of the trachea were rendered so resisting by ossification, that the knife would not divide them. A short blunt-pointed pair of scissors is, under such circumstances, the most available instrument to lay open the air-tube.

[To be concluded.]

* These notes were supplied by Mr. Passmore, of Potter's Bar.

ON SOME POINTS CONCERNING THE METHOD OF OBSERVING THE TEMPERATURE OF THE BODY.

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AMONG the various circumstances upon which the correctness of a thermometrical observation depends, one of the greatest importance is, the time during which the thermometer must remain *in situ* in order to indicate correctly the temperature to be observed. For it is obvious that, with the most delicate and correct instrument, the patient assuming the most convenient position, and the instrument having been placed in the axilla or any other locality in the most faultless manner, the whole observation must turn out incorrect if the thermometer be not allowed to remain until the mercurial column has really become stationary. It might appear superfluous in these days, after the thermometer has been in use already for years, to return again to the method of using this instrument, as it might be supposed that all those who use it have, by their own experience, already settled such preliminary matters. Yet statements appear, now and again, which show that very erroneous impressions still prevail on this point; and rules are laid down for the guidance of beginners which, if followed, cannot but deprive the observations thus obtained, to say the least, of all scientific value. The printed instructions which accompany the instruments most in use in this country direct the thermometer to be left in the axilla from two and half to three and a half minutes; and, as this rule seems to rely on an authority of the very highest rank, it becomes the more necessary, before venturing upon any expression of dissent, to submit it to a careful consideration. This has been done by others as well as by myself; but, with all deference to so high an authority as Dr. Aitken, and, whilst fully recognising the very great services he has rendered to the profession of this country in introducing the thermometer into practice, I cannot come to any other conclusion than that the rule laid down thus—"the instrument must be retained *in situ* not less than three minutes"—may easily be misunderstood, and lead to a practice giving incorrect results. Although, a little further on, this rule is somewhat qualified by the statement that, "in cases which do not require the most rigorous and extreme accuracy, three to five minutes is found quite sufficient in private practice for the application of the thermometer" (p. 37), yet even these limits are much too narrow; and this has, no doubt, been felt by many observers after some little experience, and doubts on this point have also now and then found expression—at least, indirectly. Thus, Dr. S. Ringer,† after having given very minute rules as to the position of the patient, says: "All these precautions being observed, it is better to allow the thermometer to remain in the axilla at least five minutes"; and Dr. C. E. Prior, in a paper which appeared in this JOURNAL on May 9th, 1868, expresses his belief that the time required for a thermometrical observation is much longer than usually stated. Under these circumstances, I venture to think that the whole question might usefully bear to be again considered with the help of, and illustrated by, accurate experiments.

There are other sources of fallacy which must be carefully guarded against in observations made in the axilla; but, as they are more generally known and acted upon, I shall confine myself to the question—How long ought the thermometer to remain in the axilla, in order to give a correct observation of the temperature?

The axilla being the place usually selected for thermometrical observations, this paper will chiefly refer to that locality; but, incidentally, other localities of the body which are sometimes made use of will also be referred to.

Any one who has watched the mercurial column must have observed that a very great difference exists in the rapidity with which it rises in different cases. The following are, out of a great number, a few examples illustrative of this difference.

a. Febrile Temperatures.

I.—Man; tonsillitis. 24th March 1869, 5.25 P.M. C.*

	min.	DEG.		min.	DEG.
After 0		84.2	After 6		102.8
" 1		100	" 7		102.85
" 1		101.8	" 8		102.9
" 1½		102.0	" 9		102.95
" 2		102.2	" 10		102.95
" 2½		102.3	" 11		103
" 3		102.4	" 12		103
" 3½		102.5	" 14		103
" 4		102.6	" 16		103
" 5		102.7			

II.—Man; typhus. Fifteenth day of illness, 6.30 P.M. C.

	min.	DEG.		min.	DEG.
After 0		73	After 7½		102.7
" 1		101	" 9		102.7
" 2		101.8	" 10		102.8
" 4		102.4	" 12½		102.8
" 5		102.5	" 15		102.9

III.—Woman; typhus. On tenth day of illness. 18th December 1864, 10 A.M. C.

	min.	DEG.		min.	DEG.
After 3		101.1	After 10		102.2
" 5		101.6	" 12		102.3
" 6½		102.0	" 15		102.4
" 8½		102.2			

b. Temperature in Health (in the morning in bed).

IV.—Healthy man. 3rd May 1867, 6.50 a.m. C.

	min.	DEG.		min.	DEG.
After 1		94.8	After 7		97.8
" 2		96.6	" 10		97.85
" 3		97.1	" 12		97.95
" 4		97.35	" 15		98
" 5		97.6	" 20		98
" 6		97.7	" 30		98

V.—The same. 28th April 1867, 7.30 A.M. R. C.

	min.	DEG.		min.	DEG.
After 2		96.9	After 15		97.8
" 4		97.25	" 17		97.95
" 7		97.6	" 20		98
" 10		97.7	" 24		98
" 13		97.8			

VI.—The same. 6th May 1867, 7.30 A.M. C.

	min.	DEG.		min.	DEG.
After 0		70	After 10		98
" 2		97.2	" 12		98.15
" 4		97.8	" 15		98.2
" 8		97.85	" 20		98.2

VII.—The same. 7th May 1867, 7.20 A.M. C.

	min.	DEG.		min.	DEG.
After 1		96.5	After 12		97.9
" 2		96.9	" 14		98
" 3		97.2	" 18		98
" 4		97.4	" 20		98.05
" 5		97.6	" 22		98.1
" 6		97.65	" 24		98.2
" 7		97.7	" 30		98.2
" 8½		97.8	" 32		98.2
" 10		97.8			

These examples may be sufficient, and scarcely require any comment. They show that the time required for the mercury to become steady varies, not only when the temperatures ultimately reached are different, but also when this temperature is the same on different occasions (Ex. IV—VII); that such difference not only exists when different instruments are used, as in Ex. IV and V, but also when the same thermometer is used in the different observations (Ex. VI and VII). The time, therefore, which is necessary for a correct observation in the axilla cannot be fixed beforehand, and may vary from eleven to twenty-four minutes. Had, in the first observation, the thermometer only been left

* Science and Practice of Medicine, 5th edit., 1868, vol. i, p. 35.

† On the Temperature of the Body as a Means of Diagnosis in Phthisis and Tuberculosis. 1865. P. 3.

* The thermometers used in these observations were—one by Casella (C), a registering one by the same maker (R. C.), one by Geissler in Bonn, and one by Greiner in Munich. The very slight differences between the indications of these instruments have been corrected above.

five minutes, the temperature found would have been too low by 0.3 deg.; in the third observation by 0.8 deg.; in the seventh by 0.6 deg. Differences of 0.3 deg. to 0.8 deg., amounting on an average to half a degree, are of sufficient importance; the more so when the fluctuations of temperature in a disease are only small, or when, as in the study of the action of drugs on the heat of the body, the fluctuations due to their influence only amount to a fraction of a degree. It is obvious that, for all scientific investigations, there must be a security against such mistakes; but even in the daily practice, where absolute correctness is not necessary, it requires a long familiarity with the thermometer to interpret correctly such imperfect observations—a difficulty which still increases when, as frequently occurs, the observations must be left to nurses, or to members of the patient's family.

What is the cause of this difference in the rate at which the mercury rises and of the time in which it reaches a fixed point?

It might be supposed that, when observations were made with thermometers of different makers, the delicacy of the instruments was one of the chief causes of the difference in the rapidity of their indicating the temperature to be observed. But a comparison of various instruments with regard to this point shows that this is the case only to a very trifling extent indeed. If our four thermometers be placed into water of a certain temperature, the mercury in all of them becomes steady in from three-quarters to one minute. If we take a fluid of greater cohesion, such as olive-oil or castor-oil, the time required for the thermometers to indicate the temperature of the fluid is found to be from two and half to three minutes in the former, and from three and a half to four minutes in the latter substance. We thus find that, in different instruments by various good makers, very little difference exists with regard to the quickness with which their mercurial column indicates the temperature of the surrounding medium; and that, within certain limits, the greater or less thickness of the glass or the width of the tube in which the mercury rises make but little difference. Of greater importance is the quantity of mercury in the bulb—i.e., the size, and also the form, of the latter. A thermometer must be the more sensitive the smaller the quantity of mercury which is to receive or to give up heat, and the greater the surface with which this quantity comes into contact with the surrounding medium.

If the thermometers so rapidly assume the temperature of a surrounding medium of fixed temperature, how is it, then, that so much longer and such various times are required for them to indicate the temperature of the axilla? As the instruments do not account for this difference, it must clearly be dependent upon the place of application; and this conclusion is supported by Ex. VI and VII, in which, although the temperature ultimately reached was the same, yet the rate of rising of the same thermometer was different on the two succeeding days. A comparative examination of different localities of the body where the temperature may be taken might assist us in clearing up this difficulty. Now if, in the first instance, we place the thermometer into the rectum, we find that the mercury there rises very much quicker than in the axilla, and becomes steady already after from three to six minutes, as in the following examples.

VIII.—Boy; recovering from typhoid fever. 3rd August 1865, 9.30 A.M. C.

	DEG.		DEG.
After 1 min.	98.6	After 3 min.	99.4
" 2 "	99.1	" 4 "	99.4
" 2½ "	99.3	" 6 "	99.4

IX.—The same. 2nd August 1865, 9.30 A.M. C.

	DEG.		DEG.
After 1 min.	98.3	After 5 min.	99.1
" 2½ "	98.8	" 6 "	99.2
" 3 "	98.85	" 8 "	99.2
" 4½ "	99.05		

X.—The same. 4th August 1865, 9.30 A.M. C.

	DEG.		DEG.
After 1 min.	98.2	After 4 min.	99.2
" 2 "	98.8	" 5 "	99.2
" 2½ "	98.9	" 6 "	99.2
" 3 "	99		

If we introduce into the rectum a thermometer the bulb of which is of a lower temperature, it becomes warmed, and the mucous membrane surrounding it loses heat, but this loss is immediately recovered as fresh blood of the original temperature is constantly replacing that which had been cooled. Thus, the difference between the temperature of the thermometer and of the mucous membrane becomes less and less, and is soon equalised. No doubt, the colder bulb of the thermometer will, in the first instance, have some influence on the contractile elements of

the small blood-vessels, but this effect is very transitory, and can be altogether neglected if the difference of temperature be not very great. Still, the blood being the chief vehicle of animal heat, it is clear that different states of the circulation, depending upon local or upon general causes, must have a considerable influence on the rapidity with which the temperature of the bulb of the thermometer is raised to that of the surrounding mucous membrane—i.e., with which the heat abstracted by the bulb is replaced; and this influence of the circulation was probably the cause why in one instance four minutes were required for the thermometer to rise to 99.2 deg., and in another six minutes to reach the same point. The pulse on the former occasion had been 90, on the latter 76. It thus becomes intelligible that the point of departure of the mercurial column, as well as the point ultimately reached, may be exactly the same in two observations in the rectum, and yet the time required may slightly differ, the state of the circulation being the only variable element in these two observations.

The rectum, being a closed cavity, has a fixed temperature already at the commencement of the observation, and the whole time is required to raise the temperature of the mercury to that of the mucous membrane. The axilla, on the contrary, not being a permanently closed cavity, has another temperature just when it is being closed, and another after it has been so for a time, as, by closing it, the loss of heat which constantly takes place by radiation and evaporation has been suspended. Now, this makes all the difference between observations in these two localities, and herein must be found the chief explanation why it takes so much longer for the mercury to reach its greatest height in the axilla. This explanation was given already, in 1852, by Dr. Armitage,* in some remarks on the method of making thermometrical observations, which he had practised with Dr. Traube at Berlin; but it seems his little work has not met with that attention which it in every respect deserved, and the excellent remarks which it contained on our subject remained fruitless. No one has discussed the question with more clearness and precision than Dr. Liebermeister, in the first article of a series of admirable papers on Pyrexia;† and we cannot do better than simply translate here a few sentences. He says, at page 12: "If a thermometer be placed in the axilla, its temperature gets there as quickly as in the rectum or any other place of application into equilibrium with the surrounding temperature, and after a few minutes that point is reached which corresponds to the temperature of the unclosed axilla. Meanwhile, however, the axilla has, by enclosing in it the thermometer, been transformed into a closed cavity; its temperature, therefore, begins at once to rise, and continues rising until the temperature is reached which would correspond to that of a point in the interior of the body lying in the same depth under the surface. The mercury, too, must, therefore, continue to rise until the temperature of the axilla has become that of a closed cavity." This is proved by a simple experiment. If the axilla have already, before the application of the thermometer, been kept closed during some time, then, on an average, four, at the most five to six, minutes only are required for the mercury to reach its highest point. The following experiments illustrate this.

XI.—Man; with rheumatic fever. 19th March 1869, 3.27 P.M. C. Thermometer placed in the right axilla, which had not been kept purposely closed; the patient lying on his left side.

	DEG.		DEG.
After 0 min.	80	After 6 "	101
" ½ "	100.4	" 7 "	101.05
" 1 "	100.8	" 8 "	101.1
" 1½ "	100.85	" 9 "	101.1
" 2 "	100.9	" 10 "	101.15
" 3 "	100.9	" 12 "	101.15
" 3½ "	100.95	" 13 "	101.2
" 4 "	100.95	" 15 "	101.2
" 5 "	101	" 20 "	101.2

The patient is turned round and the thermometer introduced into his left axilla, without opening it more than necessary. 4.19 P.M.

	DEG.		DEG.
After 0 min.	80	After 4 min.	101.05
" ½ "	100.2	" 5 "	101.1
" 1 "	100.4	" 6 "	101.2
" 1½ "	100.7	" 7 "	101.2
" 2 "	100.8	" 10 "	101.2
" 2½ "	100.9	" 11 "	101.2
" 3 "	101		

* Dr. T. R. Armitage, *Hydrophathy as applied to Acute Disease*. London Churchill and Son. 1852.
† *Prager Vierteljahrsschrift*, vols. 85 and 86, 1865; and *Deutsches Archiv für Klinische Medizin*. Vol. i, 1866.

Or in the following case.

XII.—*Vide* No. I. 5.25 P.M. C.

After	0 min.	DEG.	After	4 min.	DEG.
"	0	84.2	"	4	102.6
"	1	100	"	5	102.7
"	1	101.8	"	6	102.8
"	1½	102	"	7	102.85
"	2	102.2	"	8	102.9
"	2½	102.3	"	9	102.95
"	3	102.4	"	11	103
"	3½	102.5	"	16	103

At 5.42 P.M., the thermometer was taken out, cooled, and re-introduced, at 5.45 P.M., into the axilla, which had been kept closed.

After	0 min.	DEG.	After	3 min.	DEG.
"	0	84.2	"	3	103
"	1	101.7	"	3½	103
"	1	102.5	"	4	103
"	1½	102.8	"	5	103
"	2	102.85	"	6	103
"	2½	102.9			

These experiments show that, when the axilla has a fixed temperature already at the commencement of the observation by having been kept closed for some time previously, the mercury rises as quickly and becomes steady in just as short a time as in the rectum. It is, therefore, a very good plan, which has been recommended by Dr. S. Ringer (*loc. cit.*, p. 3), "if the patient has been lying on one side, to turn him diagonally over to the other", as the axilla which was previously most dependent has been kept closed by the weight of the body. But, unfortunately, this plan cannot be carried out in all cases, as a good many patients, especially those suffering from chest-affections, and some of those in an advanced stage of continued fever, cannot lie on their sides at all. In such cases, it may even sometimes be necessary to have a nurse sitting by the side of the patient, to fix the arm to the body during the time of observation. But whenever it is possible to keep the axilla closed for some time before the thermometer is introduced, either by making the patient lie on his side or by other means, it should be done, as it shortens the time of the actual observation so considerably.

The rate at which the temperature of the axilla, after it has been closed, rises to that of the blood at a certain depth below the surface, must necessarily vary very much according to the state of the circulation; viz., the power of the heart, the number and completeness of its contractions, and the dilated or contracted state of the peripheral arteries. Thus, it is explained why the time required to reach the same point is so variable; why at one time we had to wait twenty-four minutes before the mercury became stationary at 98.2 deg., whilst at another it took only fifteen minutes (Ex. VI and VII). The great influence which the state of the peripheral circulation has upon the rate of rising of the mercurial column, or rather upon the time which elapses before the axilla, after it has been closed, attains a fixed temperature, is nowhere more manifest than if we take such opposite cases, as, for instance, a case with great dilatation of the blood-vessels on the surface, such as the rash in scarlatina, or even that more delicate rose rash not unfrequently present all over the skin in the beginning of typhoid fever and in other states of high pyrexia on the one hand, and the cold stage of cholera on the other. In the first instance, the mercury, even without any precautions, may become stationary in the axilla in six or eight minutes, whilst it may take half an hour, or even more, before we can be sure of an accurate observation in the latter. These, however, are the opposite extremes, and between them lies a great variety of possibilities, which are fairly represented by the examples given above.

From what has been said, it is clear that, even by using a much more sensitive instrument than the ordinary thermometers are—as, for instance, a thermo-electric pile—an observation would be but very little shortened, unless the place of application had already a fixed temperature.

All that has been said with regard to the axilla applies also to observations taken in the mouth, under the tongue, which locality is sometimes selected for the application of the thermometer, and which, if the mouth be carefully kept closed, the respiration being carried on through the nose, and if the body be not exposed to great changes of external temperature, gives also quite trustworthy results. Now, unless the mouth has been kept closed for some time—at least ten minutes—the time required for the mercurial column to become stationary will be found to be from nine and a half to twelve minutes. If, however, the mouth had been kept closed before the introduction of the thermometer, from two to five minutes will be found sufficient. If, for instance, after

finishing one observation, the mouth be kept closed, and the thermometer cooled and then introduced again, the highest point is reached in from two to three minutes.

XIII.—28th February 1869, 8.50 P.M. C.

After	0 min.	DEG.	After	5 min.	DEG.
"	0	84.2	"	5	98
"	1	97.2	"	6	98.05
"	1	97.8	"	8	98.1
"	2	97.9	"	9½	98.2
"	3	98	"	15	98.2

The thermometer taken out; the mouth kept closed. Thermometer (G.) introduced at 9.6 P.M.

After	0 min.	DEG.	After	3 min.	DEG.
"	0	84.2	"	3	98.2
"	1	97.1	"	5	98.2
"	1	97.82	"	15	98.2
"	2	98.18			

When I first found this out, it occurred to me that this difference of time might be due to an altered state of vascularity on the place of observation; that, through the irritation of the instrument during the first observation, the blood-vessels of the mucous membrane under the tongue had become gradually more dilated, and thus the currents of blood in them accelerated; and that in this way, in the second experiment, the heat abstracted by the bulb of the thermometer was more rapidly replaced. But a simple experiment shows that this is not the true explanation. If it were, the difference between the two observations following each other could be very much diminished, or altogether abolished, by not allowing the bulb of the thermometer on the first occasion to abstract any heat from the mucous membrane at all. This can be done by heating the thermometer to a point beyond the temperature of the mouth.

XIV.—2nd April 1869, 10 A.M. C.

After	0 min.	DEG.	After	5 min.	DEG.
"	0	102	"	5	97.4
"	1	97.2	"	5½	97.6
"	1	97	"	6	97.7
"	1½	96.9	"	6½	97.8
"	2	97	"	7½	97.9
"	3	97	"	9	98
"	3½	97.1	"	10	98.1
"	4	97.2	"	11	98.2
"	4½	97.3	"	14	98.2

This experiment proves that the temperature of the mucous membrane at the floor of the mouth increases just as gradually after the mouth has been closed as that of the axilla. Had the temperature of the mouth already been a fixed quantity at the beginning of the observation, the mercury would only have receded to that point, and would then have remained stationary. In the following experiment, the mouth had been kept purposely closed for ten minutes previous to the introduction of the thermometer, and the result was as follows.

XV.—1st April 1869, 11.40 A.M. C.

After	0 min.	DEG.	After	5 min.	DEG.
"	0	100.5	"	5	99.2
"	1	99.2	"	8	99.2
"	1	99.2			

These experiments were repeated very frequently, and with various modifications; but the result was always the same. I have only to add that, if the first observation be made soon after a warm meal, then the temperature under the tongue becomes steady somewhat more rapidly, viz., in about six minutes; and this is, no doubt, chiefly due to the increased vascularity of the tongue caused by the process of eating.

It has been shown that, by heating the bulb of the thermometer beyond the temperature to be observed, the time of observation can be very much shortened, provided the temperature of the mouth has already arrived at a fixed point, by the mouth having been kept closed for about ten minutes before the observation was commenced, but not otherwise. The same applies also to the axilla, as experimentally shown by Dr. Liebermeister; a little consideration of the preceding remarks will show that this must be so, and we need, therefore, not adduce any special observations on this point.

To sum up, we must say that the time required for a thermometrical observation varies as to the locality in which the temperature is taken. This time is:

From 3 to 6 minutes for the rectum.

" 9 to 11 minutes for the mouth under the tongue.

" 11 to 24 minutes for the axilla (extreme cases excepted).

The time can be very materially shortened, in the case of the mouth and of the axilla, by keeping them closed for ten or fifteen minutes respectively previous to the introduction of the thermometer, the bulb of which has been warmed.

But however we may proceed, in order to be quite certain of a trustworthy result of our observation, it is best not to depart from the rule already laid down by Von Baerensprung* and by Traube,† and adopted also by Wunderlich‡ and Liebermeister; namely, not to finish the observation as long as the mercury has not remained stationary during five minutes. An accurate observation will then, if the axilla had been kept closed for a quarter of an hour, take not much more than ten minutes; and if that precaution have not been, or could not be, taken, from twenty to twenty-five minutes. It may, however, happen that the mercury, even if the temperature be high, does not become steady in the time usually found necessary, but continues slowly rising. This is the case when the observation is made during a febrile paroxysm, in which a rapid rise of temperature takes place. The usual daily fluctuations will but rarely interfere in this way, as, even during the time at which the daily changes take place more rapidly, the difference but very seldom amounts to one-fifth of a degree in five minutes; and, from all the circumstances, it will be easy in such a case to arrive at the true explanation of what takes place.

It is, of course, one thing to make observations with the thermometer which claim scientific value, and another to use that instrument in everyday practice. Here a shorter observation may be sufficient for many objects—for instance, to determine whether the patient has pyrexia at all or not; but, as soon as important conclusions are to be drawn from these observations, either for the diagnosis or for prognosis and treatment, then the most accurate method of observation is indispensable.

ABDOMINAL PUNCTURE IN TYMPANITES.§

By JAMES G. DAVEY, M.D., Northwoods, Bristol.

THE case which I am about to narrate is, to my mind, one of some practical value; it opens up a question, the reply to which I look for from this present meeting.

On the 6th of last October (1868), I saw at Whitfield, with Mr. Salmon of Thornbury, a female child about nine years of age, suffering from a very evident and severe affection within the abdomen. The history of the case was this. In the preceding August, towards the end of the month, Mr. Salmon's assistance was sought for this child, in consequence of her complaining very constantly of the "stomach-ache". Mr. Salmon found his patient with an abdomen somewhat tender and distended. The bowels were constipated, the tongue dirty and yellowish, and the breath foetid. She felt sick, and was without any appetite. He found her, in a word, *bilious*. Aperient medicines were prescribed, and warm poultices put on the abdomen. But little and temporary benefit resulted, and then more active aperients were resorted to. Enemata were administered from time to time; and the local application of tincture of opium with olive oil, and of mustard cataplasms with turpentine stupes, was suggested. The diet was, of course, of a light character, as broth and milk, with wine or brandy and water occasionally. Two or three weeks elapsed, and the symptoms not only did not give way or succumb to treatment, but they became much aggravated. The indications of disorder of the *primæ viæ* became more and more palpable. Thus the abdominal pain and distension were increased, and the sickness was more urgent. The disinclination to take food persisted; the tongue was still foul; and the bowels remained more or less constipated—that is to say, not duly purged. Palliatives, as spirits of chloric ether, hydrocyanic acid (dilute), etc., were now given, but with only a passing relief to the sickness and pain.

Some further time elapsed, and then it was that I was requested to see her—in consultation, of course, with Mr. Salmon. I found our patient lying on her back, with the knees drawn towards the abdomen, but fallen to the right side. She was greatly emaciated, and to all appearance not far from death. The abdomen was enormously distended, and very evidently tympanitic; tongue loaded, moist, and covered with a darkish mucus; breath very offensive. She had no appetite. The bowels had been relaxed ("diarrhœa"). The skin was somewhat hot and dry; pulse rapid and feeble. Though believing the case a hopeless one, we determined on a line of treatment. We sought—1, to maintain the powers of life by the aid of small and frequent

quantities of diluted brandy, beef-tea, milk, and the like; 2, to relieve the local distension and pain by the application of the linimentum hydragryri, a flannel bandage being worn over the abdomen and around the body. We agreed also on the administration of small doses of either calomel (one-sixth or one-eighth of a grain) or grey powder (one or two grains), with Dover's powder or opium, according to circumstances, every few hours; as well as a mixture containing spirit of chloric ether, compound tincture of cardamoms, and syrup of ginger, in camphor mixture. I suggested, further, the trial of a dose of castor-oil and spirits of turpentine every few days; as well as the use of O'Beirne's tube.

But to the point of this paper. In driving homeward with Mr. Salmon, it occurred to me that the enormous quantity of gas or wind occupying either the peritoneal sac, or, it might be, the intestines, being nothing more nor less than a foreign body, or, at any rate, a product of abnormal action in the parts concerned, should be evacuated. I said this to Mr. Salmon. That gentleman hesitated to fall in with my suggestion. I pursued the subject thus. If, instead of the air within the abdomen of our patient, we felt assured there was fluid or water (ascites), would not an operation—puncture—be then held to be imperative on us? Mr. Salmon assented. The consequence was, that my friend did, on the very next day, act on my suggestion, and operate. A note from Mr. Salmon to myself, dated April 18th, 1869, has these words, viz.: "In reply to your letter respecting the little girl at Whitfield Farm, I find that you saw her on the 6th of October (1868); and on the following day I punctured the abdomen, letting out an immense quantity of air, of a most offensive character, which continued at intervals to discharge until her death, which took place on the 19th of the same month. The operation," he goes on to write, "gave great relief, and tended much to mitigate her suffering, previously to which the difficulty of breathing had been most distressing."

Let me observe here, that the examination *post mortem* revealed the ordinary belongings of "tubercular peritonitis"; viz., adhesions, deposits of lymph, purulent effusions, and so on. There were, in addition, three ulcerations on the intestines, one of which had, it would seem, opened a communication between the gut and abdominal cavity; in the immediate neighbourhood of which, and external to the bowel, some faecal matter was seen. This "communication", however, was nowhere near the seat of "puncture".

As you will perceive, it was not the good fortune of Mr. Salmon and myself to achieve more than the relief of our patient's great sufferings; but does not this partial success seem to justify, in extreme cases of tympanitis, a resort to the trocar and cannula? However, I am not without evidence of a more assuring or promising character; and to that evidence I would now invite your attention.

In the *Medical Press and Circular* for April 7th, 1869, you will find these words; viz.:

"*Intestinal Puncture in Tympanites*.—Under the advice of Dr. Fonssagrives, intestinal puncture, as a last resource, has been several times practised at Toulouse, on two patients suffering from tympanites. In the first case, the abdomen formed an immense mass; the patient was perfectly cyanosed, and suffocating. An exploring trocar was inserted into the most distended part of the lower umbilical region. The gas escaped so violently as to extinguish a candle. The distension returning next day, two fresh punctures were made in different places, and gave so much relief, that the life of the patient was prolonged four days. In another case, six punctures were successively made, until the gases were naturally evacuated, and the patient cured."

Now it was on reading the above sentence that it occurred to me that the case of Mr. Salmon's was really deserving of record, as leading us up, as it were, to the very gratifying result of the treatment of tympanites by puncture, as realised by Dr. Fonssagrives of Toulouse; and hence this paper.

Speaking on this subject to a medical friend some weeks since, he told me that veterinary surgeons so treated the disorder among cattle. That this is the case, I have the authority of Mr. Nathaniel Leigh, the eminent veterinary surgeon of Bristol. I wrote to him for information in regard to the treatment of tympanites in horses and cows. He has replied as follows, under date April 28th, 1869. "Tympanites is a very common occurrence in cows, but not so frequent in horses. I have operated with great success on both. I make the puncture with a common trocar, or, if I have not that at hand, with a common pocket-knife. I pass the trocar or knife just between the last rib and the ilium, and on that side of the abdomen which is the more prominent. I think," he adds, "that, if the operation were more frequently resorted to, many beasts would be then saved which now die."

In view, then, of the foregoing facts, are we not called on to draw this conclusion—viz.: In extreme cases of tympanites (the air being either within or without the intestines, *i. e.*, in the peritoneal sac), the

* Müller's Archiv, 1852.

† Annalen des Charité Krankenhauses, i, 1852.

‡ Das Verhalten der Eigenwärme in Krankheiten. Leipzig: 1868. P. 79.

§ Read before the Bath and Bristol Branch.

other and more ordinary remedies failing, puncture of the abdomen is not only perfectly justifiable, but is, in point of fact, called for, even demanded, at our hands.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

MIDDLESEX HOSPITAL.

CHOREA: AT FIRST UNILATERAL (LEFT), THEN GENERAL AND SEVERE: GOOD EFFECTS OF STRYCHNIA.

(Under the care of Dr. MURCHISON.)

WE are indebted to Mr. H. A. Bale, Resident-Physician's Assistant, for the following notice.

E. B., aged 15, was admitted into the hospital on March 23rd. Her illness began with slight twitchings of the fingers of the left hand a month before admission; these spread to the arm, left side of the body, and face; the right limbs were now slightly affected, but the patient could walk and talk, and slept well; the heart-sounds were normal. She never had rheumatic fever. When admitted, the patient was put on ten grains of bromide of potassium three times a day; this was increased to thirty grains three times a day; but in spite of this, the right side rapidly became as bad as the left. Belladonna and cannabis Indica were successively tried, but without improvement.

On April 7th, the patient was noticed to be unable to sleep, owing to the violence of movements; pulse 108; temperature 101; skin hot and dry; the pupils dilated; the patient was stupid and heavy; her appetite was bad. Sulphate of zinc was then tried (two grains three times a day), but the patient became worse.

On April 10th, the patient was becoming much exhausted; she was unable to talk, and could only be fed with great difficulty, owing to the violence of the convulsions; she had also great difficulty in swallowing. The back of the body and limbs were sore and much chafed from the constant movement. She had great thirst. She had passed urine in bed for the last two days. She was now ordered six minims of liquor strychniæ in water, to be taken every four hours, and two drachms of brandy every two hours. The improvement was immediately apparent after two or three doses. The pupils became natural; the paroxysms less frequent, shorter, and less violent.

On the 15th, trismus was noted to have quite disappeared. She was taking nourishment freely, and the amount of liquor strychniæ had been increased to thirty-six minims in the twenty-four hours.

On the 18th, there were very slight choreic movements in the limbs and face. She was ordered ten minims of liquor strychniæ every eight hours.

On the 20th, the improvement continued, and the mixture was now ordered every six hours. The amount of strychnia was gradually increased from this time, until on May 12th she was ordered to take ten minims every four hours; the movements at the same time steadily, and at last completely, disappeared. The left arm was left almost paralysed, but rapidly recovered. The mixture was omitted on May 28th; and on June 7th the patient was discharged cured.

MUCOUS POLYPUS OF THE UTERUS: MENORRHAGIA: AN INTRA-UTERINE FIBROID POLYPUS.

(Under the care of Dr. HALL DAVIS.)

THE subject of the first case, Sarah Spickernell, aged 47, a widow, with two children, was admitted last November. Up to four months previously, she had enjoyed good health; but at that time menorrhagia commenced—ceasing, however, in a few days. Subsequently, it returned, at intervals of a fortnight; and she had also aching in the loins. Vaginal examination presented a dilated os uteri, embracing a polypus, half of its body projecting into the vagina. Its body was found unattached, except by a narrow pedicle to the lower part of the cavity of the body of the uterus. Its attachment could be reached easily, the lips of the os uteri being soft and flaccid. The general health had not as yet suffered; but, to prevent this from happening, it was decided to remove the polypus, which was of the size of a small walnut. This was easily and without pain effected by torsion, with the help of a small pair of uterine forceps. The patient recovered without a bad symptom, and there has been no recurrence of menorrhagia.

The subject of the second case was admitted in January this year—

Anne Plumb, aged 45, married, with nine children, the last born ten years ago. Hæmorrhage commenced twelve months ago, at and between the menstrual periods, without pain. Appetite and sleep were very deficient. On admission, the face was blanched. Hæmorrhage was going on. Examination by the point of the index finger discovered within the os uteri what appeared to be a fibroid polypus. The sound readily passed by the side of its body and all round it in the cavity of the uterus; but only the point of the finger could be passed just within the orifice into contact with the growth.

Steps were taken to dilate the os, preparatory to the removal of the polypus, and with it the cause of the hæmorrhage, which had much weakened and anæmiated the patient. A sponge-tent was introduced, and ordered to be changed for a fresh and larger one in three or four hours. Dilatation having thus been obtained of sufficient extent to admit the point of the finger to the fundus, and the uterus washed out with carbolic acid lotion to remove any taint left by the sponge-tent, the single wire *écraseur* loop was adjusted around the neck of the polypus. This could now be distinctly felt by the finger to be attached to the fundus. The patient was first placed under chloroform. The wire was now tightened; and, having made its way through the pedicle, the polypus, of the size of a large walnut, was removed by the uterine forceps. The uterus was then injected with solution of perchloride of iron. She was ordered, at bed time, four grains of blue pill, to be followed by three drachms of citrate of magnesia in the morning. The bowels were fully opened in the morning. No bad symptoms followed; and the patient, with the help of a good dietary and steel with quinine, went out convalescent, to return to the country, in fifteen days.

QUEEN'S HOSPITAL, BIRMINGHAM.

TWO CASES OF MOVEABLE KIDNEY.

(Under the care of Dr. FLEMING.)

Reported by Dr. SAWYER, Resident Physician.

Moveable Kidney on the Right Side; Abdominal Pulsation; Tonic Treatment; Relief.—E. R., aged 24, a domestic servant, was admitted on June 7, 1869.

History.—She enjoyed good health until five weeks previously, when she noticed a pulsation in her abdomen, together with a tumour on the right side of the belly, just below the free edges of the ribs. At this time she suffered much from pain after meals; occasionally from sickness and vomiting; and felt unequal to exertion. Seven months since, she became a mother; but the supply of milk failing, she was unable to suckle her child. Latterly she has menstruated regularly, and there is no leucorrhœal discharge. She says that the degree of pulsation in the belly and the prominence of the tumour vary considerably, and are especially marked when the general health is bad. There is no family history of disease. She denies having been in the habit of tight lacing, and there is no account of any blow or undue exertion preceding the appearance of the swelling.

Present Condition.—When the patient takes a deep inspiration, a tumour, having the size, shape, and feeling of a kidney, can be felt lying below the ribs on the right side, its lower margin almost reaching to the anterior superior spine of the ilium on the same side. Handling the swelling does not cause pain. The displaced organ slips about easily in the abdominal cavity, and can be moved to a small degree in every direction, but can be pushed most easily upwards and backwards under the ribs towards the normal site of the kidney. When the patient lies on her back, the tumour does not become evident until she takes a deep inspiration, when it passes from under the ribs; it can then be grasped by the hand, and retained in the abnormal position. In the erect position, the lump is easily felt; but it is, perhaps, most apparent when she lies on the back and inclines a little to the left side. A strong pulsation is felt in the abdominal aorta, extending from the ensiform cartilage to the umbilicus. The vessel is drawn to the front of the spine, and slightly to the right of the median line. There is no *bruit*, but slight pressure produces a loud murmur. The other organs of the body are healthy. The urine and micturition are normal. This patient has obtained much relief from treatment, which embraced the tonic regimen and medication, and the use of an abdominal bandage.

CASE II.—Moveable Kidney on Right Side caused by a Blow: Abdominal Pulsation; Tonic Treatment; Relief.—C. L., aged 48, single, washerwoman, was admitted August 5th, 1864. She was thin and delicate-looking, but had been stouter. At the age of ten, she fell with her right side upon the back of a chair, and was much hurt. Since then, she had had a lump in the belly, and had never felt thoroughly well. On examination, the swelling, which was readily detected, presented all the characters of a moveable kidney on the right side. It was

sensitive to pressure, but not painful, and when low down, caused a sense of dragging and considerable uneasiness. There had never been any disturbance of micturition; the urine had been at times copious and pale, but had been otherwise normal. Since the swelling was noticed, she had suffered more or less from atomic dyspepsia and constipation. She was weak, nervous, and hysterical, and has very marked pulsation in the abdominal aorta, in which slight pressure caused a loud murmur.

This patient remained two months under treatment, which comprised cod-liver oil, iron, and other tonic remedies. She improved much in general health and strength, becoming at the same time a little stouter. A bandage was applied to the abdomen to support and protect the swelling, which now causes very trifling discomfort.

REMARKS.—We have here two well marked examples of moveable kidney. In both, the subjects are women, and the affection is on the right side. Females are more liable to this displacement than men, probably in virtue of their greater proneness to atony and laxity of tissue, and because they are more often the subjects of rapid emaciation, which has been reasonably thought to favour displacement, by the diminution of the fatty cushion, which helps to retain the organ *in situ*. The right kidney is more frequently displaced than the left, probably in consequence of the pressure of the liver, and the greater length of the renal vessels on the right side; moreover, the ascending colon is not so closely applied to the kidney on the right side as the descending colon is on the left.

In the first case, the disorder occurred after parturition, but there is no history of undue or too early exertion. In the second case, the displacement was clearly traced to a blow on the right loin. Neither patient had been guilty of tight lacing. Both women were delicate, prone to hysteria, with impaired nutrition and lax fibre. There was no history in either of disorder of the renal function, or of micturition. The moveable organ was sensitive to pressure; there were backache and uneasy feelings in the belly. E. R. suffered a good deal for some days after admission from sickness and vomiting. Both patients had very pronounced pulsation of the abdominal aorta; and in E. R. this vessel was drawn to the front of the spine, and slightly to the right of the median line. I attribute this to the traction through its artery exerted by the displaced and moveable right kidney.

In cases of displaced kidney, several authors (Trousseau, Flint, Da Costa, and Roberts) assert that they are able to confirm the diagnosis by proving the absence of the organ from its normal position on the corresponding side. I cannot say that in these examples I have been equally fortunate; for, after careful examination by palpation and percussion, I could not detect such difference as would enable me to speak confidently as to the absence of the kidney on the right side.

When the organs are in their normal position, percussion in the back is usually more resonant over the left kidney than over the right—a difference readily explained by the closer apposition of the descending colon to the left than of the ascending colon to the right kidney. In E. R., the dulness on the right side remained the same when the kidney was displaced and carefully retained by the hand in its abnormal position, as when it was *in situ*; in fact, the percussion and appearance of the loin were quite unaffected by the presence or absence of the kidney.

Much relief was obtained in both cases from tonic treatment, rest, and the use of an abdominal bandage.

SOUTH STAFFORDSHIRE GENERAL HOSPITAL.

PROLAPSUS OF UTERUS AND VAGINA: OPERATION: RECOVERY.

(Under the care of Mr. VINCENT JACKSON.)

Severe Prolapsus of Uterus and Walls of Vagina: Operation for Elongation of Perinæum and Narrowing of Vagina, attended with Success.—Emma W., aged 19, unmarried, was admitted into the hospital on March 24th, 1869. The patient was a very healthy-looking young girl, by occupation a servant. Three months previously, she was delivered of a healthy living child. Owing to the peculiar circumstances of her position, she was up and doing, after her confinement, much sooner than she ought to have been; and she early perceived a "falling of the womb", until at last it reached its maximum descent, nearly half-way down the thigh. Frequent and unsuccessful attempts had been made to replace the organ, but with no benefit; and it was not until after her application for relief at the hospital that this was effected.

Before replacement, the condition of the poor girl was most distressing, the prolapsus being of a very complete and aggravated form. The uterus was also much swollen, and a good deal ulcerated. After reduction, which was accomplished in the supine position, with a little care and patience, the perinæum was seen to be intact, and also the neighbouring parts. She was directed to remain in bed, and ordered a liberal diet.

April 1st. The bowels were well opened yesterday. An operation was performed for elongating the perinæum and narrowing the vagina. Chloroform having been given, and the vagina well opened on the sides and below, Mr. Jackson very carefully dissected the mucous membrane of the floor and a considerable portion of the sides of the vagina for some distance backwards. The loose membrane detached laterally was cut away, that from the lower wall being left. A bleeding point or two were arrested by torsion. Three metallic sutures were deeply inserted; but, before the wires were tied over a bone rod, the raw edges of the loose portion of mucous membrane dissected from the floor were united anteriorly to the vagina; every effort being thus made to narrow the vagina as much as possible; and, to still further promote coaptation, three superficial wire sutures were inserted. The patient having been removed to bed, the feet and legs were tied together, and she was directed to lie on her left side, a catheter being retained in the bladder. She was ordered to have five grains of compound soap pill nightly.

On April 7th, the catheter was removed from the bladder; the two remaining superficial sutures were cut away—the deep ones and the lowest superficial having been removed on the 4th. Union was very good. The compound soap pill was omitted. On April 11th, the bowels were opened by an enema. On May 16th, the cicatrix of the wound was firm, hard, and strong. She was allowed to get up. On June 1st, she was discharged cured. When she visited the hospital on July 30th, the perinæum measured four inches, and presented a firm and resisting cushion.

REVIEWS AND NOTICES.

REPORT ON THE TREATMENT OF EPIDEMIC CHOLERA. By JOHN MURRAY, M.D., Inspector-General of Hospitals, Bengal Medical Department. From Information Collected by the Governments of Bengal, Madras, Bombay, N. W. Provinces, Punjab, Oudh, and Central India, by order of the Government of India. Calcutta: 1869.

It is difficult to over-estimate the value and interest of the Report on the Treatment of Epidemic Cholera by Dr. MURRAY, Inspector-General of Hospitals, Bengal Medical Department, just issued, by command of His Excellency the Governor-General, to all medical officers throughout the various presidencies of India. The object which Dr. Murray had in view appears to have been to make the Report as nearly as possible a digest of the opinions which obtain at the present time in India regarding the treatment of this frightful scourge; and, to do this, he issued circulars with searching and exhaustive queries, many of them put in a suggestive form, to all medical officers in India, requesting them to fill in their answers as far as their *personal* experience enabled them to do so. As many as five hundred men of various and some of vast experience in the disease, amongst whom were two Inspectors-general and thirty-one Deputy inspectors-general of hospitals, returned the circulars filled up. Their answers are all embodied in the Report, forming at once a most valuable, instructive, and interesting summary of what is known of the treatment of cholera in India. The queries are arranged in seven divisions: 1. The sanitary measures; 2. Precautionary measures; 3. The general indications of treatment; 4. The treatment in the first stage, or stage of *malaise*; 5. The second, or diarrhoea stage, frequently termed choleraic diarrhoea; 6. the third stage, or stage of collapse; and 7. The fourth stage, or stage of reaction. These again are subdivided. From the replies given under these heads, and from the results of a long experience, extending over a period of thirty-six years, Dr. Murray has drawn up the Report on the Treatment of Epidemic Cholera now before us. From it we cull a few of the more important points.

After a few introductory remarks, Dr. Murray commences his Report by giving a short account of the symptoms of the disease, including the intense form of cholera almost unknown in this country—the Ground or Earth Cholera, called by the natives, "Kalla Murees" (Black Death). He then proceeds to consider the sanitary measures to be adopted. Abundant evidence is given of the bad effects of impure air and water, improper food and clothing, and of overcrowding. As a fearful example of the last is adduced the Hurdwar epidemic of 1867. In it the disease arose amongst the pilgrims, and radiated in all directions, carried by the pilgrims from three hundred to seven hundred miles, and advancing in strict conformity to their rate of travelling, and being accelerated by the railway to Mooltan. The author and the great majority of the profession in India are contagionists, believing that the poison is inhaled from the atmosphere from close approximation to the sick, and not alone from the ejecta. Numerous instances are given where attacks of the disease have followed from visiting places recently occupied by cho-

lera cases, but in no case, it appears, after a period exceeding one year. The disease generally, though by no means only, rages in the warm and damp months, and usually in low latitudes.

In the chapter on Precautionary Measures, the theory of the spontaneous generation of the specific poison from defective sanitary arrangements receives but little support. It is in adopting precautions against the spread of the disease that our knowledge is brought to bear so powerfully in India. The good effects of isolation, rendered as perfect as practicable, and the more complete the better; of careful supervision of all sanitary arrangements; the adoption of the dry-earth system when possible, the soil being buried in trenches at some distance from the station, and, when practicable, burned,—are acknowledged on all hands. Special hospitals, especially in towns, should be provided. Removal of troops from barracks into tents—a practice first adopted by Dr. Murray with great advantage—is now recognised as an imperative measure, and has been the means of averting the attack from a great number of soldiers, and, what is also of importance, of diminishing the mortality from other diseases. There is no point in the treatment of the disease on which the opinions expressed in the Report are more decided or so unanimous as on this. Removal is considered one of the most efficacious means available for saving life during cholera epidemics in India.

Dr. Murray next proceeds to the consideration of the Medical Treatment of cholera. In addition to the three stages recognised in this country, that of diarrhoea, collapse, and reaction, he considers that there is generally an earlier stage, which he calls the stage of *malaise*, in which there is depression of spirits, with want of appetite and torpor of the bowels, which are induced by the presence of the poison in the system; and, during this stage, as in that of diarrhoea, much can be done in the way of treatment by cautious stimulation and the administration of tonics, anodynes, or, in the warm season, of quinine, and the careful avoidance of exhaustion and purgatives. In the second stage, that of diarrhoea, or choleraic diarrhoea, early treatment is considered of vital importance. To the name of choleraic diarrhoea, Dr. Murray has, however, strong objections, as it tends, he thinks, to conceal from the person the true nature of the malady, and increases the danger of dissemination over the neighbourhood. Of the various remedies employed, almost every one of which has been tried extensively in this country, opium obtains the confidence of the great majority, and is given generally in combination with chloroform, or some other stimulant. During cholera epidemics, pills containing opium, with carminatives and frequently camphor, are widely distributed amongst the villages and cities, and given in charge of the police and non-commissioned officers in the army, so as to be easily obtained by natives and soldiers suffering from diarrhoea. It has been found that soldiers will frequently avoid applying for diarrhoea medicine to the doctor, in case they should be sent to hospital, and thus the chance of arresting the malady is lost; whereas they apply without fear to the sergeant. Many lives have been saved in this manner.

In the third stage, or that of collapse, the Report states that “even in the most hopeless cases, though life may not be preserved, much distress or agony may be alleviated. In less intense cases, many lives are saved by judicious treatment, where a fatal result would have followed neglect or improper treatment.” It is interesting to mark the results of the injection of saline fluids into the veins, carried out extensively by some medical men in India. Their experience agrees with the more limited experience of physicians in this country, that the good effects are marked although temporary. The opinion generally entertained regarding the increase of temperature immediately following the injection is, that it is due simply to the higher temperature of the fluid. The case brought forward by Dr. Murchison, at the Clinical Society, in which the temperature of the injected fluid was below the rise which actually took place after the injection, would appear to prove that this opinion is erroneous. Of thirty-one cases where the injection was adopted by Mr. J. M. Joseph, twenty-nine cases proved fatal, and two recovered; the good effects lasted from thirty to fifty minutes. Similar results were obtained from the subcutaneous injection of quassia and chlorate of potash. Alcohol in large quantities and opium are universally condemned. As a stimulant, the inhalation of chloroform receives some support. The castor oil treatment has but few advocates; and purgatives generally are deprecated, except, on rare occasions, to remove irritating ingesta. Calomel does not meet with much support, except to restore the secretions of the liver and kidneys when the looseness is checked. Quinine is found of great value, especially during the rainy season; not that it is believed to have any specific effect on the cholera poison, but that it has the power, as a general tonic, of warding off miasmatic and other diseases, which would render the body more open to the action of the cholera poison. The importance of maintaining the recumbent position is strongly urged. Saline injections into the rectum

are found of use in relieving the cramps. The inhalation of chloroform is also said to have proved beneficial for the same symptom. According to Dr. Murray and many others, the cramps are due to irritation of the intestinal mucous membrane.

In the fourth stage, or that of reaction, the necessity of rest and sleep is enforced. Full directions are given for the treatment of suppression of urine; counterirritation and diuretics are employed, and quinine in small doses is considered very valuable, especially in the rainy season, in restoring the secretions and preventing the recurrence of collapse. Most agree that alcohol and opium are in this stage very dangerous, and, in fact, act simply as poison.

Such are, briefly, some of the most important points noticed in the Report; but we must not neglect to observe that some of the replies, from men, we presume, of large experience, are most disheartening; for example, Dr. Gordon, Inspector-General, British Medical Department, Bombay Presidency, says: “The remedies which have hitherto been proposed for the cure of cholera, I believe to be utterly valueless; and I am inclined to think that patients treated without medicine have as good a chance of recovery as those who are drugged.” Dr. Gordon must here surely refer to the stage of collapse. No man, in the face of the evidence afforded by the report, or by any experience of the disease, can for one moment doubt the efficacy of treatment in the stage of diarrhoea. There are, apparently, however, here and there men, who disbelieve in the effects of any treatment in the advanced stages of the disease; but they are in a very small minority.

Anyone reading carefully through the Report cannot but feel convinced of the great influence which, by our more mature knowledge, we can now exert to diminish the mortality of an epidemic and stay its progress. It is by making this more generally felt, by preventing the continuance of heroic measures in the treatment of cholera, that we think the Report will prove most valuable, omitting mention altogether of the importance and interest of the Report in many other ways. The thanks of the whole profession are due to Dr. Murray for the very able and elaborate manner in which he has presented his Report on a subject of such vital moment.

THE PRACTICE OF MEDICINE. By THOMAS HAWKES TANNER, M.D., F.L.S., etc. In Two Volumes. Sixth Edition, enlarged and thoroughly revised. Pp. 656 and 645. London: Renshaw. 1869.

DR. TANNER'S book on the Practice of Medicine has undergone a remarkable series of developments. First appearing some years ago as a small manual, it gradually increased until in the fifth edition it reached the size of a large octavo volume of 938 pages; and now, in the sixth edition, we have it in two volumes containing together 1,300 pages.

In preparing the new editions, the author has laboured to keep the work up to the standard of existing medical knowledge; and he states that, in preparing this new edition, all the time which he has been able to spare from his professional duties for two years has been devoted to the careful revision and improvement of the work. The general arrangement remains as before; and the author has, in the manner in which he has dealt with his subject, given another evidence of that happy facility which he possesses of giving the essential points of a mass of information in a well connected and instructive form.

To the work is added a very copious Appendix of Formulæ, comprising a Summary of Climates for Invalids and of Mineral Waters; and the utility of the work is further increased by an elaborate Index.

THE HOSPITAL FOR WOMEN has just received a donation of £1,000 from an anonymous donor, R. T. W.

THE INO ROWING CLUB.—The silver challenge cup presented by the Medical Officers of the Post Office for annual competition by members of the Ino Rowing Club, composed chiefly, but not exclusively, of Post-office men, will be competed for on Saturday, the 28th instant. The course will be from Hammersmith Bridge to the railway bridge at Barnes, and the time of starting 5.30 P.M., or thereabouts.

KING'S COLLEGE.—The following is a list of the Prizes and Certificates gained in the Summer Session:—Practical Chemistry: prize, Andrew Duncan; certificates of honour, G. Hartridge, S. A. Robinson, and A. Nicholson. Forensic Medicine: prize, A. W. Blyth; certificates of honour, W. Allnutt and G. L. H. Rowland. Botany: prize, A. W. Blyth; certificates of honour, J. N. Rat and F. P. F. Ransom. Obstetric Medicine: prize, E. B. Roche; certificates of honour, R. B. Morrell and W. Allnutt. Materia Medica: prize, W. Berry; certificates of honour, F. P. F. Ransom and E. R. Morgan. Comparative Anatomy: prize, G. L. H. Rowland. Clinical Surgery: prize, E. B. Roche; certificate of honour, C. T. Vachell. Todd Medical Clinical: prize, R. W. Lyell.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, AUGUST 21ST, 1869.

THE ORIGIN OF LIFE.

IV.

THE central point of the controversy which has raged between M. Pasteur and his heterogenist opponents has been, as to whether the air does or does not contain that multitude of germs which was originally stated to exist therein by Spallanzani and Bonnet. This was the theory that these early observers started in answer to the experiments of Needham: it is one which has always had its advocates in the intervening years, but no one has endeavoured so skilfully to establish its truth by well conceived experiments as M. Pasteur. This accomplished chemist has gone into the whole subject in his *Mémoires sur les Corpuscles Organisés qui existent dans l'Atmosphère* (*Ann. des Scien. Naturelles*, t. xvi, 1861); and although he at first adopted entirely the views of Spallanzani, that corpuscles existed everywhere in the atmosphere, and were universally diffused, he now holds a very modified form of this doctrine. His experiments have forced him to the conclusion that certain parts of the atmosphere contain no germs, so that he is now compelled to surmise that these probably exist in veins or areas, variously intersecting germless portions of atmosphere. The organic germs which he has found, also, by filtering different kinds of air, in a skilfully contrived apparatus, through gun-cotton, have certainly been by no means so numerous as might have been expected from the general statements of the Panspermatists. And as the gun-cotton containing these germs, filtered from the atmosphere, has been dissolved in sulphuric æther, the organic and inorganic particles collected have subsided, so that, after having been transferred for a time to a different medium, they have been in a condition fit for subjection to a careful microscopical scrutiny. This scrutiny has, of course, demonstrated the existence of inorganic particles, and of shreds of tissue of all kinds—of minute portions of vegetable fibre or of animal products (constituting the infinitesimal offcastings of textile fabrics), of starch granules in all variety, of granules of carbon or of silica—all these varying in quantity and in relative proportion according to the situation from which the air submitted to examination had been taken. Then, there have been discovered, also in variable quantities—though for the most part sparsely—minute molecules and globules which may be, and possibly are, organic bodies; but at no time have the panspermatists been able to discover the actual germs and ova of the microscopic fungi, and of the ciliated infusorial animalcules which are so plentifully produced in organic solutions. The forms of many of these are known, and their dimensions have been ascertained, so that if present they could be readily recognised by skilled microscopists.

And yet, as we understand the question, one of the objects of M. Pasteur and others in making their experiments, was to demonstrate the existence of the spores of these very fungi, and the germs or ova of these very infusoria in the atmo-

sphere, in order to account for the multitude of such lower forms of animal and vegetable life—so soon teeming in organic solutions after exposure to the air. In this respect, therefore, we must conclude that their experiments have had purely negative results. But, as we have previously stated, so far as the possibility of bringing about any settlement of the question by means of it, this search was almost as useless as it has proved to be futile. The heterogenists do not maintain that specimens of the genera *Paramecium* and *Kolpoda* are capable of being directly evolved out of a putrescible organic solution; such a thing, they distinctly say, never takes place, so far as their experience goes. The necessary and invariable preliminary is that innumerable monads, bacteria, and vibrios, should have existed, and that then out of the dead bodies of these the much higher ciliated infusorial animalcules are evolved by slow and definite stages, such as are capable of being watched by all skilled microscopists. It would seem, then, almost childish to be looking about in the air for germs of these animals. Why did they not rather look through their microscopes more diligently to ascertain whether or not that could take place under their very eyes, which had been affirmed to occur by Pineau, Nicolet, Pouchet, Schaafhausen, Mantegazza, and others? If it did not, then one of the strongest points in support of the doctrines of the heterogenists would have been swept away. It must, doubtless, be regarded as an interesting contribution to our general scientific knowledge, if we are taught by M. Pasteur what the air really does contain; but, even granting that he had found the ova of these higher infusorial animalcules, amongst other matters filtered from the atmosphere we do not see how it could have seriously affected the doctrines of the heterogenists, so long as their statements concerning the development of these animals had not been gainsaid. If it were generally admitted that ciliated infusoria might be evolved out of the aggregated dead bodies of monads and bacteria, we think that M. Pouchet and others might rest upon this fact principally; and that it would soon appear probable to most, who were capable of forming a judgment upon the question, that the teeming multitudes of ciliated infusoria, which so rapidly appear in organic solutions, were more likely to have originated, in great part, after this established mode of development, than to have been the offspring—either by means of eggs, buds, or fission—of two or three solitary animalcules which may have dropped into the solution in a dried condition, or in the form of ova. It would be rather inconsistent with known facts if we were to assume that such a teeming progeny could result in such an excessively short time from a few solitary individuals, even by the combined methods of fission, gemmation, and sexual reproduction. It was formerly believed that the infusoria did multiply rapidly by means of fission, but of late years this doctrine has been very much shaken. Mantegazza has stated that he has only seen ciliated infusoria undergo such a process of division two or three times, though millions of these animals of all sorts of species had passed under his observation during a space of fourteen months; while M. Pouchet, during observations extending over many years, says he has never once seen a *Vorticella* divide; though, amongst individuals of this genus, the process has been described as a common one. He gives a different explanation of appearances which have been considered by other observers to be indicative of such a process either completed or in process of completion. Then, the process of gemmation, or the throwing off of buds which are to be developed into perfect animals, is also probably not such a common occurrence as has been imagined; and the sexual method of

generation—the existence of which amongst the infusoria has been so fully established by the recent researches of Balbiani and of MM. Claparède and Lachmann—has been admitted even by these authors to be rather an exceptional method of reproduction, and one which takes place only under particular conditions. Thus, in weighing the evidence, it must never be forgotten that great difficulties do stand in the way of our accounting for the existence of such amazing numbers of these ciliated infusoria in solutions which have only been exposed for a very short time to the influence of a limited portion of air confined beneath a bell-glass.

But, as we have seen, altogether the most vitally important question to be resolved at the present time, is as to the mode of origin of the primary organic forms—the monads, bacteria, and vibrios. Do they really separate and become evolved under suitable conditions, out of homogeneous organic solutions, or do they originate from pre-existing germs? Of course it is allowable to look at this part of the question from an *à priori* point of view, so long as we do not attach too much importance to this method of reasoning, and such considerations may enable us to form a more correct appreciation of the experimental evidence bearing upon the subject. If a ciliated infusorial animalcule, $\frac{1}{3000}$ " in diameter, can originate from changes taking place in a mere aggregation of dead organic granules, we may fairly ask ourselves whether it is so very much more improbable that a mere organic granule, less than $\frac{1}{500000}$ " in diameter, should be capable of arising in an apparently homogeneous organic fluid, by a process of atomic evolution, the steps of which are infinitely beyond the possibility of resolution by the highest powers of our microscopes. Is there not said to be, in both cases alike, a transition from dead organic matter to life and organisation? and may it not be argued that the two cases are dissimilar by reason of an accidental rather than a fundamental difference? In the one case, the lifeless organic molecules out of which the ciliated infusorium is to be evolved are of an appreciable and measurable size; in the other, the lifeless organic molecules out of which the monad is to be evolved are inappreciable to us, and utterly incapable of recognition by means of the highest microscopic powers with which the optician can supply us. It is impossible for us to ignore this method of augmentation; but now let us look at the question from its other aspects.

We think it will be recognised by most, that it would be of comparatively little good to search in the air for the *germs* of monads, bacteria, and vibrios. The largest of the former are not more than $\frac{1}{300000}$ " in diameter; and if we do not believe them to have originated by a process of evolution such as we have been suggesting, then, of course, we must suppose that they have resulted from pre-existing germs, which would practically be as invisible to us in the air as they now are in water. What microscopist would pretend to be able to identify the *germs* of monads in a solution? And we need only speak of monads; for there can be little doubt that the bacteria and vibrios are little later developments, or else result from the previous existence of such primal normal forms. It would seem most probable that they originate out of the nomad forms by direct processes of growth and development, although Dumas and Dr. Hughes Bennett state that, in certain instances, they have seen the more complex forms result from the more simple by a mere process of coalescence in linear series—monads uniting to form bacteria, and bacteria joining so as to give rise to vibrios. Dr. Bennett pertinently enough asks, with reference

to the supposed "sporules" obtained by M. Pasteur from filtration of the atmosphere, how these bodies could produce "the incalculable millions of minute molecules in the smallest fragment of the pellicle we can transfer to our microscopes, in which, as we have seen, the infusoria originate? It has been supposed that, on falling from the air, they undergo rapid division, and spread over the surface with the greatest rapidity; but no one has ever seen this remarkable phenomenon, and the slightest consideration must show that such an assumption is completely adverse to what can be readily demonstrated on the surface of every infusion. Thus there can be no doubt that the minutest molecules are formed first, and the bacteria, vibrios, and filaments, last. . . . Surely the idea of their rapid multiplication by division is opposed to that of their power of elongating into bacteria and vibrios, whether by aggregation or growth from their extremities." It will be seen, however, that Dr. Bennett does assume the possibility that the organic particles gathered from the atmosphere by M. Pasteur may have been the germs or "sporules" of monads; but it seems that we have no right to assume this at all as a possibility, unless we are also content to believe that the germs of these lowest forms of life are very much larger than the complete organisms to which they are to give rise.

So far as actual observations go as to the genesis of the primal forms of life, it is stated by M. Jolly that, if a clear solution be taken, in which some meat has been previously macerated, and if a portion of this be watched for some hours under the microscope, after a time the previously clear fluid may be seen to become filled with a prodigious quantity of monads and bacteria. But Professor Mantegazza first watched the appearance of bacteria in a solution which contained some fragments of vegetable tissue in an hermetically sealed glass tube. On this occasion he displayed that rare zeal which so often characterises the votaries of science: he watched this solution assiduously for sixteen consecutive hours. At the expiration of two hours, he saw the first granules appear in the solution, at first simply exhibiting a slow, oscillating movement, but, after a time, darting about with the rapid movements by which they are characterised. Their number increased imperceptibly, till at the end of ten hours the liquid had become quite cloudy. Mantegazza says: "L'observation dura seize heures; et pendant tout ce temps, je ne me levai pas de mon siège, je ne quittai pas le champ du microscope, regardant tantôt avec un œil, tantôt avec l'autre, puis les fermant tous deux pendant environ une demi-minute dans le but de les reposer. J'aurais eu le vif désir de continuer l'observation, mais la nature fut plus forte que ma volonté; mes yeux commencèrent à se remplir de larmes et à ne plus voir distinctement le champ du microscope: je dus me lever, brisé de fatigue, mais enchanté d'avoir surpris la vie à son berceau."

THE Queen has been pleased to appoint Dr. Wilson Fox to be a Physician Extraordinary to Her Majesty.

MR. GEORGE COWELL has been appointed Assistant-Surgeon to the Westminster Hospital.

THE Morpeth Local Board of Health have resolved to discontinue the services of their medical officer.

The Introductory Lecture at the Westminster Hospital will be delivered by Dr. Joseph Walker, dental surgeon to the hospital.

M. MAREY has been nominated Titular Professor of the Natural History of Organised Bodies in the Imperial College of France, in the room of M. Flourens, deceased.

A HOSPITAL barrack has been nearly completed in one of the courts of the General Hospital at Vienna.

MR. JOHN BLAND, a surgeon, residing in Durham, was killed a few days ago by being knocked down by a train while passing over a railway line.

THE business of the thirty-ninth annual meeting of the British Association for the Advancement of Science commenced on Wednesday evening, with an address by the President, Professor Stokes of Cambridge.

THE first competitive examination for assistant-surgeons in Her Majesty's Navy was held at Chelsea, from the 9th to the 14th instant. The names of five candidates only have been published as having passed.

A STATUE of Dr. S. T. Chadwick of Southport, who has given £15,000 for the erection of model dwelling-houses and an orphanage in Bolton, is about to be placed in the last named town. The statue is to be of bronze, about eight or nine feet high, and placed on a pedestal of granite or other suitable stone.

QUALIFICATIONS OF POOR-LAW MEDICAL OFFICERS.

WE a few weeks ago announced the fact, that the Poor-law Board had recognised the right of the Royal College of Physicians of London to grant the double Licence; viz., a Licence in Medicine and a Licence in Surgery, required by the Poor-law Board as qualifications for Poor-law medical officers. As we have since received several communications upon the subject of the qualifications of Poor-law medical officers and the powers of Licensing Bodies, we subjoin a list of the powers of these different Bodies as at present recognised by the Poor-law Board.

Authority granting the Qualification, and nature of Qualification.

Royal College of Physicians of London—Licence in Medicine, and Licence in Surgery.
 Royal College of Physicians of Edinburgh—Licence in Medicine.
 King and Queen's College of Physicians in Ireland—Licence in Medicine.
 Royal College of Surgeons of England—Licence in Surgery.
 Royal College of Surgeons of Edinburgh—Licence in Surgery.
 Faculty of Physicians and Surgeons of Glasgow—Licence in Surgery.
 Royal College of Surgeons of Ireland—Licence in Surgery.
 Society of Apothecaries, London—Licence in Medicine.
 Apothecaries' Hall of Dublin—Licence in Medicine.
 University of London—Degree in Medicine.
 University of Edinburgh—Degree in Medicine and Surgery.
 University of Oxford—Degree in Medicine.
 University of Cambridge—Degree in Medicine.
 University of Durham—Degree in Medicine and Surgery.
 University of Glasgow—Degree in Medicine, Degree or Licence in Surgery.
 University and King's College, Aberdeen—Degree in Medicine.
 Marischal College and University, Aberdeen—Degree in Medicine and Surgery.
 University of St. Andrew's—Degree in Medicine and Surgery.
 University of Dublin—Degree in Medicine and Surgery.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

AT the last meeting of the Council of the Royal College of Surgeons, held on Thursday, August 12th, Mr. Erasmus Wilson was unanimously appointed Professor of Dermatology to the College for the ensuing year. Mr. Spencer Smith's motion "for a Committee to advise the Council as to the advisability and the practicability of instituting one conjoint Board for conducting joint examinations, upon which qualifications to practise medicine, surgery, and midwifery, may be obtained", was seconded by Dr. Humphry, and carried. The following gentlemen were appointed to form the Committee: Mr. Hilton, Mr. Busk, Mr. Simon, Mr. Smith, Dr. Humphry, with the President and two Vice-Presidents. Altogether, we think the Committee a good one, and we believe it will undertake the consideration of this important measure in a

liberal spirit. We were at first almost afraid that there was a little too much of the old element in the composition of the Committee: we trust, however, that the result of its deliberations will show that it is fully alive to the desirability of carrying out a measure of so much moment. The subject is one requiring delicate handling; and, if not arranged amicably amongst the various licensing bodies, it will in all probability be summarily dealt with by Government. A motion, by Mr. Charles Hawkins, relative to the examination of candidates for the membership at the bedside of patients was, at the mover's request, referred to the Court of Examiners. A motion, by Mr. Curling, relating to the mode of nomination of Professors and Lecturers, was carried.

THE MANCHESTER GUARDIANS AND DR. LEDWARD.

A COMMITTEE meeting of the Manchester Medico-Ethical Society was convened recently, to take into consideration the late vote of censure passed by the guardians on Dr. Ledward. A letter was received from that gentleman, however, in which he stated that he wished to avoid further publicity, and therefore deprecated any further action being taken in the matter, being himself satisfied with numerous letters which he had received from members of the profession privately, expressing their sense of the injury which had been done to him. It was, therefore, resolved to allow the matter to drop; and no further steps have been taken in other quarters.

MIDDLESEX HOSPITAL.

A QUARTERLY general court of the governors of this hospital will be holden next Thursday; when, in furtherance of a resolution passed at the last court, it will be proposed to appoint Dr. Francis Hawkins and Dr. A. P. Stewart consulting-physicians, and Mr. Alexander Shaw consulting-surgeon. The long services of these gentlemen in connexion with the hospital well entitle them to this honourable recognition.

LIGATURE OF THE ABDOMINAL AORTA.

THIS formidable operation was performed on the 6th instant by Dr. P. H. Watson of Edinburgh. The common iliac artery had been tied nine weeks previously, with a catgut ligature, according to the antiseptic plan. Secondary hæmorrhage set in; and, the arteries being in a diseased state, Dr. Watson opened the abdomen through the linea alba, and tied the aorta with a common silk ligature, about half an inch above the bifurcation. He also tied the external and internal iliac arteries on the affected side. The patient went on well for forty-eight hours; but began to sink after the sixtieth hour, and died sixty-five hours after the operation.

THE FACULTY OF MEDICINE IN PARIS.

THE annual distribution of prizes to the pupils took place on Saturday last. Of the six prizes offered by competition by *concours*, and consisting of remissions in various degrees of the arts of manipulation and examination, with medals and books, none were awarded. The Corvisart prize of 400 *francs* was equally divided between M. Barbaurey and M. H. Chevalet, for essays on the Coagulation of Blood in the Veins, illustrated by clinical observations; M. P. Rudin received honourable mention. The Mentyon prize of a silver-gilt medal and 300 *francs*, for the best essay on the prevailing diseases of the past year, was not awarded; but M. Rathery received an "encouragement" of 200 *francs*. The Barbier-prize of 2,000 *francs*, for the invention of improved mechanical apparatus, was awarded; 1,500 *francs* being awarded to M. Longuet for inventing an improved sphygmograph; and 500 *francs* to M. Bandon, of the Imperial Marine, for improvements in the method of withdrawing fluids accumulated in a cavity. A prize of 2,000 *francs*, founded by the Countess de Chatauvillard, for the best work on medical science, was not awarded. The sum of 1,000 *francs*, bequeathed by the Baron de Trémont, was divided, in accordance with the testator's will, between three students of limited means who had distinguished themselves in the school. The authors of four theses received silver medals; of fourteen, bronze medals; and of twenty-seven, honourable mention. M.

Lasègue delivered an oration in honour of Trousseau, speaking very highly of his merit as a clinical teacher. "In Trousseau's lectures," he said, "nothing was unprepared; everything cost patient labour. Every idea which he had acquired by practice or by study was handled, fashioned, and bent, until it took the desired form and became teachable. Endowed with a prodigious memory, always active and always ready, he excelled in grouping analogous facts; and in doing this he was by his nature led rather to comparison than to generalisation. The clinical histories which he related were not mere proofs in support of an assertion, but formed the ladders by which he conducted his audience from the base to the summit of his argument. His method was that of those clinical teachers who give demonstrations rather than dissertations; it might be supposed, in hearing him, that the patient was at hand, or that the hearer was taking part in an observation of which Trousseau had undertaken to give a summary of the main points. . . . For this kind of teaching, Trousseau had great natural aptitudes; but it was not the less necessary that these qualities should be improved by laborious cultivation."

EDINBURGH UNIVERSITY CLUB.

THE quarterly dinner of this club was held on the 11th instant, at St. James's Hall. The chair was taken by Dr. Sieveking, with Dr. Duckworth, the Honorary Secretary, acting as croupier. At a meeting of the Council held previously—Dr. J. Burdon Sanderson, F.R.S., in the chair—Dr. J. Crichton Browne, of the West Riding Lunatic Asylum, Wakefield; Mr. W. A. Mackinnon, V.C., C.B., Staff-Surgeon-Major, of Netley; and Dr. Ninian A. Williamson, of the Seventh Dragoon Guards, were elected members of the club.

GUY'S HOSPITAL: THE NEW WING.

THE workmen are now engaged in digging the foundation for the new wing at Guy's Hospital, which Messrs. Lucas Brothers have undertaken to finish and hand over to the governors by the 1st of July next year. It will provide accommodation for one hundred and sixty patients, and a corresponding staff of sisters and nurses. It will include also a commodious kitchen, entirely apart from the building, but communicating with the new and old hospitals by means of covered passages, from the ends of which lifts will be made to ascend and connect each floor of the two buildings with the kitchen. The contract price for the entire work does not amount to more than £28,500—a comparatively small sum, when it is considered that each patient will have not less than 1,800 cubic feet of space, and that a somewhat costly and elaborate system of ventilation, chiefly by extraction, has been provided for. All the most recent improvements in hospital construction will be introduced into the new building, as far as its configuration will admit; for it has been found necessary, in consequence of limited space and exigence of architecture, to adhere to the original design of having four rows of beds within the external walls of the building. When finished, the hospital will have accommodation for seven hundred patients; but one chief object of the new structure is to allow for the occasional vacation of the other wards for sanitary purposes; so that it is not to be desired that the beds in the hospital should at any time be fully occupied.

PUBLIC TEACHING OF PHYSIOLOGY.

A VERY useful course of lectures has lately been delivered at the South Kensington Museum, by Dr. Michael Foster, for the purpose of instructing teachers in the methods by which, with common and easily acquired objects, they may bring the most important facts of physiology within the comprehension of their pupils. The course was instituted by the Lords of the Committee of Council on Education, on the recommendation of Professor Huxley, the Examiner in Physiology in the Science and Art Department. In his course, Dr. Foster gave first an outline of the general structure of the body and its component parts, and then treated of the blood, the circulation, respiration, food and its changes, motion and locomotion, the nervous system, and the organs of sense. The lectures were demonstrative; and the lecturer showed how

all the examples required, even for an advanced course of physiological study, might be obtained readily from a village butcher. We are glad to learn that the course was well attended by a number of teachers who came to London for the purpose. It ought to have important results in the spread of a sound knowledge of the leading facts of physiology among the community.

SOCIAL SCIENCE ASSOCIATION.

AT the annual meeting of this Association, to be holden in Bristol from September 29th to October 6th, the following questions will be discussed in the Public Health Department:—1. Can Government beneficially further interfere to limit the spread of infectious diseases? 2. What legislative measures might be proposed to deal with cases of uncontrollable drunkenness? 3. Should the Contagious Diseases Act be extended to the civil population?

METROPOLITAN DEAD-HOUSES

THE vestry of Greenwich has determined, on the representation of Dr. Purvis, to provide a better dead-house than that in which their medical officer has hitherto been obliged to make *post mortem* examinations. Dr. Purvis, in bringing forward the subject, informed the vestry that there was no water-supply to the parish dead-house, and that the water required by the medical men in making autopsies had to be paid for by them. The ventilation, also, was utterly defective. It has been determined to allow funds for the conversion of another building into a dead-house, with a skylight, water-supply, and drainage.

THE ST. PANCRAS GUARDIANS AND THEIR MEDICAL OFFICERS.

THE inquiry into the conduct of the St. Pancras Guardians and their medical officer, Mr. Harley, was resumed before Mr. Bere, Q.C., on Wednesday last. The new Guardians are charged with having sent Mr. Harley, who was outdoor medical officer, into the infirmary of the workhouse, with implied instructions to reduce the number of patients by sending the occupants of beds in the infirmary into the workhouse itself or out of the place altogether, in order to prove the allegations of the new Guardians that the action of the old Guardians in commencing the erection of a new infirmary at Highgate was unnecessary and extravagant. The result of Mr. Harley fulfilling this instruction, it is further alleged, was that a woman, Mary Allen, had her death accelerated, and the jury made this charge after holding an inquest on the body. Several witnesses were examined, including Dr. Joseph Hill, Dr. J. Ellis, Mr. Harley, Dr. Goodfellow, and Dr. Steele of Guy's Hospital; after which the inquiry was again adjourned.

SCOTLAND.

UNIVERSITY OF EDINBURGH.

HER Majesty has been pleased to approve of the recommendation of the University Court that retiring allowances be granted to Professors Syme and Henderson.

THE CHAIR OF CLINICAL SURGERY IN THE UNIVERSITY OF EDINBURGH.

MR. JOSEPH LISTER, Professor of Surgery in the University of Glasgow, has been appointed Regius Professor of Clinical Surgery in the University of Edinburgh, in the room of Mr. Syme, whose resignation was reported some time ago.

NORTH OF SCOTLAND MEDICAL ASSOCIATION.

THE annual general meeting of this thriving Association took place on Saturday, August 7th, in the Medical Hall, Aberdeen. There were present Dr. Ross, Elgin, President, in the chair, and thirty-seven members. The President, on taking the chair, thanked the Association for the honour they had done him in electing him to the office. The question of the present unsatisfactory position of parochial medical officers

was discussed. In reference to the memorial to Government agreed upon at the last meeting of the Association, Dr. Beveridge, the Secretary, said that the principal medical corporations throughout Scotland had been communicated with, and had expressed pretty general approval of the object. The matter was ultimately reported upon by the Board of Supervision to the Home Office, which was inclined to look favourably upon the memorial; but no opportunity had occurred for the subject being taken up and pressed upon Government. Votes of thanks were passed to Mr. Fordyce, M.P., for the interest he had taken in the object, and to the Council for the trouble they had taken in the matter. A committee was appointed, consisting of the President, Dr. Bruce, Dr. Beveridge, Dr. Gavin, and Dr. G. G. Brown, to adopt further measures. Dr. Beveridge then brought forward, on behalf of Dr. Struthers, the following motion regarding the amendment of the Medical Act, which was seconded by Dr. Kilgour, and carried—"That the Association address a memorial to the Lord President of the Privy Council, Earl Granville, expressing the hope that he will introduce during next session of Parliament an amendment of the Medical Act, which shall embody the views stated in the communication addressed by his lordship's direction to the General Medical Council, of date May 14th, 1869; and which shall also remodel the General Medical Council, reducing the number of its members, and changing the mode of its election, so as to render it more representative of the public interest and of the medical profession. And that a committee of the Association be appointed to draw up the memorial." The committee appointed consisted of Drs. Struthers, Kilgour, Keith, and Beveridge. Dr. Beveridge then read papers on some interesting hospital cases. Dr. Keith (Aberdeen) was unanimously elected President for the ensuing year. After a vote of thanks to the Chairman, the meeting separated. The members of the Association afterwards dined together at the Northern Hotel.

THE NEW SYDENHAM SOCIETY: ELEVENTH ANNUAL MEETING.

THE annual meeting of the New Sydenham Society was held during the recent meetings of the British Medical Association in the Town Hall, Leeds. Dr. Sibson, Vice-President, was in the chair. The minutes of the preceding meeting having been read, the Report, as drawn up by the retiring Council, was presented, and, on the motion of Dr. Shann, seconded by Dr. Barclay, was unanimously adopted. It was as follows.

"The Council have the pleasure to report that the conclusion of the Society's eleventh year finds it in its usual condition of prosperity. The income for 1868 was nearly equal to that for 1867, and exceeded that for 1866, amounting in total to £2,951. During the year, including the Catalogue of Portraits of Skin Diseases, five volumes were issued, thus making a total of forty volumes in ten years. Under the term volume are here comprised the *Fasciculi of the Atlas of Skin Diseases*, the publication of which is much more expensive than that of an ordinary printed book. Although during each of the last two years the expenditure has somewhat exceeded the income, and thus the balance in hand has been reduced, yet the financial state of the Society is such that the Council feels no anxiety at its being able, in the future, to continue the annual average of four volumes. The balance now in hand amounts to nearly £1,000, and in addition to the usual income from annual subscriptions, the Society possesses a valuable property in stock in hand.

"The demand for back volumes is still steady. Ten complete sets were required during the year.

"The Council has recently adopted for translation several important works, which will, it believes, be acceptable to the profession. Amongst these are:—

"Professor Niemeyer's *Lectures on Phthisis*. Wunderlich's *Treatise on Temperature in Disease* (being a complete guide to the use of the thermometer in medical practice). Stricker's *Manual of Human and Comparative Histology*. This work will be a complete treatise on the microscopic anatomy of the tissues, and will be produced (under the editorship of Dr. Stricker) by a staff of authors, which includes most of the distinguished histologists of Germany. Only the first part is as yet published. Its translation has been entrusted by the Council to Mr. Henry Power, the Editor of the last edition of Carpenter's Physiology. The first vol-

ume will probably be ready early next year, and the issue of the English edition will be almost simultaneous with that of the original.

"The Council has also under consideration several other important works. During the present year three volumes have already been issued, and the series will be completed by the ninth *Fasciculus of the Atlas of Skin Plates*. The third volume of Trousseau's *Clinical Medicine* will be ready early in 1870."

The balance-sheet was next read and adopted. In answer to inquiries, the Secretary stated that it was not usual to allow members to fall into arrears. If a subscription remained unpaid at the end of the year, the books were stopped; and the Society had habitually a balance of about a thousand pounds, which was quite clear of all liabilities, and additional to its stock in hand.

The ballot was next taken, and the following were declared duly elected as the Society's officers for the ensuing year. *President*: John Hilton, Esq., F.R.S. *Vice-Presidents*: H. W. Acland, M.D., F.R.S.; T. E. Beatty, M.D.; J. H. Bennett, M.D.; C. Chadwick, M.D.; E. Charlton, M.D.; Sir D. Corrigan, M.D., Bart.; S. Hey, Esq.; W. D. Husband, Esq.; G. E. Paget, M.D.; J. Paget, Esq., F.R.S.; T. B. Peacock, M.D.; F. Sibson, M.D., F.R.S.; Sir J. Y. Simpson, M.D., D.C.L., Bart.; Sir T. Watson, M.D., F.R.S., Bart.; C. J. B. Williams, M.D., F.R.S.; Erasmus Wilson, Esq., F.R.S. *Other Members of Council*: F. E. Anstie, M.D.; J. Barclay, M.D.; T. W. Bartleet, M.B.; J. Warburton Begbie, M.D.; C. Brooke, Esq., F.R.S.; T. Cammack, M.D.; T. M. Daldy, M.D.; Herbert Davies, M.D.; J. Langdon Down, M.D.; R. Druitt, M.D.; A. E. Durham, Esq.; C. Hilton Fagge, M.D.; R. W. Falconer, M.D.; S. Fenwick, M.D.; C. Heath, Esq.; M. H. Higginbottom, Esq.; James Hinton, Esq.; J. Hughlings Jackson, M.D.; T. Carr Jackson, Esq.; J. C. Langmore, M.B.; A. Leared, M.D.; G. May, Esq.; W. D. Moore, M.D.; John W. Ogle, M.D.; E. L. Ormerod, M.D.; O. Pemberton, Esq.; W. Roberts, M.D.; G. Shann, M.D.; S. W. Sibley, Esq.; A. P. Stewart, M.D.; W. Turner, M.B.; H. Weber, M.D. *Treasurer*: W. Sedgwick Saunders, M.D. *Auditors*: J. S. Bristowe, M.D.; Thomas Bryant, Esq.; Andrew Clark, M.D. *Honorary Secretary*: Jonathan Hutchinson, Esq.

Dr. BARNES moved, in a speech in which he strongly commended the past management of the Society, and spoke warmly as to its great services to medical literature—"That the best thanks of the meeting be given to the President, Vice-Presidents, Council, Treasurer, and Secretary, for their zealous attention to the Society's affairs during the past year." This was seconded by Dr. MORRIS (Spalding), and carried unanimously. Dr. Morris and several other members spoke strongly as to their appreciation of Trousseau's *Clinical Medicine*, the copyright of which in England the Society has recently purchased.

The HONORARY SECRETARY moved—"That the warm thanks of the Society be given to the Hon. Local Secretaries, to whose continued services the permanent success of the Society is in large measure due." He said that he had kept this motion in his own hands, because none knew so well as himself the extent to which the Society was indebted to these gentlemen. Many of them had held the office from the foundation of the Society, and the labour which it involved was very considerable. The local success of the Society was really in the hands of the Secretary for the district, a fact well proved by experience. In many small places the Society maintained from year to year a good list of members; whilst in others much larger, in default of a local Secretary, few or none could be obtained. The task of collecting subscriptions was not always either easy or agreeable, and the manner in which many of the Society's officers had zealously served its interests by punctual attention to this and other matters, was such as to make the rest of the members deeply indebted to them. He thought that the time had come when it might be suitable for the Society to make some more definite expression of its acknowledgment of these services.

Dr. HENRY seconded the resolution, which was carried unanimously.

Dr. M'INTYRE (Odiham) deprecated the idea of offering to the Local Secretaries any sort of recompense, and stated in their behalf that he believed the office was generally felt to be one which it was honourable to hold, as giving opportunity for good service in the cause of medicine.—After some further conversation on the subject, the Chairman stated that he believed the plan in the Secretary's mind was one which would not hurt the feelings of the most susceptible Local Secretary. He had been informed that it was to request the President and the several ex-Presidents, Dr. Williams, Sir Thomas Watson, Mr. Paget, Dr. Stokes, and Mr. Hilton, to allow their photographs to be taken in a handsome manner for presentation in a suitable form to the Society's honorary officers. This suggestion was warmly approved, and was recommended to the consideration of the Council by an unanimous vote.

After votes of thanks to the Chairman and the Leeds Committee of the British Medical Association for the use of the room, the meeting concluded.

THIRTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in LEEDS, July 27th, 28th, 29th, and 30th, 1869.

THE CONSTRUCTION OF HOSPITALS.

DURING the meeting, two very interesting discussions took place on Hospitals and their effects on Mortality. The first discussion was held in the General Meeting on Thursday, July 29th.

Captain GALTON, C.B., read a paper on the Construction of Hospitals, his remarks being illustrated by reference to drawings of some of the best known hospitals in the country, including those of London, Netley, Leeds, and other places. The first object of a hospital was that it should enable the sick to recover in the shortest possible time; and it was now recognised by all that, in addition to skilled attendance, medicine, and food, the essential requirements for ensuring speedy recovery were—pure air; that was to say, that there should be no appreciable difference between the air inside the ward and that outside the building; capability of warming to any required extent the air supplied to the ward; pure water, so supplied as to insure the removal of all impurities to a distance from the hospital; the most perfect cleanliness within and around the building. In order to give effect to these principles it was necessary to consider, in the first place, the site of the proposed hospital. The qualities of a site most favourable to a hospital in this country were a situation in the open country, upon porous and dry soil, with free circulation of air round it, but sheltered from the north and east, raised above the plains, with the ground falling from the hospital in all directions, so as to facilitate drainage. The next most important question was the structural arrangement of the building, which must be such as to secure free circulation of air. The first thing was to obtain good healthy wards; everything else, such as administration, means of access, and discipline, being made subsidiary to the question how the sick were to get well in the shortest possible space of time, and at the least expense. He spoke in considerable detail of the manner in which this would be best accomplished. Having considered the principles which governed the size and general forms of wards, the next point which he dwelt upon was the material to be used for the walls, ceilings, floors, and windows, after which he described what he considered to be the best kind of accessory apartments, such as bath-rooms, etc., and spoke of the necessary subsidiary accommodation. It was in the detailed application of the principles of hospital construction that so many errors were committed. The architect ought to make his whole design subservient to these principles, and his watchwords should be—light and air, speedy removal of refuse, and great facility of cleansing. The smallest number of parts compatible with the wants of the hospital should be arranged in the simplest form, and solely with reference to the wants of the patients, and to the way in which the service could be carried on with the smallest number of attendants. The architecture should be an expression of the need, and nothing more. Any sacrifice of sanitary requirements to architectural features was wrong. Ornament meant too frequently the creation of corners which delayed the stagnated air; it meant present outlay and continual cost in repairs. Whilst so much suffering remained unprovided for in the world, it was melancholy to see a large portion of the money, gathered with much difficulty for the relief of that suffering, diverted from its main object in order to create a monument of the architect's taste. In conclusion, he added another word of caution against building for a long futurity. Rooms used for the reception of the sick became permeated with organic impurities, and it was a real sanitary advantage that they should be pulled down and entirely rebuilt on a fresh site periodically.

Dr. E. KENNEDY (Dublin) could not conceive points more fairly put or more comprehensively dealt with than in Captain Galton's paper. He was particularly struck with the part of the paper where Captain Galton spoke of organic impurity. He wished to point out that it was quite possible, in a great subject of this kind, to be led away by one idea, to the neglect of principles of vital importance which had hitherto escaped notice, but were not the less worthy of attention. Ventilation had hitherto been one of the great questions in connection with our hospitals; and a great question it ought to be, for it could not possibly be too much dwelt upon. Chimneys were of vital importance; and his (Dr. Kennedy's) observation of the Leeds Hospital confirmed many of Captain Galton's statements. He could not believe it was possible to secure proper ventilation in hospitals without chimneys. Pavilion

hospitals were attracting much attention at the present day; and of this description they saw in the Leeds Hospital a magnificent example, which had cost about £100,000. But here there was a neglect of a vital and important principle, slightly touched upon by Captain Galton; and while he admired Captain Galton's observations, he regretted to hear him state that pavilions might be placed in parallel lines, provided the interspace was double the width of the pavilion. To his mind, the construction of the Swansea Hospital was a very great improvement in hospital arrangement. In the case of the Leeds Hospital, the central hall ought to be opened, and the corridor windows removed, in order to have a proper pavilion hospital. It was impossible to have a properly permeated hospital until that was done. Much as he admired the magnificent central hall, with its glass roof, he felt it would ultimately be the cause of a miasm in the hospital, which it would be impossible to get rid of until the defect which he had pointed out was removed. There were principles in connection with hospitals which were only now developing themselves. The first was the habitat of disease in particular hospitals. They could not always ascribe that to defective ventilation. He had been connected with a hospital in which the habitat of disease had gone on for one hundred and eleven years. The habitat continued to accumulate, and the accumulation went on until it terminated in saturation; and disease, which began from an individual case, spread until eventually it became endemic. The Jews were well aware of this. They would find that, in dealing with lepers, one of the principles upon which the Jews insisted was the scraping of the walls of hospitals with the greatest care, lest any miasm should attach itself to the walls. Captain Galton's principle of Parian cement for hospitals was a capital one, and his objection to the angles at Netley was well founded. He wished to call attention to the fact that there was a peculiar poison in connection with hospital walls, which ventilation would not remove, and which they had not yet reached, whatever it might be.

Mr. JONATHAN HUTCHINSON (London) had been connected with four hospitals, and for some years he had taken great interest in this question. The four hospitals with which he had been connected represented different management, and were built on different plans. One with which he had been connected for six years was badly managed as regarded accommodation, but the most successful as regarded treatment. He differed a little from some of the principles at present in vogue as to hospital construction and hospital dangers; but he would state his own great appreciation of the able and very excellent paper which Captain Galton had read, and he would also refer with admiration to the zeal and energy of Sir James Simpson in carrying on his work. But he could not help feeling exceeding doubt as to a movement which had taken so strong a hold upon the public mind. He felt that the notion was wrong that hospital efficiency was increased by increasing ventilation. In his opinion it was not the quantity of air, but the freedom from the germs of organic disease, which should be the chief desideratum. Just as the physician dealt with the germs of contagious disease, so the surgeon should be prepared to deal with septicæmia, erysipelas, and hospital gangrene. If he had time, he could give strong evidence that these diseases spread by contagion, and would spread in hospitals, but would stop if the cases were separated. Fresh air only diluted the germ—it did not get rid of it. This led to a very important question as to how hospitals might be built; and he thought he could rightly say that nine-tenths of the cases admitted might be taken into any kind of hospital and do equally well. Three-fourths of the surgery cases were simple fractures, and cases in which there was no risk of contamination. Extra precautions had to be used in a small minority of the cases; and there need not be that large expenditure as to many of them which was entailed under ordinary circumstances; but when there were huts to resort to, he found there was no special risk of contagious disease. Then, as regarded ventilation, he really could not see, from experience, that increase of ventilation materially diminished the risk. He believed that in some ways it increased it. He did not believe that hospital gangrene was influenced by ventilation. If in hospitals there were one ward which had no communication with others, there would be no case of hospital gangrene. Such was the result of the evidence afforded in the London Hospital, with which he was connected. Their experience of epidemics was that, though they had none for six or seven years, at last there was a violent outbreak. He appealed to every hospital surgeon whether it was not the testimony of nurses and patients alike that too great ventilation acted injuriously, and was fraught with danger. Nurses said that, if they had the chance, patients would shut the windows. He (Mr. Hutchinson) coincided with that prejudice of the patients, and was not astonished that there were so many cases of bronchitis contracted by patients when lying in bed, because of the draughts from the open windows blowing right down upon them. Then there was an interesting suggestion which might modify their future belief as to the causes of mortality in hospitals. All the while that they were studying the ven-

tilation of hospitals, they were using numerous specific agents for disinfection. Take the palatial institution built in Leeds—a finer institution as regarded comfort he never had the opportunity of seeing. But he should look with great interest at the statistics of the next ten years as compared with the statistics of the last ten years of the old and badly ventilated building which had just been abandoned. It was possible that in the future there might be a great diminution in the number of cases of septicæmia and erysipelas; but he thought it could not be seen that any great improvement had been made in the isolation of contagious diseases. He had himself seen some small wards used for that purpose. The contrast between the next ten years and the past might be fallacious. Some might say it was due to ventilation, while all the while it might be owing to the employment of carbolic acid. Carbolic acid might possess a virtue which a circulation of air did not; and it was one of the most important points, whether the vapour given off from carbolic acid could or could not destroy the germs of specific disease. If it could, it would save a great deal of cost.

Sir JAMES SIMPSON was not opposed to hospitals, but he was against hospitals as at present constructed; and he thought they required very great reform. Many gentlemen in the room happened to know the test which had been applied by men around him and himself latterly in reference to the mortality in the hospitals—the amputations of the limbs—of the thigh, the leg, and arm and forearm—as a test of the healthiness of the different institutions. He had had now upwards of 6,000 cases reported to him, the results of which were published, and these results—he had only calculated some of them lately—were something that quite startled him. Captain Galton had not alluded to the size of hospitals, but that seemed to be a matter of very great moment. In the large Parisian hospitals, one man out of every one-and-a-half died if the limbs were amputated—three out of every five, a terrible mortality. When they came to Britain, they found that in the hospitals that had more than three hundred beds, and these were not many, the ratio was not so great as one in one-and-a-half, but still the mortality was frightful; it was one in two-and-a-half. He had obtained the statistics of about 2,000 patients in provincial hospitals, and there he found that of six hospitals that contained less than 300 beds and down to 150, the mortality was one in four, greatly less than in London. When they came down to hospitals with from 120 to 50 beds, the mortality was about one in five or five and a half; and when they came to cottage hospitals, the mortality was only one in seven. In country practice they found the mortality amongst practitioners in general was only about one in nine; and where men were in the habit of operating, it was found that the mortality diminished to one in twelve. Patients in the country were treated in their own cottages, and the question was: should not large hospitals in London, and Edinburgh, and Glasgow act upon a similar plan, and send away all patients, for their own sakes, to get their limbs amputated? The day before he left Edinburgh he had received a letter from a gentleman who was one of the best specimens of a country doctor. This practitioner had never sent a case to any infirmary; and, although he could not state definitely the number that came under his care, he thought they exceeded fifty; perhaps, in all, they amounted to fifty-three. Of these fifty-three, all recovered except one, and that also should have recovered but for removal on the ninth day. Supposing these fifty cases had been sent to the nearest hospital, instead of one death there would have been twenty. He was inclined to think that a building of one storey was the best plan for hospitals; and that, in time, all would come to that opinion. He noticed the results of the Commission appointed to inquire into the health of barracks; and then, commenting on the construction of the Leeds Hospital, recommended that the roof in the central garden should be removed, and that the windows in the corridors should be taken out. He also observed that if they would take the windows out of the enormous staircase in King's College, and let the air pass in freely, it would probably make it a far more healthy hospital. In a conversation with the matron at the Leeds Hospital, he found that she had been at St. Thomas's Hospital, London, and she told him that they only sent to the cottage hospitals extreme cases which were not likely to recover elsewhere. But if, he urged, extreme cases were sent for recovery to cottage hospitals, why should other cases not recover there also? Recovery as soon as possible ought always to be striven for. Captain Galton had spoken of putting up barracks for treatment. In Germany, that was done at this hour; and the benefit of such hospitals had been felt during the late war between Prussia and Austria. He did not say the palaces should be given up, but he thought they ultimately would, and, in the meantime, a great revolution should be made in them. For their hospitals, it might be thought worthy of consideration that they should adopt, at times, Sir Sydney Waterlow's plan in regard to dwellings for the poor people of London; namely, that they should divide each flat so that it does not communicate with another. All those hospitals

which communicated freely in their wards were apt to prove destructive, and, as an instance of the evil thus accruing, he cited a case of which Dr. Rumsey was aware, in which the stench emitted by a patient, at Netley, was felt in a disgusting manner at the end of a long corridor. Contagion was mainly owing, he believed, to such defects in ventilation, as the air passed from one ward to another; pyæmia, for instance, was spread from patient to patient, and was carried about by the surgeons themselves, so that the more separate the wards are the better. Great good had been said to attend the use of carbolic acid in amputations, but he was sorry to say that the supposition was not borne out in truth, and he spoke of the results attained in Edinburgh and Glasgow last year as unsatisfactory. In Glasgow they were worse than before, and he knew that in Edinburgh the amputations of the limbs were considerably higher in their death-rate than they had been for many long years previously.

Dr. RUMSEY (Cheltenham) said that two or three months ago he went over the magnificent hospital at Netley. He was at once struck with what all must admit was its grand defect, namely, that all the wards were erected parallel, so that there was no possibility of ventilation, except by what was effected by the corridor. He was speaking on this point to Professors Longmore and Maclean, when one of them said that there had been a case of putrid abscess at one of the corridors, the smell from which was frightfully bad. Where was it first perceived? The first announcement of this horrible smell was made from the other end of the corridor, which is a third of a mile in length. That was a proof of the diffusion of the putrid air in the corridor for a distance of a third of a mile. He thought that they could not have a stronger condemnation of corridor walls, where parallel wards could not be brought forward, than that. He wished they had Dr. Oppert here, as he had produced two or three continental hospitals, in two of which was embodied that very important and excellent element now carried out in the Swansea Hospital; that was, that the pavilions, instead of being parallel, should diverge.

Dr. STEWART (London) said he had been at Netley, and found that, owing to the frequent prevalence of cold blustering weather, the windows for the most part were kept closed. Ventilation had been found almost impossible, owing to the high winds which frequently prevail. Having gone repeatedly over the wards, he had asked the attendants how they managed to keep them in a healthy state. They replied that they did the best they could, but it was a matter of difficulty. It had been pointed out to the Commission entrusted with the construction of Netley Hospital, that the corridor was utterly offensive, and that it would be impossible to keep any effluvia from permeating the whole of the wards. Some alterations in the plan were made, but the worst objection was carried through. A motion was brought forward by Mr. Sidney Herbert in reference to this hospital, recommending that it should be given up altogether. Unfortunately, the question of construction was mixed up with that of the site, which was a good one; and those in favour of the construction, by showing what an admirable site it was, managed to gain the attention of the House of Commons, and succeeded in turning the building into a hospital after all. They represented that it was not intended to be properly a hospital, but only a convalescent home; but, when the hospital came into use, so many large parties of soldiers constantly coming home were sent to it, that the hospital was generally very full. He might mention that the corridor was a close one.

Dr. HUGHES BENNETT (Edinburgh) said that he feared he belonged to that comparatively small section of the profession that desired to base its knowledge on the sure foundation of unquestionable truth, rather than upon vague opinion and fallacious assumption. We were constantly hearing all kinds of hypotheses advanced, unsupported by the slightest research or proof. Hence his anxiety for the appointment of Committees, with grants of money, which would enable them to settle positively doubtful points in medicine. What they had just heard, and what they were constantly hearing, as to the construction of hospitals, was a good illustration of professional discussions. The cause of epidemics and endemics, it must be admitted, was as yet unknown, and constituted one of the most difficult investigations it was possible to enter upon; yet the most contradictory opinions regarding it were now brought forward, in order to influence the structure of hospitals. The medical department of the Royal Infirmary of Edinburgh, of which he was a physician, was one of the best ever planned; and, so far as he knew, no epidemic had ever originated in it. It was a model hospital; but it was now so old, that its walls could no longer stand, and they were about to replace it by a new one. Those walls, however, were as capable of absorbing organic germs and miasmata as those of any similar institution; yet no harm had resulted. For a long time it was maintained that free ventilation was the best remedy for preventing the spread of disease in hospitals; but they had just heard a speaker main-

tain that ventilation was more injurious than beneficial, and that the constant open windows produced worse maladies than those which it was intended in this way to remove. While opposed, however, to the theory of free ventilation, he adopted the revived and fashionable hypothesis of "organic germs", and their destructibility by means of carbolic acid. But had any one seen these germs? or had they any existence, except in the imagination? Our modern microscopes enabled us to examine particles much more minute than the smallest vegetable spores or animal ova. Surely, then, those who attributed to germs the origin of numerous diseases, and sought to modify the construction of hospitals because of their influence, should at least take some pains to find them and show them to others. No one, however, had done this. There was no proof whatever that such germs had any reality; and yet here was a large body of scientific and medical men considering how to build hospitals, and probably waste thousands of pounds in order to prevent the evils of such imaginary existences. Then statistics were had recourse to, on which to form conclusions; and these also were too frequently only assumptions. Sir J. Simpson had adopted deaths from amputations as a test of hospital mortality. Without impugning the facts brought forward, should we consider the test a good one? He (Dr. Bennett) thought not. Other causes influenced the results of amputations, besides the badness of hospitals. The inhabitants of large towns, for example, such as Manchester and Leeds, were more liable to sink under the shock of such operations, than the robust labourers in the country. As an example of the assertions so constantly advanced instead of proof, he might refer to the statement that a country practitioner had had fifty amputations with only one death. But they had also been told that that practitioner had lost his notes; and, if so, little confidence ought to be placed in such an assertion, when the point to be ascertained was the ratio of the dead to the survivors. Medical men were very apt, from memory, to exaggerate the number of their successful cases. What was required were carefully taken records to determine with exactitude the nature of the case and the results of treatment. He therefore considered it advisable, in all medical investigations, to abolish such vague generalities, and in future seek to advance medical knowledge and practice on the indisputable grounds that scientific investigation alone could furnish.

Dr. MACLEOD (Glasgow) said he should not have ventured to address the meeting, but for a remark made by Sir J. Simpson with regard to the mortality in the hospital of which he (Dr. Macleod) was one of the surgeons—the Glasgow Royal Infirmary. It was situated in the midst of a dense population, and they had as severe cases to deal with as it was possible to conceive. Having been familiar with it since the beginning of his professional career, he could say that, since the introduction of carbolic acid, explain it how they would, they had saved many cases of compound fracture by the use of it, which there would have been no chance of saving by any other method with which he was acquainted. He should have great pleasure in showing Sir James Simpson a case in his own practice, which he believed it would have been utterly impossible to save by any other method of treatment than that which was usually adopted in Glasgow. As to mortality after amputation, he was aware of the ground on which Sir J. Simpson's assertion was founded; but they all knew the extreme fallaciousness of statistics. He would allude to some remarks made by Dr. Hughes Bennett with regard to the number of deaths in fifty cases being only one, but throwing discredit upon the allegation because the practitioner had lost his notes. But he (Dr. Macleod) would have the honour of reading a paper in the Surgical Section, in which he should mention fifty cases of amputation at the ankle-joint with only one death; and, when he stated also that a great number of amputations had been performed in the Glasgow Royal Infirmary with the same comparative success, he hoped it would be taken into account as balancing the testimony afforded without the accompaniment of the operator's notes. In the next place, he wished to mention one or two things which had occurred to him during the reading of the able paper by Captain Galton on Hospital Construction. He had had considerable experience during the Crimean war in huts for the sick and wounded, and he had submitted plans for hospitals such as were afterwards used in the Dardanelles; and he could say, from his experience of huts and tents in the treatment of the wounded, that nothing could be more perfect. When anything was going wrong—when, for instance, there were capillary symptoms or secondary hæmorrhage, or anything else—they used to remove the patients into those huts, and they almost invariably did well. But there was the constant necessity for changing the huts from place to place, because the very ground on which they stood became impregnated with unhealthiness. The subject of hospitals was one that during all his life had occupied his attention; and it gave him the greatest possible interest to find that the system advocated by Sir J. Simpson was just that which, twelve years before, he

had himself brought before the Social Science meeting at Glasgow—of having hospitals in the country chiefly, and having minor hospitals in towns for the relief of accidents, as a great means of saving life. A great deal had been said about the internal arrangements of hospitals; but he would say something for the external circumstances of hospitals. He had always said it was one of the greatest mistakes to put hospitals on sites surrounded by buildings. Our hospitals, he hoped, would ultimately be very small; because, in exact proportion as a hospital got old, it became unhealthy; and he hoped that hereafter they would generally be pitched in open gardens in the country, with all the addenda of flowers, music, and all else that could be brought to human aid in the cure of disease.

At this stage, it was agreed that the discussion should be adjourned until an opportunity was afforded of resuming it when Dr. Kennedy read his paper on Hospitalism in the Section of State Medicine.

Captain GALTON said he had listened with very great interest to the remarks which had been made. He could only say that the business of the architect was to give effect to what the medical man said was necessary for the recovery and healing of the sick.

Sir JAMES SIMPSON moved a vote of thanks to Captain Galton for the very excellent paper which he had read. That paper contained a summary and analysis of knowledge wonderful to be compressed into a short space; and the Association was deeply indebted to him for the trouble he had taken.

Dr. CLIFFORD ALLBUTT (Leeds) seconded the motion, which was carried unanimously.

The discussion on Hospitals was resumed on Friday, July 30th, in the Section of State Medicine; Dr. W. Farr, F.R.S., President, in the chair.

Dr. EVORY KENNEDY (Dublin) read a paper on Zymotic Diseases and Hospitalism, especially as illustrated by Puerperal Fever. Dr. Kennedy began by recapitulating the propositions brought forward by him in the recent discussion in Dublin. He said that, out of 3,500 deliveries in his private practice, there were only three fatal cases of puerperal fever, or one in 1,200; while, during his mastership of the Dublin Lying-in Hospital (1834-40), there were 117 fatal cases of the disease, or 1 in 112. He contended that puerperal fever was contagious, and denounced large lying-in hospitals as provocative of great mortality among parturient women, while he urged that the advantages offered by lying-in hospitals as places of skilled treatment and schools of instruction might be preserved by receiving the cases in isolated buildings. He quoted statistics to show that the mortality from puerperal fever was much greater inside than outside the hospitals, and illustrated the propositions he advanced by elaborate tables and diagrams, bearing on the mortality in the Dublin Lying-in Hospital. The contagions of puerperal fever, he said, did not merely accumulate and then wear itself out, as with the poison of ordinary epidemics; it had a property of saturation, rendering it fixed and endemic within a hospital. From this, the Dublin Lying-in Hospital for fifteen years had been saturated with the contagion of puerperal fever. Notwithstanding, it was one of the least fatal in Europe, and Dr. Kennedy quoted statistics, showing that in the lying-in hospitals of Russia and France the rate of mortality was far higher than in Dublin. He then gave a number of figures as to the fatality in cottage hospitals in smaller towns of Ireland—New Ross, Waterford, and Limerick—where the course adopted was only to have one or two cases in a ward, and the statistics showed a very low rate of mortality.

Dr. WILTSHIRE, for Mr. HOLMES COOTE (London), read a paper on Hospitalism. Mr. Coote stated that since the communication of Sir James Simpson on "Hospitalism," large hospitals were on their trial. He did not affirm that the hospital system of Great Britain was perfect; there were hospitals and hospitals, and a very incomplete approach to their general merits and demerits was gained from statistics affecting all alike. He denied that statistics could be safely used without reference to the nature of the cases. In St. Bartholomew's Hospital, in 1866, for instance, there were 28 major amputations with a mortality of 7; viz., 9 primary, for compound fractures, with one death (in a patient who had heart-disease); 3 secondary, all fatal—two of the patients never having rallied from the accidents; and 16 for disease, with three deaths—from phthisis, diffuse cellulitis, and chronic pyæmia. Further statistics were given to the same effect as regarded amputations. Eighteen cases of lithotomy had been performed without a single accident. In any well formed hospital, wounds would unite by first intention, if left quiet; and Mr. Coote strongly deprecated the indiscriminate use of chloride of zinc or of carbolic acid. Mr. Coote avowed his disbelief in the common views of the absorption of pus from open wounds, and of pyæmia, considering that blood-poisoning occurred almost invariably by inhalation of animal poisons. He objected strongly to the word "Hospitalism" as tending to imply the production of some-

hing in the wards of a hospital that did not exist elsewhere. He had never seen any pathological event in hospitals which did not also occur in private practice. Mr. Coote then proceeded to offer remarks on the construction of hospitals, and tried to show how numerous small detached buildings, scattered over a large area, was a scheme involving much trouble and a vast amount of expense. He considered that an hospital fit for a crowded city should be on the plan of a square—four detached buildings, enclosing a sufficient area. He read a letter from Sir W. Fergusson, supporting his opinion that the results of operations in a well-formed hospital and in private practice were not dissimilar.

Dr. STEWART for Mr. JOHN BIRKETT (London), followed with a paper on the Causes of Death after Amputation of the Limbs in Hospitals. Mr. Birkett had performed amputation on 169 individuals. Of these, 54, or about one-third, died. Of those who died, 11 were killed by the injury; 23 were found after death to be suffering from organic disease of the heart, lungs, liver, and kidneys, and hence were not in such a condition, either at the time of injury or of the operation, as to give grounds for the belief that they would recover; and in the remaining 20, of whose viscera there was no *post mortem* examination, death was attributable to diseased state of their tissues and internal organs, as evidenced by their constitutional nutrition.

Dr. STEWART also read a statement contributed by Mr. CALLENDER (London). Mr. Callender began by submitting, as a proposition, that country patients in town hospitals recover after amputation as well as country patients in country private practice. Since 1861, Mr. Paget and himself had performed 97 amputations at St. Bartholomew's Hospital; the number of deaths had been 29, or 1 in every 3.3, or 30 per cent. Of the cases, 29, remarkable for obscurity or severity, came from various country districts—one from Australia. Among these, there were 16 amputations of the thigh, with 4 deaths; 6 of the leg, with one death; 6 of the arm, and one of the forearm, with no death. The number of deaths was then 5, being 1 in 5.8 or 17 in every 100. Mr. Callender made a comparison of the death rates of country practice, hospital practice, and country patients in a town hospital. He arrived at the conclusion that there was no material difference between the results of amputations performed on country people in hospitals and in private country practice.

Sir JAMES SIMPSON said he thought the observations made in reference to his theory must have been from want of knowledge of what had come out in practice. What he had published in his pamphlet, were facts not collected by himself, but by Mr. Willett, and signed and countersigned by that gentleman. With regard to the hospital system generally, he would remark that there must be some general law pervading it, if, out of every hospital in Great Britain containing 300 beds and upwards, one in every two-and-a-half patients died who were subjected to limb amputation. Mr. Holmes Coote had said there was no use troubling themselves about the fore-arm. He did not know what the matter was to come to. It had come to this: that collected statistics in the country proved that of the men subjected to amputation of the forearm, one in 100 or 180 died. But of those sent to the Glasgow and Edinburgh Hospitals, instead of 1 in 180, one in six died. It was a tremendous difference, and not to be accounted for by any sophistry in reasoning. It was a terrible fact—enough to alarm them, and to lead them to some proper inquiry as to the frightful difference in the relative mortality. He was anxious to have spoken to Mr. Holmes Coote, because he wished to tell him that he had tried to blind them to the whole inquiry. He had tried to show his own side of the argument by introducing an irrelevant question: that, of the patients operated on for lithotomy, not one had died. Mr. Coote thought this a complete answer to the animadversions made on the death-rate in St. Bartholomew's Hospital. But he had concealed this fact—that according to Mr. Willett there were, in 1864, nine men operated on for lithotomy; and, of that number, four had died. It appeared to him that Mr. Callender, in his paper, objected to Mr. Holmes Coote showing that their operations were not so terrible in their results as he (Sir James) or Mr. Willett had published. He (Sir James) did not know the other surgeons in St. Bartholomew's Hospital; but if these gentlemen were as unfortunate in the results of their operations as in the case before them, how frightfully unfortunate they must be. He had the same complaint to enter against Dr. Macleod, who said there had been fifty amputations at the ankle joint, performed successfully, in the Glasgow Hospital. He should, however, have put amputation of the leg for amputation of the ankle-joint, as, of the amputations so performed, one in three died. Mr. Coote had also referred to amputation of the finger. Let them, however, select the case he had taken—viz., limb amputation; and not mix up with such operations little petty amputations. They were not in the least degree to be compared. Mr. Coote had, in his paper, gone upon the old plan of trying to avoid a conclusion, by saying, after death, "look at the former condition of the patients; they had

this, that, and the other disease." Those gentlemen who amputated in the country—men like Dr. Dewar, from whose letter he had read on the previous day—would not send a case to the hospital; they know how deadly it was, and they could perform an operation quite well at home. A gentleman in the city of Marseilles required to be operated upon for cancer; but, in that great city, there was not one who had ever ventured on such a terrible operation before. Our country surgeons could now do that as well as, if not better than, our city hospital practitioners. They were not to be staggered from their inquiry, in how many amputations of the leg or arm do the patients die in London—he had evidence to prove it—of diseases begotten in the Hospitals? He knew it was the same in Edinburgh and elsewhere. In a French book upon mortality, that came out sometime ago, it was decided that of women delivered, one only in every 230 died at home and in dispensary practice; whereas, if they came to hospitals, they would find that, over the whole length and breadth of Europe, instead of only one in 230, one in twenty-nine died in the hospitals in child-bed. But what would they think of him if he were to answer the fact by saying: "you are utterly mistaken; some of them died of convulsions, some of embolism; here and there some had other complications of heart-disease, disease of the peritoneum, of the ovary, and so forth." Gentlemen would have them believe that the patients did not die from amputation. They were not, however, to have their eyes closed to the general fact by such reasoning upon the causes of mortality. Upon the continent of Europe, particularly in Prussia, the result of a late inquiry was the present reform and revolution going on in hospitals. After the battle of Sadowa, the sick and wounded of the Prussian army were sent—some to palatial hospitals, and others to tents and huts made of wood. It was when the enormity of the difference between the results of the treatment in the tents and huts, and the treatment in the great palatial hospitals, became apparent in Germany, that German surgeons came to see that hospitals upon a large scale were wrong; and were thus, at the present day, far in advance of us in the movement of making small hospitals. A table which had been put into his hands was intended to prove that the country patient bore the operation in general better than the town man; and it showed this: that there was between the deaths in the town hospitals and the deaths in the country a difference of twenty per cent., so that there was grave reason for sending the patients back to the country to be operated on. The mortality amongst London people—if all the facts before them were true—must be perfectly hideous. He held that country patients should be kept in the country; and that country surgeons should operate upon their own cases, if they could do so. Against what Dr. Stewart had just laid before them, he (Sir James) had stated on the preceding day—and he believed there were sufficient statistical facts to prove this great general fact—that hospitals, so far as their healthiness could be judged of by limb-amputations, were fatal in proportion to their size. With reference to the cottage hospital system, he combated the opinion that it was a farce, by the fact that, while one in seven died in the cottage, one in two and a half died in the London hospitals. This, so far from being a farce, was a terrible reality, which ought to awaken them to some active movement in the whole matter. Dr. Brown-Séquard had told him that, when the Necker Hospital in Paris was first instituted and filled with patients, the death-rate in the Paris hospitals was frightful, being one in one-and-a-half, against one in two-and-a-half in the London hospitals. The exception in the case of the Necker Hospital was, however, so striking that the late Professor Trousseau, who was much interested in these statistical inquiries, published a letter in one of the French papers, showing how infinitely superior the Necker Hospital was to any other hospital at Paris, and suggesting whether it was not owing to the simple fact that, instead of having wards consisting of ten, twenty, or thirty beds, it being an old monastic institution, the rooms never held more than one bed, or sometimes two. Shortly afterwards, all these rooms were laid into one ward; and, in a year, the Necker Hospital was as deadly as any other hospital in Paris. Cottage hospitals were nothing but houses containing one or two patients in each room; and the poor colliers and others brought to them for treatment, had systems just as diseased with drink and so on as any London constitutions. According to statements made, London was the most healthy city in the Kingdom to live in; and yet it was the most unhealthy in which to have an amputation performed. If it were argued that the patients in the London hospitals came from the worst parts of the city, he answered that it was the same every where. Hospital patients always came from the poorest districts, so that the argument was as broad as it was long. The speaker concluded by stating that his past experience had made him rather hopeless that the evils of hospitalism were to be overcome, seeing that, with all the attempts at a remedy, the hospitals in Edinburgh and Glasgow had been getting worse instead of better.

Dr. ANSTIE (London) implored the meeting to remember that what had been put forward was not a general but a special case, and that to raise an outcry against hospitals in general upon an argument which, if proved, had been connected with a limited class, was a mistake. It was very well for them to speak in theory upon supplying the hospital wants of great cities and large districts with cottage hospitals; but had anybody considered the enormous increase of administration expenses that this would involve, and how supplies of money were to be obtained? He did not say it might not be done, or ought not to be done; but he wished them to consider the remark which he had just thrown out. It was the class of surgical operations which was the dangerous class, or was supposed to be the dangerous class of cases, which produced such frightful bills of mortality in the large hospitals. He would assume this to be true, but such cases ought not to be taken as the sole test. Amputation was resorted to in serious injuries, and only a small portion of the general hospital population was therefore subjected to it. But, granting every figure which Sir James Simpson had made use of to be true, there was no cause for raising a cry against large hospitals when there were so many diseases to which his arguments did not apply.

Sir JAMES SIMPSON—They apply to all.

Dr. T. K. CHAMBERS (London) agreed that the application of the term "hospitalism" to diseases which occurred in hospitals was unfair. It was an absurd calling of names, because the diseases occurred to patients who were not congregated together. He held the opinion that so long as there were large populations there must be large hospitals; and the practical consideration, therefore, was to avoid in these hospitals everything which could possibly cause this falsely named "Hospitalism"—those results which arose from the exhalations (he would not call them germs) of foetid pus, or from any pus at all. He was glad to notice in Captain Galton's paper a few remarks about æsthetic hospitals. The fault about architects was, that they planned their buildings as if they were meant to last for ever; and ornamented them so that they might serve them as well as a monument. He belonged to a hospital in London which was, in one respect, perfectly unique; it was the ugliest building in the metropolis, and that had been always a great satisfaction to him. He felt that it was appropriately ugly; and his satisfaction at this arose from the feeling that his successors would not have the slightest objection to pull it down. Hospitals should be built so that they might be pulled down and rebuilt from time to time. This was his opinion; and it had been confirmed by Dr. Kennedy's paper. He hoped, therefore, that all new hospitals would be built upon a different principle from that at Leeds.

Dr. GAIRDNER (Glasgow) said he did not feel competent to deliver any opinion upon the statistical part of the question, and would not enter into it further than to say that he thought Sir James Simpson had unquestionably struck a vein of valuable ore in the matter, and that, although there might be considerations of great moment to set up against his statistics, he did not doubt that there were principles involved in them which the profession ought gravely to investigate. The subject generally was one to which he had been obliged to give great attention, both as a hospital physician of many years' standing and as a medical officer of health, to whom it had fallen to have to alter the construction of hospitals, and particularly of fever and cholera hospitals, within the last few years. Without being prepared to justify his opinion upon statistical grounds, he must distinctly intimate that it had always been, and was now more and more, in favour of the restriction of the size of hospitals, and in favour of the restriction of the size of wards in hospitals. He held that a hospital was a necessary evil, and he thought the remarks of Dr. Chambers in that respect were sound. There could be no doubt that, if the poor could be treated at their homes, so as to bring about and promote the conditions of recovery, hospitals might be dispensed with altogether. But it was the case now, and probably would be for many years to come, that in all our great towns there were vast numbers whose homes were not suitable places in which to treat them for disease, so that we must have, not perhaps buildings on the scale of the chief London hospitals, but something like hospitals on a considerable scale. The problem, therefore, for the architect, was to reduce the danger in these places to the minimum. When he had to order the erection of a fever hospital in Glasgow for one hundred and twenty patients, he built it on the pavilion principle; but, instead of making pavilions for thirty or forty patients, he split them into compartments of one story, and had them constructed of the simplest materials, with the view of their not lasting more than ten years. The materials used were wood in three and brick in the fourth. He, however, did not claim this as a point of principle, because the pavilions had to be run up quickly, and those materials naturally fell to hand to build them with; and, on the other hand, it should be recollected that there was always a difficulty in winter in keeping up a proper degree of heat in hospitals built of fragile material. The rate of mortality in the hos-

pital of which he had been speaking was low. He thought no hospital should be built so as to contain more than three hundred beds; and it was only for economical and satisfactory administration that there should be so many as that.

Dr. ACLAND (Oxford) was greatly indebted to Sir James Simpson for the various publications with which he had favoured the profession, but he confessed to having been greatly alarmed at the publication of his statistics, in consequence of the ill-use that a not very discerning public was apt at once to make of any dispute in the medical profession on matters of that kind. That of course was no reason why they were not openly and boldly to invite the discussion of all questions that arose in which they were interested. He had long been convinced, in common with Sir James Simpson and Dr. Gairdner, and any person who had paid attention to the subject from the time the discussion arose in England ten or twelve years ago as to the pavilion principle, that a difficulty would present itself. Miss Nightingale, with her astonishing powers of administration and organisation, seemed to lay down this plan, which Captain Galton clearly described, as if it were the only way in which a hospital could be built. That was a fallacy. He had not the slightest doubt, as Dr. Chambers and Dr. Gairdner admitted, and all who reflected must admit, that, with our great populations, we must have great hospitals. He did not doubt this for a moment, and he did not believe Sir James Simpson doubted it for a moment—(Sir JAMES SIMPSON: No, no.)—Dr. Acland contended, therefore, that, as practically there must be large hospitals, they should be so constructed as to do away as much as possible with the evils complained against. He must say that, ever since the question of cottage hospitals was started, he had felt that they would become a necessity in the country—so much so that he took some pains, three or four years ago, to consider what would be the best typical hospital, and he found that this would be a very difficult problem to settle. The reason his attention was called to this matter was, because of the importance it would be to country practitioners; for a country practitioner, upon the whole, was a very different person from what he was, speaking generally, fifty years ago. There were first-rate country practitioners, with energetic young students growing up amongst them, and they were as skilled and competent as the best London surgeons; and all they wanted were opportunities, and these opportunities they would make, and they would have small hospitals. But he repeated, supposing there were a number of cottage hospitals, would any experienced metropolitan surgeon—and among these surgeons he would include Mr. Teale, a man being essentially a metropolitan surgeon who had a great surgical practice in such a town as Leeds—would any such person, then, tell them that he had any expectation of doing away with, or was desirous of doing away with, great hospitals? Let them part, then, with the understanding that there was no dispute amongst themselves as to this matter; and let the public understand that there must be no destruction of large hospitals, but that, in addition to them, as they were wanted, they must erect the smaller institutions.

Mr. T. P. TEALE (Leeds) felt that he ought not to allow the occasion to pass by without in some manner entering a protest against the way in which the statistics of Sir James Simpson had been used. Sir James had started what they all believed to be a very important question—one in which the truth ought to be known, and, when known, acted upon. He had, however, narrowed the question to that of limb-amputations; but, accepting the facts as Sir James Simpson had stated them, he must say that he had put in a great number of cases not comparable, and they were stated as being from memory.

Sir JAMES SIMPSON: I have not in the published accounts said anything but what has been taken from general notes.

Mr. TEALE said his objection was this, that an impression went forth to the world—he did not say correctly—that Sir James Simpson had said that the deaths in the hands of a country practitioner was one in fifty, and in London one in three or four; and as the conclusion which the public would adduce would be that the deaths in London should be one in fifty, it was desirable that such an impression should not be promulgated, and that they should not put forth sources of error. Now there were three questions which occurred to his mind. First of all, there was the relative state of health of the patients operated upon. Healthy country labourers would be free from many of the diseases from which their brethren in large towns suffered—such as disease of the heart and disease of the kidneys. Secondly, Sir James Simpson had compared in one mass amputations of the arm and fore-arm with amputations of the leg and thigh.

Sir JAMES SIMPSON: I have separated them every one in my published statement. I had no chance yesterday to enter fully into the matter in ten minutes, and I stated general results; but in my pamphlet the statistics of amputations of the thigh and leg, and arm and fore-arm, are given separately, and from different hospitals.

Mr. TEALE: My objection is still that yesterday we had these statistics used in a way in which they should not have been used, and I fear an impression will have gone forth which is undesirable at this early stage of our inquiries.

Sir JAMES SIMPSON: Perhaps I may be allowed to say one word. Mr. Teale has brought forward an argument—quite a proper one, and one that has often been addressed to me against my statistics—saying, “Ah! but what state of health were the people in at the time when the amputations were performed? Were not some of them in too deplorable a condition to recover?” I have collected above two thousand cases of amputation from hospitals, and above two thousand from private practice—all operations upon men who had formerly been quite healthy, because these were primary amputations brought about by accident, and the result in private was infinitely more satisfactory than in hospital practice. A good deal had been said as to what should be done. We would come to do what was right; but he did not see why our architects should not be able to build a splendid village hospital as well as a palatial one. They had been doing this in America. They had village hospitals there; and an eminent architect had informed him that very much the same thing could be done in this country at no great cost and with no great difficulty.

Dr. CLIFFORD ALLBUTT (Leeds) contended that it was quite possible to build a large hospital, which, due regard being had to sanitary principles, would be free from many of the evils that were said to be attached to such structures. As to the atmosphere of hospitals, he contended that, although Dr. Hughes Bennett had not been able, by microscopical aid, to discover “germs”, as they were called, certain atmospheric particles or germs must nevertheless exist, and every effort should therefore be made to make the ventilation of surgical and other wards as complete and satisfactory as possible.

Dr. JAMES LEWIS (Maesteg) was desirous of calling attention to Dr. Anstie's remarks with reference to cottage hospitals. He had to do with a cottage hospital that was established seven years ago, and he was happy to tell the section that it had been almost self-supporting during the whole of that time, at a cost of 7s. 6d. a week for each individual. He had made inquiries into the cost of building a more extensive hospital of the same kind, and he found that in a county such as Glamorgan, where stones and lime were cheap, one could be built to contain one hundred beds at a cost of £2,500. That we must continue to have large hospitals there could be no doubt; but at the same time he thought an effort ought to be made for the multiplication of small hospitals.

Dr. STEWART (London) said that, as he had read one of the papers, he must be allowed to say a few words. He had no doubt there was substantial truth in much of what Sir James Simpson had alleged; but the papers which had been read contained facts which should lead them to suspend their judgment as to the extent to which large hospitals in towns were injurious. It ought to be taken into consideration that large numbers of operations were performed in town hospitals on cases in which at the best the hope was for prolongation of life, not for cure. Many of these cases were so bad that it was a question, in the first instance, whether the operation should be performed at all; and the result often proved that perhaps it would have been just as well, or better, to have left the patient alone. As to the nature of hospitals in towns, he must say that he had long been convinced that, instead of the introduction of what were called refuges for cholera, typhus, and various forms of fever, it would be immensely better to have houses taken as hospitals to be used for the time, and shut up afterwards. It would be better to do this than to build up large fever hospitals at a great cost at long distances from each other. It was unwise to reduce the strength of patients by conveying them long distances. In London there should be hundreds of such places for use in times of epidemic. He must say one word in defence of Dr. Bennett, who was not there to defend himself. In speaking of “germs”, what he contended was, that it was improper to apply a word having a definite scientific meaning to a different thing, when it could not be proved that such a thing existed. That was his point, and he argued that a different term should be given.

Mr. J. HUTCHINSON (London) wished to call attention to some weaknesses that were, he thought, involved in Sir James Simpson's statistics. The statistics he had got from the hospitals were truthful and reliable. They were *data* collected from registration—from facts written down at the time; but how were the statistics obtained that were to be compared with these? They were obtained from private practitioners, after lapse of time, and sometimes from memory. He was sure that gentlemen who were at all concerned in the collection of *data* would agree with him when he said that these latter facts were not worth much, and ought not to be placed in comparison with hospital facts. He had worked for many years in collecting hospital statistics, and he

knew how exceedingly difficult it was even to get the facts out of hospitals—how very often the unfavourable cases were concealed or forgotten, and much more often concealed than forgotten. When he had to go to the surgeon, and asked him for his own cases, very often he found that some of them had been forgotten; but when he went to the Registrar appointed by the hospital authorities, then he could get the whole of them. He tried some years ago to get up the same inquiry as Sir James Simpson had done. He applied to a good many private practitioners for facts, and he got from them the statement that they could not give him anything for his purpose that would be reliable or trustworthy. He thought it therefore unfair, and likely to create a false impression with regard to hospitals, to contrast facts which were so unequal. He must now be allowed to refer to Dr. Kennedy's paper on Hospitalism, as illustrated by puerperal fever. Now it seemed to him that the Lying-in Hospital was to be compared with an ordinary general hospital in this way—that it took nothing but dangerous cases. In the large hospitals there were open wounds, and in the lying-in hospitals all the cases had open wounds and were dangerous, and therefore these were the best spheres in which they could judge of the spread of disease by contagion. Take erysipelas, pyæmia, puerperal fever, and gangrene, and consider how they originated and spread. That they spread by contagion, and were caused often because of a want of regard to ventilation, all the facts with which he was acquainted tended to prove. He thought a great many of the cases of so-called puerperal sporadic fever were carried by physicians into their practice, and by medical students; and he thought also that the practice of allowing medical students to attend difficult cases during the period of dissection was fraught with the greatest danger to the public. What they had to do in their surgical wards was to keep out special causes of contagion, and this was a point to which attention should be directed. He was convinced as strongly as any one that Sir James Simpson's amputation test was unfair; but he did not wish to ignore the great fact to which Sir James had drawn attention. He believed the mortality of the London hospitals was, to a great extent, preventable; and he thought if they could carry out, on a limited scale, what Sir James suggested, it was their duty to do it. There were one or two practical suggestions which he would like to offer. He thought lying-in hospitals must end. They served no good purpose. When fever took place among them, it could not be stamped out where there were a number of patients all liable to disease. Then he thought the practice of allowing students engaged in dissection to attend midwifery cases certainly ought to end; and he also held the opinion that surgeons engaged in private practice should not attend erysipelas and midwifery at the same time; and that, if puerperal fever happened in their practice, it was their bounden duty to decline their attendance. He thought that fractures and all operations upon bones in large general hospitals should be as carefully isolated as possible—should be treated as far as possible from all sources of contagion, whether aerial infection, infection from sponges, beddings, nurses, dressers, surgeons, or instruments. And there ought also to be this reform; students engaged in the dissecting-room should not be engaged as dressers, and dressers and nurses who attended to erysipelas should have nothing to do with other cases.

The PRESIDENT, in closing the discussion, said it had been most interesting and profitable. They were much indebted to Dr. Kennedy, who had been obliged to leave, but who had remained three days in order that he might have an opportunity of reading his paper. He should like to state that, in his opinion, this question of hospital statistics was now in a better state, so as to admit of public investigation. There had hitherto certainly been very defective registration in the hospitals themselves; and it was now highly creditable to all the large London hospitals that, notwithstanding the charges Sir James Simpson was able to make against them, they were, he believed, by their own documents furnishing the public with the most truthful accounts of their experience, and of the accidents that were treated by them. St. Bartholomew's was giving a minute account of all the cases treated there, and the results of those cases; and this would put them in the position to decide several of the questions that had come under discussion. They would also soon have an opportunity of seeing the results of the great improvements in hospital construction that were seen in Leeds and other places. Experience would soon show the excellent surgeons of such institutions whether structural improvements tended to diminish mortality. The great question was this. Hospitals were founded with a view to diminish the mortality of the population. No doubt, the benevolent people who raised these hospitals did it with the intention of diminishing the sufferings of mankind; and there was no doubt, either, that they had been very much mistaken in many of their opinions. The founders of lying-in hospitals, for instance, instead of diminishing mortality, had undoubtedly increased it; and he thought

they might say that the founders of the old general hospitals had made the same mistake, although with an excellent intention. They were anxious to put all this right, and to determine whether the greatest good could be accomplished by bringing the patients into small hospitals, leaving them at their homes, or taking them to large improved hospitals. He quite agreed with those who stated that, in the present condition of things, it would be unwise to leave a certain class of sick people in their homes in large towns, with bad house-accommodation. It was impossible to say that such people could be left in their homes with advantage to the community; they must be removed. To what place they should be removed, was, of course, a question for consideration. He had expressed, he thought, a good many years ago, nearly the same opinion as Sir James Simpson had expressed about small hospitals; and he was still of the opinion that it was an evil to bring a great many people together under the same roof; that isolation was a great advantage, particularly isolation of the sick. The mortality of lying-in hospitals was a most painful and dreadful fact. His attention had been attracted to it for some time, and any way of dealing with the matter should be most carefully considered by the profession. He would like to express, in concluding the business of the Section, how much they were indebted to their friends of Leeds for the assistance they had given, and how much the Section was indebted to its Secretaries, Dr. Philipson and Dr. Wiltshire.

REPORT OF THE JOINT COMMITTEE ON STATE MEDICINE.

THE following is a copy of the memorial presented at the General Meeting of the Association on July 30th.

The past year has not entailed much labour on your Committee, who have for the most part been occupied in perfecting their schedule of questions—copies of which have been sent to all the members of the Royal Sanitary Commission—and in quietly watching the progress of events, acting only where their interference seemed likely to be followed by important results.

For two months after the meeting of the British Medical Association at Oxford, the scope and extent of the future inquiry were still doubtful, and it was only on the 24th of November—nearly two months after the meeting of the Social Science Association at Birmingham—that the appointment of the Commission was announced in the pages of the *Gazette*.

During the period of five months that intervened between the deputation to the Government and the beginning of October, Dr. Acland, as Chairman of the Committee, was in frequent communication with the Home Secretary in reference to the objects and geographical extent of the Inquiry. While matters were in this position, the Joint Committee met at Birmingham on the 5th of October, when a resolution, proposed by Dr. Gairdner of Glasgow, and seconded by Dr. Mapother of Dublin, was unanimously adopted, urging upon the Home Secretary the importance of including the whole kingdom in the inquiry. Dr. Acland, in accordance with the instructions of the Committee, at once transmitted this resolution to Mr. Hardy, who in the course of a few days signified his intention to comply with the wishes so earnestly expressed to him by the Committee.

The necessity of reconstructing the Commission, occasioned by the ministerial changes involving the Chairman and several of its most important members, gave an opportunity, as the Committee think very unfortunately, of reconsidering the constitution and objects of the Commission, the investigations of which are now restricted to England and Wales. The Metropolis, Scotland, and Ireland, are excluded from the inquiry. The Committee are still of opinion that this narrowing of the field of the Commission's labours greatly detracts from their value. It was after long and serious deliberation that they took up the ground from which they addressed the late Government; and the Committee see no reason for departing from it. They, therefore, readily acceded to a request conveyed to them by the Metropolitan Counties Branch of the British Medical Association, that they would solicit an interview with the Home Secretary and the Chancellor of the Exchequer, in reference to the extension of the Inquiry to the Metropolis, to Scotland, and to Ireland. They further appointed a Subcommittee to draw up a memorial, which is now submitted for the approval of the Association.

To Her Majesty's Principal Secretary of State for the Home Department, and to the Right Honourable the Chancellor of the Exchequer.

THE MEMORIAL of the Joint Committee of the British Medical and Social Science Associations

Humbly sheweth,—That the primary and chief object of those who last year earnestly urged upon Her Majesty's Government the appoint-

ment of a Royal Commission of Inquiry into the Operation and Administration of the Laws relating to Registration, Medico-legal Investigation, and the Improvement of the Public Health, was to obtain, on unimpeachable authority, the fullest and most trustworthy information as to how far the laws in question are fitted to secure the ends for which they were enacted, and how far they are obeyed throughout the United Kingdom of Great Britain and Ireland. That they hoped and believed that such an inquiry, properly carried out, would furnish a body of evidence that would be accepted on all hands as a safe guide in all future discussions on the consolidation and amendment of the said laws, and might be appealed to as conclusive, both in and out of Parliament.

That they asked for an inquiry coextensive with the kingdom; because, while the spirit and general tenor of the said laws are everywhere the same, the details are very varied and marked by diversities, sometimes well and often ill suited to the circumstances under which they are administered. That, therefore, any legislation founded on imperfect information as to these special circumstances and the special means required to meet them, must of necessity fail to fulfil the intention of a Sanitary Commission, and to secure those benefits which would be likely to result from fuller and more extended inquiry.

That no information obtained merely by written answers to schedules of questions, always open to grave misconception of their scope and import, and addressed exclusively to local authorities, can, in the absence of personal inquiry, either by the Commission itself or by skilled persons deputed to discharge their functions, furnish a trustworthy basis for permanent legislation. That as, sooner or later, recourse must be had in many places to inquiry on the spot, in order to supplement the tabular returns, as well as to test their accuracy, economy as well as efficiency demands that this course be adopted now.

That the urgent necessity for a full consideration of the present method of conducting medical investigations in relation to forensic tribunals has been, much to the regret of your memorialists, entirely lost sight of, and excluded from the inquiry of the Commission.

Your memorialists, therefore, would most respectfully urge on Her Majesty's Government a further prosecution of these inquiries, and their extension to the Metropolis, to Scotland, and to Ireland. This, although entailing some additional outlay, would amply repay, in value to the country, any contemplated expenditure of national funds; and would insure that confidence in the investigations of the Royal Commission which the present limitation of the inquiry fails to command.

Signed in name and by appointment of the Committee,

W. H. MICHAEL.
A. P. STEWART.

London, July 1869.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

THE Committee of Council will meet at the Queen's Hotel, Birmingham, on Tuesday, the 24th of August, 1869, at 3 o'clock *precisely*.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.

13, Newhall Street, Birmingham, August 9th, 1869.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETING.

THE Annual Meeting of this district took place at Canterbury, on May 27th, 1869, when the following papers were read.

Dr. PARSONS: On the Preventive Treatment of Bronchitis.

Dr. WILKS: On the recent Epidemic of Influenza and Pneumonia at Ashford.

Dr. BOWLES read two Cases of Croup in which he had performed Tracheotomy, once with success.

Dr. KERSEY reported cases of Congenitive Deficiency of the Skull in several members of the same family.

The Members then dined together at the Fountain Hotel.

[This report was not received till August 18th.]

WESTMINSTER HOSPITAL.—The following prizes and certificates were gained in the Summer Session, viz.:—Practical Chemistry: prize, Parkhouse; certificate, Arthur. Materia Medica: prize, Parkhouse; certificate, Butler. Botany: prize, Parkhouse; certificate, Hocking. Forensic Medicine: prize, Lucas; certificate, Wallis. Midwifery: prize, Wallis; certificate, Harvey.

CORRESPONDENCE.

MUCH PROGRESS IN THERAPEUTICS IMPOSSIBLE IN THE PRESENT STATE OF HOSPITALS.

SIR,—Sir Thomas Watson, in his famous inaugural address to the Clinical Society of London, only embodied in forcible language the unanimous opinion of the intelligent practitioners of the present day when he said: "The greatest gap in the science of medicine is to be found in its final and supreme stage—the stage of therapeutics. We know tolerably well what it is we have to deal with, but we do not know so well, or anything like so well, how to deal with it! We want to know distinctly what is the action of drugs, and of other outward influences, upon the bodily organs and functions; for every one now-a-days acknowledges that, it is only by conducting and directing the natural forces of the body, that we can reasonably hope to govern and guide its diseased actions. To me it has been a life-long wonder, how vaguely, how ignorantly, and how rashly, drugs are often prescribed."

In the exceedingly interesting address delivered from the chair of the British Medical Association at Leeds, and reported *in extenso* in your issue of July 31st, Dr. Chadwick quotes and endorses this succinct and felicitous enunciation of the pathological strength and therapeutical weakness of modern medicine; but, as the subject of his discourse was the situation and construction of hospitals, a good opportunity was lost of following up Sir Thomas Watson's statement by a suggestion to the Clinical Society, which arose in my mind—not for the first time—as I read Dr. Chadwick's discourse, and which has no doubt presented itself to many others who have reflected on the present abject state of therapeutical inquiry. Can any considerable progress be made in our knowledge of the "action of drugs and other outward influences upon the bodily organs and functions," so long as the great fields of therapeutical experiment are pervaded by enormous, but not necessary, sources of fallacy? In other words, can the results of hospital practice be compared in such a way as to throw much light upon the action of drugs and outward influences, so long as a small minority only of hospital patients are placed in favourable circumstances as to air and light, and protected from that noxious atmosphere, which, unless extraordinary precautions are employed, renders mere residence in hospitals counteractive of the best medical and surgical therapeutics? If these questions admit only of negative answers, it clearly follows that the first required work of the Clinical Society, and of all societies of therapeutical inquiry, ought to be rendering hospitals fit for very extended comparative therapeutical observation. As the immediate interests of the sick poor, and the ultimate advance of therapeutics, are identical in respect of the work which has to be done, it only requires to be inaugurated and followed up by a few influential individuals to be crowned with success. The co-operative and vigorous action of physicians and lay philanthropists, if rightly organised, could do much, as the ground has already been well prepared by Sir James Simpson and others. One great step in the right direction would be an authoritative list of hospitals, and wards in particular hospitals, where the conditions of temperature, air, and light were such as to fit them for being fields for observing and comparing "the action of drugs and of other outward influences upon the bodily organs and functions."

As an example of the necessity which exists for ventilating this subject, let me refer to the exquisite little Galignani Hospital, which has just been rendered thoroughly unfit for hospital purposes by the indifference with which some medical men consider sanitary requirements. The circumstances seem almost inexplicable; but there can be no doubt as to the facts, as I have heard them repeatedly stated by Dr. Shrimpton, the physician in charge of the hospital. This hospital, built four years ago by the Messrs. Galignani, to be transferred to the British Government for the benefit of the British poor in Paris, contains twenty beds, and is situated in the Parc de Neuilly, just outside the gates of Paris. It is built on a sandy soil, and has an excellent natural exposure. It received the rays of the sun abundantly, and the air entered it freely from all quarters until within the last two months, when an immense building was erected immediately adjoining it. This has effectually destroyed the little hospital. The Messrs. Galignani allowed this new building to be erected, by the advice of three well-known French medical men. The Messrs. Galignani, thoroughly aware of the injury which would arise to their hospital from this edifice, had agreed to purchase the ground on which it was being built, when, the day before concluding the purchase, they privately asked the advice of the three medical celebrities. Baron Cloquet said: "I do not see that this building will do any harm to the hospital." Baron Larrey went still further, and said: "The new building will be rather an advantage to the hospital than

otherwise; it will protect the patients from the sun and wind." M. Nélaton, who was afterwards consulted, was of the same opinion as Baron Cloquet.

The new building in question is a vast warehouse for storing, and workshop for the manufacture of scenery for the Théâtre Français. It covers a very large space of ground, and has a dead wall fifty-four feet high, rising immediately above the hospital, and extending seventy feet at right angles beyond the hospital, in the direction S.S.E., so that the wards are deprived of all sun until 12.30 P.M., and from that time the heat reflected from this immense wall becomes intolerable during the warm weather. The hospital is thus deprived of all air coming from the S.S.E.; and, when buildings are erected on the other side of the hospital, which may be the case any day, air will also be excluded from the west. It is impossible to account for Messrs. Cloquet, Larrey, and Nélaton having dissuaded the Messrs. Galignani from the necessity of keeping their hospital isolated as it was; but this admits of no denial that *they have destroyed an exquisite little hospital*. The point, however, upon which I wish to insist is this: that hospitals, which from original or acquired defects in construction or situation do not receive a sufficiency of air and light, ought not to be accepted as fair fields for testing and comparing "the action of drugs and other external influences upon the bodily organs and functions."

Another illustration of my point is the new Hôtel Dieu of Paris, at present in course of construction. Few hospitals are worse than the old and condemned Hôtel Dieu. Its costly successor does not promise to be much better adapted for the treatment of the sick, and for therapeutical observation. The edifice is sufficiently advanced to show that there will be but a stinted supply of air and sun-light.

The building of the new Hôtel Dieu, including purchase of ground and indemnities to former proprietors, will cost 40,000,000 francs, that is, *one million, six hundred thousand pounds sterling*. This is equal to an annual charge in perpetuity of £112 sterling for each bed, reckoning merely the cost of the bare walls! This calculation is based on the fact that there are to be 700 beds, which will make the cost of each bed about 57,000 francs.

I must add, however, that there are modern buildings in Paris which are really models for the reception of the sick; and which, could I venture to make the necessary demands on your space, I should have pleasure in here describing. I may refer, for example, to the Asile Sainte-Anne, recently erected by the Department of the Seine as a dépôt for insane patients. This institution ought to be visited by English physicians when they come to Paris. It is situated inside the fortifications at Gentilly-la-Clacière, not far from the Val de Grâce and Observatory. This magnificent institution consists of detached pavilions united by covered pathways, the whole being enclosed in a garden, and accessible to the sun and all winds.

Another important fact must be noted, as a gratifying evidence that in some influential quarters at least the defects of the old hospitals of Paris are fully recognised, and are being remedied so far as circumstances permit. The Parisian hospital administration has caused to be constructed at the Cochin Hospital, at the request of, and upon a plan suggested by, Dr. Le Fort, a hospital-tent with two small annexes or auxiliary tents for the reception of patients. The administration has also established in the gardens of the St. Louis Hospital a wooden construction, capable of containing from eight to ten beds, and also two smaller constructions of a similar nature, each destined to receive a single patient. It is understood that, if these supplementary hospital tents and constructions are found to be as useful as is expected, they will be largely increased in number. This subject was brought before the Academy of Medicine on the 29th July, by M. Husson, in a paper entitled—"Note sur les baraques et les tentes destinées au traitement des blessés."

To return to the point; if progress is to be made in therapeutics, the observations must be made on a large scale in hospitals where there is a natural amount of air and sun-light, and where no inherent cause prejudicial to health is in operation. Legislative interference is required; but, ere that can be obtained, clinical societies and medical associations must enlighten the public upon this momentous question of public health. I am, etc., JOHN ROSE CORMACK, M.D.

Paris: 7, rue d'Aguesseau, 5th August, 1869.

PUFFING IN NEWSPAPERS.

SIR,—In your impression of Saturday last, you make some remarks on a paragraph which appeared in the *Redditch Indicator* headed "A Rare Operation in Surgery," and in which my name is mentioned. I think it due to myself to state that I was in no way cognisant of it either directly or indirectly. I enclose you a report of the case; and, if you

think it of sufficient importance to merit a place in the JOURNAL, it is at your disposal.—I am, etc.,

JOHN SMITH GAUNT.

* * We insert with much pleasure the letter of Mr. Gaunt, who is a most honourable member of the Association, and who is, we understand, naturally indignant at the manner in which his name has been used. The report which he sends shall be published.

DEBATING COLUMN FOR DISCUSSION OF PAPERS, ETC., PUBLISHED IN THE "JOURNAL".

MR. LISTER'S ANTISEPTIC TREATMENT OF WOUNDS.

SIR,—As Mr. Nunneley's severe criticism of the antiseptic treatment is calculated to prejudice the minds of some against it—and so impede the progress of surgery—I am anxious to bear testimony to its really satisfactory results, as observed by me in several cases last week under the care of Professor Lister, in the Glasgow Infirmary.

Until the recent improvements which Professor Lister has made in his treatment are published, and the careful manner in which he carries it out in all its details is seen, I do not think any one is in a position to form a judgment of it.

I had previously seen the antiseptic treatment practised—probably as seen by Mr. Nunneley—but in a very different way from that at present practised by Mr. Lister. It is to be hoped, therefore, that he will soon make known to the profession his recent advances in the carrying out the details of his treatment.

Whether the theory of his treatment be true or not, there can be no doubt that the results obtained by it are excessively satisfactory, as any one may satisfy himself by a visit to Mr. Lister's wards.

I am, etc., THOMAS JONES, M.B.,
Resident Medical Officer, St. George's Hospital.

THE ACTION OF MERCURY.

SIR,—We owe very much to the Edinburgh Committee for the pains they have taken in their laborious investigations into the action of mercury upon the biliary secretion. The experiments have been so exhaustive as to leave no doubt upon the immediate question at issue. But if the inquiry is to have any practical effect upon therapeutics, it should be extended. Has mercury (and so as regards podophyllin, etc.) any advantage not possessed by other aperient drugs, as favouring the expulsion or passage of bile? The experience of many seems to point to such superiority in certain cases of digestive derangement. Dr. Bennett will not regard the plea of experience as of much value, and may be right in tracing back the idea in question to a "vague statement of Paracelsus;" but nevertheless the "experience of all ages" carries with it a certain prestige, which so far entitles it to our respect, that we should inquire into its foundations before condemning it. If the inquiry is to terminate now, it is valueless from a practical point of view. It is essentially incomplete: so far as it is physiological and not pathological. It deals with the secretion of bile and nothing else, and does not take into consideration the intimate connection existing between the liver and the rest of the digestive system. The experiments from their very nature preclude the possibility of any judgment upon the question whether bile retained by spasm or otherwise, whether at the duodenal orifice of the duct or elsewhere, may not be liberated or its passage favoured by the action of mercury. The inquiry, then, must be incomplete without the comparative analysis of fecal matters as well during disease as during experiment. The results as at present obtained simply show, not that the practice of giving mercury is wrong, but that the explanation of its action must be reconsidered. Unless, therefore, the inquiry be completed, it may do harm by deterring us from the use of a valuable remedy, while upon the other hand, if mercury be really useless, the sooner the question is put beyond a doubt the better.

I am, etc., C. H. ALLFREY, M.D., F.R.C.S. (Exam.)
Chislehurst, 1869.

P.S. It will be observed that although the Committee take into consideration the effects of purgation from various causes, they do not consider the effect of mercury in cases of deficient appearance of bile during disease.

DONATION.—The Corporation of the City of London has voted £150 towards the grounds of the East London Hospital for Children.

BEQUESTS.—Mrs. Eliza Doncaster, of Winthorpe, Nottinghamshire, has bequeathed £200 to the Medical Benevolent Society (?), £100 each to the Royal Hospital for Incurables and the Hospital for Paralysis, and £50 to the Cancer Hospital.—A legacy of £500, less duty, has been received by the Nottingham General Hospital, under the will of John Sherwin Gregory, Esq.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having been elected Fellows of the College at previous meetings of the Council, were admitted as such on August 12th.

Square, Wm. Joseph, Plymouth; diploma of membership dated May 11th, 1835
Whipple, John, Plymouth; March 5th, 1824

UNIVERSITY OF LONDON.—Preliminary Scientific M.B. Examination. Pass Examination.

First Division.

Asby, H., Guy's Hospital	Harvey, C. W., University College
Ball, W. W. R. (First B.A.), University College	Houghton, W. B., University College
Bott, H. S., Owens College	Hubbard, J. W. (Student before 1839), St. Thomas's Hospital
Colgate, H., University College	Humphreys, H., University College
Crocker, H. R. (private study)	Rossiter, G. F. (private tuition)
Duncan, P. T., University College	Russell, E. G., Guy's Hospital
Dyson, W., University and Wesley Colleges	Schafer, E. A., University College
Eastes, T., Guy's Hospital	Skeritt, E. M., B.A., University College
Fennings, A., Charing Cross and St. Mary's Hospitals	Taylor, H., St. Bartholomew's Hospital
Hartog, M. M., University College	Whittle, E. G., University College

Second Division.

Appleyard, J., University College	Gould, A. P., University College
Bailey, F. W., King's College	Hickman, R., St. Mary's Hospital
Bettany, G. T., Guy's Hospital	Homan, G. W., King's College
Blake, S. H., University College	Hope, S. W., St. George's Hospital
Bomford, G., King's College	Jameson, H. G., University College
Bradfoot, H. S., Guy's Hospital	Knox, D. N. (M.A. Glasg.), University of Glasgow
Breeze, R. G., University College	Lees, D. B. (B.A. Camb.), Owens and Trinity Colleges, Cambridge
Browne, G. B., Owens and University Colleges	M'Cann, T. A. A., University College
Coates, W. H. (private tuition)	Nicholson, A., King's College
Crespin, E. R. L., Guy's Hospital	Philpot, J. H., King's College
Dawes, R. St. M., University College	Rat, J. N., King's College
Duncan, A., King's College	Roberts, R. D., University College
Dundas, G. A., Guy's Hospital	Steil, G. R., University College
Erith, W. E. N., University College	Sturge, W. A., General Hospital, Bristol
Firth, C., Norfolk and Norwich Hospital	

First B.Sc. Examination. Pass Examination.

First Division.

Aveling, E. Bibbins, University College	Harding, T. O., B.A., University College
Ball, W. W. Rouse (First B.A.), University College	Hartog, M. M., University College
Bott, H. S., Owens College	Hodson, C. W., Chester College
Clowes, F., Royal College of Chemistry and private study	Lees, D. Bridge (B.A. Camb.), Owens and Trinity College, Cambridge
Elmes, J. W., King's College	Routledge, R., Owens College

Second Division.

Jameson, H. G., University College	Rigg, C., Chester College
Osler, S. F., University College	Roberts, R. D., University College

UNIVERSITY OF EDINBURGH.—The following is a list of the gentlemen on whom degrees in Medicine were conferred on August 2nd. [*** Those who have obtained prizes for their dissertations. ** Deemed worthy of competing for the dissertation prizes. * Commended for their dissertations.]—Candidates who received the Degree of Doctor of Medicine under the New Statutes:

*Affleck, James Ormiston, Scotland; M.B. and C.B., 1867
Anderson, David Hawley Burn, Scotland; M.B. and C.M., 1866
Bent, John Francis Vincent, England; M.B. and C.M., 1866
Campbell, Charles Moss, India; M.B. and C.M., 1867
Colladon, Henri Louis (M.A. Geneva); M.B. and C.M., 1867
***Haddon, John, Scotland; M.B. and C.M., 1867
Haughey, Alexander Richardson, Ireland; M.B., 1866
Holden, Charles, New Brunswick; M.B. and C.M., 1867
Hunter, George, Scotland; M.B. and C.M., 1867
Hunter, William Brown, Ireland; M.B. and C.M., 1866
Kirkwood, John, Scotland; M.B. and C.M., 1867
**Lightfoot, Robert, England; M.B. and C.M., 1867
Lowe, George May, England; M.B. and C.M., 1866
Macbeth, John (M.A. Edin.), Scotland; M.B. and C.M., 1866
Macdonald, Alexander Dall, Scotland; M.B. and C.M., 1867
MacRae, John, Scotland; M.B. and C.M., 1867
Malins, Edward, England; M.B. and C.M., 1866
Munro, William, Scotland; M.B. and C.M., 1866
Nicholson, Henry Alleyne, England (D.Sc. Edin.); M.B. and C.M., 1867
Pullar, Alfred, Scotland; M.B. and C.M., 1866
Ramsay, James (M.A. St. And.), Scotland; M.B. and C.M., 1866
*Ritchie, Christopher Currie, Scotland; M.B. and C.M., 1867
Steven, Alexander, Scotland; M.B. and C.M., 1866
Stolterfoth, Henry (M.A. Cantab.), England; M.B. and C.M., 1866. (Received the Degree of M.D. on 31st October, 1868.)
Weddell, James Call, Berwick-upon-Tweed; M.B. and C.M., 1867
Wigg, Henry Carter, Australia; M.B., 1866

Candidates who received the Degree of Doctor of Medicine under the Old Statutes:

Grant, Alexander (M.A. Aberd.), Scotland

Ross, Donald, Scotland
 Stephenson, Thomas Appleby, England
 ***Strachan, John Miller, England
 Walker, William Josiah, England

Candidates who received the Degrees of Bachelor of Medicine and Master in Surgery. [† Indicates that the candidate has passed the examinations with First-class Honours. ‡ Indicates that the candidate has passed the examinations with Second-class Honours.]

†Amsden, George, England	Nicholson, Francis Cobham, Melbourne, Australia
Bartholomeusz, Matthew L., Ceylon	†Pitcairn, George Kincaid, Scotland
Begg, Alexander Henderson, Scotland	Pranker, Orlando Reeves, England
Bennett, Alexander, Scotland	Pritchard, Urban, England
Bennett, Thomas Marshall, England	Reid, Adam Scott, Scotland
Brener, George Keith, Scotland	Roberts, David William, Wales
Campbell, William Macfie, Scotland	Robertson, John Allan, Scotland
Cleaver, Wm. Jackson, England	Sayer, Thomas, England
Cook, Henry David, India	Scott, William Gifford, India
Davies, Francis Pritchard, Wales	Sinclair, Alexander James, Scotland
Ewart, John, England	(received the Degrees of M.B. and C.M. on 31st October, 1868)
Hirschfeld, John Charles, Isle of Man	Smith, Robert Mitchell H., Scotland
Hollis, Alfred, Isle of Wight	Smyth, Edward, Scotland
Kriekenbeek, Charles John, Ceylon	Stewart, Charles, Scotland
Law, Alfred Roberts, England	Thomas, Alfred, England
Lorimer, George (M.A. Ed.), Scotland	Thompson, Edwin, England
Mackenzie, Gilbert P., British Guiana	Thomson, James Archer, England
Miller, Henry, England	Waugh, George, Scotland
Moodie, Robert, Scotland	Zorab, John Manuk, India
Munro, Aeneas, Scotland	
Naismith, Wm. John, India	

Candidates who received the Degree of Bachelor of Medicine:

Bramwell, Byrom, England	Rabagliati, Andrea Carlo Francisco
Chalmers, Thomas Dodson, England	(M.A. Edin.), Scotland
Gray, Thomas Kay, Scotland	Stuart, George Ballingall, India

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, August 12th, 1869.

James, David, Cardigan
 Lill, William Frederick, Nottingham
 Oliver, Josiah, Hadlow, Tunbridge

The following gentlemen also on the same day passed their first professional examination.

Elkington, Ernest A., Queen's College, Birmingham
 Harding, Alfred W., University College
 Mayne, Thomas, University College
 Newstead, James, St. Bartholomew's Hospital
 Rimell, John George, University College
 Russell, William, Guy's Hospital
 White, Barrington S., King's College

MEDICAL DEPARTMENT OF THE NAVY.—The following is a list of the successful candidates, in the order of merit, who passed the competitive examination at Chelsea, between the 9th and 14th of August, for admission as Assistant-Surgeons into Her Majesty's Navy, to fill the required number of vacancies, and who have received commissions accordingly:—

Murray, Charles Frederick Kennan, M.D., Queen's University, Ireland
 O'Sullivan, Thomas, M.D., Queen's University, Ireland
 Wood, Joseph, M.D., Edinburgh University
 Smyth, Arthur Vereker, Queen's College, Cork
 Renshaw, Bernard, St. Bartholomew's Hospital

MEDICAL VACANCIES.

ATHERSTONE UNION, Warwickshire—Medical Officer and Public Vaccinator for the Polesworth District (£60 per annum, including medicine and appliances, and extra fees): applications, 21st.

BISHOP AUCLAND, co. Durham—Medical Officer and Public Vaccinator for the Whitworth District.

BOOTLE HOSPITAL AND DISPENSARY—House-Surgeon.

BOURNEMOUTH GENERAL DISPENSARY—Resident Surgeon (£100 per annum, with furnished apartments, coal, gas, and attendance): applications, 9th September; duties, 18th October.

BRAMLEY UNION, Yorkshire—Medical Officer and Public Vaccinator for the Armley District (£25 per annum, and extra fees): election, 23rd.

BRANCEPETH COLLIERIES, co. Durham—Surgeon.

BRIGHTON AND HOVE LYING-IN INSTITUTION—Resident House-Surgeon (£100 per annum, with furnished apartments, coal, gas, and attendance): applications, 1st Sept.; election, 9th Sept.

BROMLEY UNION, Kent—Medical Officer for District No. 4 (£30 per annum).

BROMSGROVE UNION, Worcestershire—Medical Officer for the Romsley District (£12 per annum).

DROVERS' SICK AND BENEVOLENT SOCIETY, "Butchers' Arms", York Road, Islington—Medical Officer: applications, 30th.

EASTBOURNE UNION, Sussex—Medical Officer and Public Vaccinator for District No. 1 (£90 per annum, 11s. each Midwifery case, 2s. 6d. each successful Vaccination, and other extras): applications, 2nd Sept.; election, 3rd Sept.

GLASGOW ROYAL INFIRMARY—An extra Surgeon to the Dispensary: election, 2nd September.

GLASSARY, Argyllshire—Medical Officer for the Kilmichael District: applications, 1st September.

GLOUCESTER DISPENSARY—Medical Officer.

GLOUCESTER GENERAL INFIRMARY—Assistant-Physician.

GREAT WESTERN RAILWAY PROVIDENT SOCIETY—Surgeon to the Weston and Cleveland Branch.

GUILDFORD UNION—Medical Officer for the Albury District (£60 per annum, 15s. each case of Midwifery, and other extras): applications, 3rd Sept.; election, 4th Sept.

HOLYHEAD UNION—Medical Officer for the Holyhead District.

KENT AND CANTERBURY HOSPITAL—Assistant House-Surgeon and Dispenser (£50 per annum, with board, lodging, and washing): election, 27th.

KILKEEL UNION, co. Down—Medical Officer for the Kilkeel No. 1 Dispensary District (£90 per ann., and Registration and Vaccination Fees): election, 23rd.

KINGSBRIDGE UNION, Devon—Medical Officer and Public Vaccinator for Stokenham (£56:10 per annum, and Vaccination Fees): applications, 3rd Sept.; election, 11th Sept.

LINCOLN COUNTY HOSPITAL—Physician.

METROPOLITAN FREE HOSPITAL, Devonshire Square—Assistant-Physician: applications, 5th August.

NEWENT UNION, Gloucestershire—Medical Officer for the Redmarley District (£70 per annum).

ROYAL GENERAL DISPENSARY—Physician.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road—Physician: applications, 23rd inst.; election, 7th September.

ROYAL MATERNITY CHARITY—Physician for the Eastern Districts.

SHEFFIELD PUBLIC HOSPITAL AND DISPENSARY—Assistant House-Surgeon (£65 per ann., with apartments, washing, and board): applications, 22nd.

SPENNYMOOR, co. Durham—Certifying Factory Surgeon.

TOWER HAMLETS DISPENSARY, Commercial Road—Medical Resident (£100 per annum, with residence, coal, and candles): applications, 6th Sept.; election, 20th Sept.

WARNEFORD HOSPITAL, Leamington—House-Surgeon (£100 per annum, with board, lodging, and washing).

WORKSOP DISPENSARY—House-Surgeon to dispense, visit out-patients, and act as Honorary Secretary (£100 per annum, with coal, gas, attendance, and furnished apartments): applications, 31st instant; duties, 1st November.

YORK UNION—Medical Officer for District No. 7 (£32 per annum, and extra fees): applications, 18th; election, 19th.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

LAMOTTE, Charles E. G., M.D., appointed Physician to the Sunderland and Bishopwearmouth Infirmary, *vice* Joseph Brown, M.D., deceased.

RUSSELL, Logan D. H., appointed Resident Medical Officer to the East London Hospital for Children.

*WELFORD, George, Esq., appointed Consulting-Surgeon to the Sunderland and Bishopwearmouth Infirmary.

BIRTHS.

BURROUGHS.—On August 13th, at Mayfield, the wife of E. F. H. Burroughs, Esq., Surgeon, of a daughter.

CLARK.—On August 8th, at Twickenham, the wife of *Alfred Clark, Esq., Surgeon, of a daughter.

CORNER.—On August 7th, at East India Road, Poplar, the wife of F. M. Corner, Esq., Surgeon, of a son.

PRANCE.—On August 6th, at Hampstead, the wife of Robert R. Prance, M.D., of a daughter.

WILLIAMS.—On August 11th, at Park Street, the wife of *C. Theodore Williams, M.B., of a son, still-born.

MARRIAGES.

CAMERON, Captain and Adjutant Donald R., Royal Artillery, to Emma, daughter of the Hon. Charles TUPPER, M.D., C.B., at Halifax, on July 22nd.

CORBIN, Thomas W., Esq., Surgeon, of Riverton, South Australia, to Laura Mary Louisa, daughter of Alfred HARDY, Esq., of Adelaide, at Mitcham, South Australia, on June 13th.

FAYRER, Edward, Esq., to Jane Emily, elder daughter of the late George FAYRER, M.D., of Henley-in-Arden, on August 10th.

GREAVES, Charles A., M.B., LL.B., of Derby, to Helen Eva, eldest daughter of the Rev. R. H. Cox, vicar of Hardingstone, Northamptonshire, on August 10th.

LAWRANCE, George W., Esq., of Lincoln's Inn, barrister-at-law, to Annie Bowen, second surviving daughter of T. Ogier WARD, M.D., at Kensington, on Aug. 12th.

MOTTRAM, Alfred, Esq., of Norwich, to Mary Esther, daughter of John F. WATSON, Esq., Surgeon, of Heigham Hall, at Heigham, Norwich, on August 11th.

PACKER, J. Macnamara, M.D., of Huyton, near Liverpool, to Lucretia Elizabeth, second daughter of Howard GILL, Esq., of Colville Terrace East, at Notting Hill, on August 5th.

DEATHS.

ADLEY.—On August 4th, at Haverfordwest, Ethel, infant daughter of W. H. Adley, Esq., Surgeon Bengal Army.

COWAN.—On August 11th, at Lee, near Ilfracombe, Elizabeth Maria, widow of *Charles Cowan, M.D., of Reading.

FERGUSHILL-CRAWFORD.—On August 5th, at Winchester, aged 63, Emma, widow of Andrew Fergushill-Crawford, M.D.

PRATT.—On August 4th, at Uxbridge, aged 26, Georgina Catherine, wife of T. G. Pratt, Esq., Surgeon.

WING, Charles, Esq., Surgeon, at Hammersmith, aged 76, on August 9th.

MR. DAVID FERGUSSON, the well known surgeons' instrument-maker, of Giltspur Street, died recently, at the advanced age of 81. Few men have passed through life more respected. Frugal, honourable, hard-working, and clear-headed, he accomplished for surgical instruments and appliances a perfection not hitherto gained. He was connected in his capacity with St. Bartholomew's and the Royal Orthopaedic, as well as other hospitals, and was much appreciated by the surgical staffs. He was born at Glasgow, but settled in early life in London. He leaves a family, well placed in the world. His eldest son has long conducted the business.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.

WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

AN INQUIRER.—When a medical man contemplates the formation of a club in the district within which he practises, he ought not to act—and certainly not to issue circulars—without first consulting with his brother practitioners in the district, and obtaining their concurrence.

ACTION OF THE URETHRA ON FOREIGN BODIES.—L. F. P. S. G. writes: "Respecting the disputed point referred to by Mr. Lund, as to the action of the urethra on a foreign body introduced into it, I have found the tendency is to expel such outwardly till its internal point or extremity reaches the bladder, when the tendency is reversed from its then coming under the action of the involuntary muscular fibres surrounding the prostate, and there is then a strong tendency to its being drawn into the bladder."

A WOULD-BE M.D.—The University of St. Andrew's has the power of conferring the degree of Doctor of Medicine on registered medical practitioners above the age of 40 years; the number of such degrees in each year being limited to ten. Our correspondent should apply for the regulations to the Registrar of the University.

PRURIGO SENILIS.

SIR,—In answer to a Member of the British Medical Association, I was consulted some time since by a gentleman staying at a friend's house, for this very troublesome complaint. He had tried every remedy but the following, which, he assured me, gave him immediate relief. But I am not in a position to say it cured the disease, as I hear he continues the application. It is as follows:—R. Unguent. zinci benzoatis ʒij; acidi hydrocyanici dil. ʒij; glycerini ʒvj. To be applied night and morning to the affected part. I am, etc., W. S. R.

SIR,—In answer to the inquiries of a Member of the British Medical Association, allow me to say that I have had such a case as he describes, setting at defiance consultations and remedies, but at last relieved by a saturated solution of borax. Milder cases have been benefited by twenty minims of creasote to an ounce of zinc ointment; also bathing with butter-milk. I am, etc., B. BLOWER.

SIR,—In answer to the query as to the treatment of the obstinate case of prurigo mentioned in the JOURNAL of August 14th, I would suggest the trial of ointment of galls, which, in my hands, has often given relief. Tannic acid in other forms, wood naphtha, and preparations of camphor, are also occasionally useful. Leamington, August 1869. I am, etc., THOS. BIRT, M.D.

SIR,—A Member of the British Medical Association, in your impression of August 14th, asks how to cure prurigo senilis. The case has resisted very numerous remedies, internal and external. 1. In these extremely obstinate attacks, I have found the use of sedatives (opium) certainly, every night and in efficient doses, an indispensable accompaniment to the effectual use of any special remedies. 2. External remedies should be used after a few Turkish baths, with careful "shampooing", to remove cuticle freely. 3. Of remedies (not tried), are the important bromides; they deaden sensation, and they eliminate. 4. If the prurigo be really senilis, it is of immense importance to know (as a scientific fact) that any given remedy has been really used. The memory is often treacherous, and the will disinclined for personal trouble. I am, etc., S. M.

SIR,—In answer to the inquiry of a Member of the British Medical Association, I beg to inform him that in a case of prurigo, which I am now attending, and in which almost all the numerous external applications he has mentioned had been tried without relief, the patient experienced more comfort from the use of the following ordinary evaporating lotion than from anything else:—R. Liq. ammon. acet. ʒij; sp. vini rectific. ʒij; aquæ rosarum ʒx. I was led to suggest it, from observing that the itching always came on most severely when he became warm, as from the bed-clothes. When this is the case, my patient dabs himself freely with the lotion, until he has reduced the temperature of the skin, when he finds some relief. I am, etc., EDWARD WELLS, M.D.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. Richards, not later than *Thursday*, twelve o'clock.

MORTALITY AFTER OPERATIONS ON THE URINARY ORGANS.

SIR,—Mr. Jessop, in his letter of July 24th, states that "the main cause of the great mortality in operations upon the urinary organs is to be found in the passage of the urine over newly cut surfaces." I know most surgeons believe that the mortality after lithotomy is influenced by the passage of urine through the wound; but, until they adduce some evidence in support of such belief, I shall continue to believe, as I do now, that the mortality is not so influenced.

Mr. Jessop states that the drainage-tube does keep the bladder empty; for, upon withdrawing it, and introducing a catheter, he could not obtain a single drop of urine. This was only what I should have expected; for why should the second catheter be able to effect more than the first? So long as a man is in the prone position, no catheter can completely empty the bladder; in proof whereof, let the following experiment be made. Introduce a catheter into the bladder, and, when no more urine can be obtained, withdraw it rapidly, and quickly insert a gum elastic catheter attached to a powerful syringe, which instrument will succeed in extracting from a drachm to a drachm and a half of urine—clearly showing that the bladder cannot be kept empty and dry. I am, etc.,

Portman Square, August 1869.

W. F. TEEVAN.

SIR,—Mr. Jessop is quite correct in stating that I agree with him, that urine should be prevented from coming into contact with wounds made in operations on the urinary organs; but how to effect such an object is another question, and I have my objection to leaving a catheter permanently in the urethra after operations for stricture. Mr. Teevan has rightly stated my reasons in his last letter; and if Mr. Jessop will kindly read the passage referred to in connection with what I say, a few lines previous to it, he will then be better able to understand Mr. Teevan.

Wimpole Street, W., August 1869.

I am, etc., HENRY DICK.

DR. F. J. BROWN (Rochester) writes that throughout the summer there has been an autumnal intermixture, as evidenced by the fall of the leaf, observed very generally. The complaints also have been autumnal, consisting of enteric fever, with abdominal congestion and inflammation (peritonitis), and of abdominal congestions and inflammations idiopathically, and as concurrences with intermittent fever. Intermittent fever has been exceedingly prevalent in the locality, where, he says, it is rarely seen, except to a slight extent in spring and autumn.

A. B.—As a Manual of Obstetrics, we know none better than Dr. Fleetwood Churchill's, published by John Churchill and Sons.

THE LATE MR. QUEKETT.

SIR,—I perceive in your JOURNAL of July 24th, that you have given a report of the annual excursion and dinner, at Leatherhead, of the Quekett Microscopical Society. It may not be generally known to your readers, that the late Professor Quekett died in this village, and his remains lie in this churchyard, he having temporarily resided here, with a view of recruiting his health during his last illness. His remains are covered with a handsome marble tomb, upon and around which the following inscription is recorded. I am, etc.,

Pangbourne, Reading, July 1869.

MEDICUS.

"In memory of John Thomas Quekett, F.R.S., F.L.S., M.R.C.S.Ed., etc., Professor of Histology, and Conservator of the Hunterian Museum at the Royal College of Surgeons of England.—Born at Langport, Somerset, 11th Aug. 1815. Died at Pangbourne, 20th Aug. 1861, aged 46 years.—His memory will ever be cherished by all who knew him, and by the thousands who have profited by his wonderful stores of science.—There is a spirit in man, and the inspiration of the Almighty giveth them understanding. (Job xxxii, 8.)"

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, August 18th; The New York Medical Gazette, July 31st; The Parochial Critic, August 11th; The New York Medical Record, July 31st; The Scotsman, August 10th; The Boston Medical and Surgical Journal, July 15th, 22nd, and 29th; The Birmingham Daily Gazette, August 9th; The South Durham Herald, July 29th; The Harrogate Herald, August 4th; The Manchester Guardian, August 6th; The Londonderry Guardian, August 12th; The Oxford Times, August 14th; The Aberdeen Free Press, August 10th and 11th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. J. B. Curgenvin, London; Mr. A. Myers, Bridgend; Dr. H. Charlton Bastian, London; Dr. J. Tapson, London; Dr. T. Birt, Leamington; Dr. F. Bateman, Norwich; Mr. A. G. Greaves, Derby; S. M., Bristol; Dr. T. P. Heslop, Birmingham; Mr. R. B. Carter, London; Dr. H. G. Stewart, Newcastle-upon-Tyne; Dr. H. Simpson, Manchester; Dr. J. Wallace, Liverpool; A Member of the British Medical Association and Retired Army Medical Officer; Dr. T. Head, Scotley, near Carlisle; Dr. Foster, Birmingham; Mr. J. B. Hutchins, London; Dr. Murray, India; and Dr. Wallace, Liverpool.

LETTERS, ETC. (with enclosures) from:—

Mr. F. Le Gros Clark, London; Dr. Bümler, London; Dr. Leared, London; Dr. J. Hughes Bennett, Edinburgh; Mr. H. S. Taylor, Guildford; Mr. E. Lloyd, London; Mr. F. W. Wright, Derby; Mr. Holmes Coote, London; Dr. T. B. Bott, Bury; Dr. Heywood Smith, London; Dr. J. D. Scurrah, Birmingham; Dr. Dyce Duckworth, London; Dr. A. Wiltshire, London; Mr. J. S. Gaunt, Alvechurch; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. Mapother, Dublin; Mr. T. W. Nunn, London; Dr. E. Crisp, London; Dr. R. Fegan, London; Dr. W. Taylor, Cardiff; Dr. J. Braxton Hicks, London; Dr. Fox, London; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Lomas, London; The Registrar of the Medical Society of London; Mr. J. P. Hartree, London; Dr. A. P. Stewart, London; Mr. C. Godson, London; Enquirer, Cambridge; Dr. T. Jones, London; Dr. Rutherford, Edinburgh; Dr. J. T. Dickson, London; Dr. Steele, London; Dr. H. Blanc, London; Dr. J. Hardie, Manchester; Dr. E. Wells, Reading; Dr. E. Malins, Cradley, near Birmingham; Mr. N. McCreevy, Drogheda; Dr. Septimus Gibbon, London; and Mr. Jessop, Leeds.

TABLE OF PARTICULARS

Regarding the Instruments employed for the Meteorological Observations published weekly in this Journal.

	BAROMETER.	THERMOMETER.	RAIN GAUGE.	OZONE.
BATH	Standard by Negretti and Zambra, on Fortin's principle. Diameter of tube 0.6 in. Height of cistern above half-tide level 126 ft. Not verified.	Hygrometer, maximum, minimum, and solar radiation; made by Burrow, of Malvern, and verified at Kew. The latter with blackened bulb in vacuo. "Stevenson's" Thermometer Stand, facing north, situated in garden; bulbs of thermometers 4 ft. above ground, and 112 ft. above half-tide level.	Made by Casella. Diam. of top, 5 in.; raised 15 in. above ground.	Moffat's tests, by Negretti & Zambra, exposed in ozone cage.
BOURNEMOUTH	Mercurial, made by Pastorelli, and altered by Casella, who certified its index error to be less than .010 inch. Placed in hall with cistern 2 ft. 10 in. above ground, and 128 ft. above half-tide level.	Hygrometer, by Casella, verified at Kew; maximum, Phillips' mercurial, verified at Kew; minimum: spirit, verified at Kew; "minimum on grass," spirit, by Casella, verified at Kew. Exposed in a "Glaisher Stand," facing north, and placed to northward of a clump of fir trees, which protect it from all direct sun rays. Bulbs 4 ft. above the ground; nearest wall 30 ft. east. Solar radiation thermometer, placed with vacuum bulb on grass, made by Casella.	Made by Casella. Diam. of top, 5 in.; placed on lawn 4 ft. above ground, and 125 ft. above sea; 30 ft. from nearest tree.	Schoenbein's tests, by Negretti and Zambra, exposed in wire cage which is suspended beneath the Thermometer stand.
DUBLIN	"Supplied" by Mason, of Dublin. Compared with Mason's standard, and verified by Mr. G. J. Symons; supposed error .002 in. Height above mean sea level 55 ft.	"Supplied" by Mason; not officially verified. Exposed in "Stevenson" stand, situated near a south wall; on the other sides a clear space of 20 ft., the north wall being 7 ft. high.	Diameter 5 in.; 3 ft. above ground, and 54 ft. above sea-level.	
KEW.....	Standard by Negretti, on Fortin's principle. Internal diameter of tube .4 inch. Height above half-tide level 20 ft. Verified at Kew and Greenwich.	Hygrometer mercurial; maximum: Negretti's patent; solar radiation: with black bulb and stem blackened 1 inch above bulb, in vacuo; minimum: spirit; all made by Negretti, and verified at Kew and Greenwich. Thermometer stand designed and made by self, consisting of three-fold sides and back, with air spaces between, louvre door in front, and open bottom; situated on lawn in garden, with bulbs raised 4 ft. above ground, and facing north. Radiation thermometers placed close to the grass.	Made by Negretti. 8 in. diameter; top of funnel 4 ft. above ground, in middle of garden.	Schoenbein's tests, made by Negretti & Zambra, freely exposed in Thermometer stand, without cage.
LLANDUDNO ..	Standard by Negretti, verified at Kew. Height above mean sea level 99 ft.	All by Negretti, verified at Kew. Exposed in a "Glaisher Stand," situated in middle of a small lawn, 40 ft. from the house, and 25 ft. from nearest tree.	Made by Negretti. 8 in. diam.; top of funnel 6 in. above ground, and close to thermom. stand.	
MALVERN	Made by W. and J. Burrow, on Fortin's principle. Height of cistern is 480 feet above sea level.	All made by W. and J. Burrow, and verified at Kew. Exposed in "Burrow's Garden Thermometer Stand," facing due north, with bulbs raised exactly 4 ft. above ground. Solar radiation thermometer, with stem blackened 1 inch above bulb, vacuum bulb resting on grass. Terrestrial minimum placed half an inch above grass.	Diam. 5 in.; verified by Mr. Symons; situated 1 ft. above ground, and 522 ft. above sea-level.	Tests according to Schoenbein, exposed in ozone cage, with inner perforated compartment.
SCARBOROUGH.	Made by Negretti, and verified at Greenwich. Situated in the house, and 184 feet above mean sea level.	Hygrometer, and solar and terrestrial radiation thermometers, made by Burrow and verified at Kew. Maximum by Negretti; minimum (mercurial) by Casella—neither verified. Exposed in louvre boxes, "similar to those employed by the Board of Trade," fixed against a wall facing W.N.W., and exposed to N., N.W., W., S.W. Bulbs raised 8 ft. above ground. Solar black bulb rests with vacuum jacket on grass; terrestrial bulb about half an inch above grass.	Diam. of funnel 5 in. Made by Casella; situated on a gentle slope, with top 1 ft. above ground, and 102 ft. above mean sea-level.	Lowe's ozone tests, exposed in a cage designed by Sir J. Clarke.
SIDMOUTH	Made by Adie. Verified at Kew, and situated 30 ft. above sea level.	Hygrometer by Casella, and verified by him by comparison with his standard. Phillips' maximum, and minimum by Burrow, both verified at Kew. Exposed in "Lawson's Stand," with bulbs 4 ft. above ground, which is distant from east wall 16 yards, west ditto 7 yards, north ditto 40 yards.	Howard's, 5 in. diam.; made by Casella; top is 6 in. from ground, and 26 ft. above sea-level.	Moffat's tests, freely exposed in Thermometer stand, without cage.
WORTHING....	Standard by Negretti; certified at Greenwich. Height of cistern above mean sea level 31 feet.	Hygrometer, maximum and minimum, made by Negretti & Zambra, and verified at Greenwich by Mr. Glaisher. These are exposed in a "Stevenson" stand, which faces due north, is situated in an open grass space fully exposed to the sun, and is quite away from all shrubs, etc. The bulbs are 4 ft. above the grass and 21 ft. above mean sea level. The black bulb solar radiation thermometer is a maximum on Phillips' principle, and made by Casella, verified at Kew. Suspended in the air with bulb 4 ft. above ground, and pointing S.E. Minimum terrestrial radiation thermometer, made by Casella, with forked bulb, verified at Kew, and placed quite close to the grass.	Let into the ground and freely exposed, with receiving surface of funnel 6 in. above ground, and 17 feet above mean sea-level; diam. of funnel 8 in.; verified at Greenwich by Mr. Glaisher.	Schoenbein's tests, freely exposed in Thermometer stand, without cage.

The above is a concise and, I believe, accurate statement of the position, nature, etc., of the instruments used by the contributors to the Meteorological Table in this JOURNAL. Although there are differences in the modes of exposing and placing some of the instruments, yet, on the whole, the observations cannot be considered other than reliable and fit for intercomparison. There appears to be some difference of opinion as to the mode of using, and the utility of the Black Bulb Maximum Thermometer. It is well known how various and variable are the results obtained with this instrument, and, if observations with it are to be of any use whatever, it is obvious that the most perfect uniformity should exist in the mode of exposing it. The following points seem to be specially worthy of attention:—1. The enclosing vacuum bulb should be of considerable size, as otherwise it has a tendency to concentrate the sun's rays upon the black bulb within. 2. The bulb of the Thermometer should be of a dull black, and the blackening should be carried one inch up the stem of the instrument from the bulb. 3. As height makes a considerable difference in the readings, which difference is by no means constant under all circumstances, it is recommended, as the simplest way of obviating this source of error, to place the instrument on shortly cut grass with the vacuum bulb resting on the grass and the other end supported by a forked twig.

The observations for the weekly table are taken thrice daily: either at 10 a.m., 2 p.m., and 10 p.m.; or at 9 a.m., 3 p.m., and 9 p.m.; and are reduced to mean values by a table, in which the mean corrections for each of these two sets of hours are deduced from Glaisher's Diurnal Range Tables; this is furnished to each observer. Observers may, however, suit their convenience by adopting other hours of observation, but then it is expected they will take out and apply the Diurnal Range corrections for themselves, and forward the *uncorrected*, as well as corrected data with their returns. The Barometer and Thermometer readings are all reduced and corrected by each observer, the former to 32° Fahr., and mean sea level, and also, together with the latter, for instrumental errors.

Returns have been promised, as early as possible, from Dover, and in the beginning of October next from Biarritz. It is very desirable to obtain returns from as many, and as widely separated places as possible, so as to furnish trustworthy data for a good Comparative Meteorology and Climatology of British and other so-called health-resorts.

Kew, W. August 9th, 1869.

W. J. TREUTLER.

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LECTURES

ON THE

PRINCIPLES OF SURGICAL DIAGNOSIS:

ESPECIALLY IN RELATION TO SHOCK AND
VISCERAL LESIONS.*Delivered at the Royal College of Surgeons of England.*

By F. LE GROS CLARK, F.R.C.S.,

Hunterian Professor of Surgery and Pathology in the College; Surgeon to
St. Thomas's Hospital; and Examiner in Surgery at the
University of London.LECTURE III.—LESIONS OF THE NECK AND THROAT.
(Concluded.)*Penetrating Wounds.—Cut Throat.—Shock.—Contusion of the Larynx.
—Scalded Throat.—Foreign Bodies in the Larynx and Trachea.—
Tracheotomy.—Foreign Bodies in the Pharynx and Œsophagus.—
Wounds of the Heart.—Parallel between Injuries of the Brain and
Lungs.*

I HAVE remarked that the *pharynx* is occasionally involved in wounds laying open the larynx and extending to the back part of the former tube, without necessarily implicating the larger vessels or other important parts in the neck. Such injury does not entail any serious consequence in itself, although the determined nature of the self-inflicted injury implies such an amount of lesion as is likely to prove mortal. The same remark may be made respecting other accidental wounds of the pharynx from the intrusion of foreign bodies which may penetrate or lacerate the back of the throat, such as fish-bones or a tobacco-pipe; but it should be remembered that these lesions may be complicated by the wound of neighbouring textures of importance. Thus fatal bleeding may result from puncture of a large vessel; or deep-seated suppuration may follow, and entail secondary hæmorrhage.

I recollect, when I was a hospital apprentice, a singular instance of attempted suicide, occurring during my week of "taking in". A woman had recourse to the curious expedient of forcing a large door-key into her throat. Happily, it was held fast in the pharynx, within reach of a pair of forceps, and was extracted without much difficulty, and without producing any worse result than a sore throat for a few days. This specimen (1077) from our College Museum is identified with a similar case; it is the handle of a punch-ladle, which was taken from the throat of a maniac who proposed to commit suicide by swallowing it. He experienced no subsequent inconvenience from this eccentric use of his punch-ladle.

The accidental blocking of the pharynx by the lodgment of food within it has proved fatal by suffocation. The accompanying preparation from the Museum of St. Thomas's Hospital exemplifies this fact. The patient, a man who was engaged in taking a meal at an eating-house, was seen to be suddenly seized with convulsion, as if struggling for breath, and was, of course, supposed to be in a fit. He died speedily; and, when examined after death, a large morsel of unmasticated meat was found to have been wedged in the pharynx, and to have thus arrested respiration.

Of accidental wounds of the *œsophagus* I have never seen an instance, except in association with division of the trachea in attempted suicide; and this, in my experience, is an infrequent occurrence. An incautious penetration of the trachea in tracheotomy might cause, and I believe has produced, a similar result. Egress of food or drink, or the symptoms consequent on their introduction into the air-tubes, would indicate the probable nature of the injury; though, as I have already remarked, these results may be due to the imperfect closure of the glottis when respiration is performed through an artificial opening below the rima. Not infrequently, surgeons are consulted respecting the supposed lodgment of foreign bodies in the *œsophagus*. I think there is no doubt that occasionally abrasion of this tube perpetuates the uneasy sensation, which the patient interprets as a proof of the presence of some extraneous body; and, if deglutition can be completed without difficulty, it is unwise to interfere. The cautious passage of a probang may, if required, satisfy the importunity of the sufferer. Again, this impression may be the first indication of some commencing serious organic disease, such as cancer. If deglutition be really obstructed, of course this sign, together with the history of the case, may indicate the reality of the patient's suspicion, and demand decided interference to afford relief. I remember an interesting exemplification of this state

which occurred to me a few years back in St. Thomas's Hospital. A young man applied at the surgery, stating that, in eating some soup a few days previously, he had inadvertently swallowed an irregular fragment of bone. He pointed to the exact position where he believed it had lodged, adding that he was starving, as he was incapable of swallowing even liquid food. The pain he suffered, which was not acute, was aggravated by the effort at deglutition; and he added, that he was conscious of the bone passing into the throat, but too late to arrest it; and his subsequent efforts to return it were fruitless. There did not appear to be any marked change of position after the first day. I tested the accuracy of his statement by giving him some milk to drink, and he complied with my request to make the attempt. A certain quantity was imbibed, and then the whole, apparently, was regurgitated. Under these circumstances, I did not hesitate to pass a probang; and at the spot indicated by him—viz., about the middle of the mediastinum—its further progress was arrested by firm resistance. I was now so persuaded of the correctness of his representation, that I did not hesitate to press the instrument onwards, and soon had the satisfaction of feeling the obstruction give way; and the probang passed on into the stomach. On its removal, I requested the patient again to make an attempt to swallow some milk. He was sceptical of the utility of repeating this experiment, as he felt sure, from his sensations, that the bone was still lodged in the *œsophagus*. His gratification at finding that he was indeed relieved was proportionate to his previous despondency; and, as I did not again see him, I presume he had no further trouble, beyond the soreness which I told him to expect for a short time.

The following is a remarkable instance of permanent relief following the simple operation of passing the *œsophagus*-tube. A servant of middle age, residing in my family, had been the subject of dysphagia for eighteen years. It was with difficulty that she could swallow any solid food during this entire period; and latterly her fellow-servants were so alarmed by her rapid loss of strength and almost entire abstinence, that the subject was mentioned to me. There was no serious obstruction to the passage of an ordinary stomach-pump tube; and the relief was immediate, complete, and permanent. I cannot explain the *modus operandi* of the remedy. I believe the case to be entirely genuine, and free from the suspicion even of hysteria; and I quote it for what it is worth.

Not long since, I noticed in print a case in which a half-crown had been swallowed, and remained lodged in the *œsophagus* for some months, when death resulted from ulceration extending into the aorta. The story of the man, who was, if I remember right, a criminal, was not credited, and no attempt was made to relieve him.

The following interesting case, communicated to me by Dr. George Johnson of King's College, exemplifies the value of the laryngoscope in the diagnosis of the class to which it belongs. A child, aged twenty months, had, according to the account of his parents, swallowed a penny. At first, he was nearly suffocated; but, when seen by Dr. Johnson two days afterwards, he breathed freely; but the respiration was accompanied with a moist rattling noise in the throat. He could swallow only liquids; and that was difficult, and excited cough. The mucus discharged was occasionally tinged with blood. These symptoms and the general distress of the child satisfied Dr. Johnson that the coin was impacted in the throat. The laryngoscope revealed its position in the upper part of the *œsophagus*—the surfaces directed forwards and backwards, and the upper margin just below the opening of the larynx. It was readily removed with a pair of long slender forceps. The early signs of suffocation in this case no doubt corresponded with the passage of the coin over the base of the tongue and epiglottis.

The removal of foreign bodies impacted in the *œsophagus* is not often called for; and, when required, the surgeon would usually be guided by the prominence of the object upon which he is cutting. Our senior Vice-President, Mr. Cock, has twice successfully performed this operation, and has given an interesting record of the cases in the *Guy's Hospital Reports*.

Traumatic stricture of the *œsophagus* is occasionally met with, as the result of textural lesion from the contact of some irritating matter swallowed accidentally or intentionally; but such obstructions are not characterised by any peculiarities, and are recognised by the diagnostic signs common to all strictures in this tube. I have a record of two cases in which the patients had fallen into a vat of soap-lees. In one, I had the opportunity of witnessing the early escharotic effect of this solution—the mucous membrane of the lips, tongue, and fauces being destroyed in patches; and dysphagia being the most distressing consequence of the accident. The other case came under my care six weeks after a similar accident; and he applied at the hospital in consequence of the difficulty he experienced in deglutition. He was relieved by the use of a bougie.

The remarks which I made in reference to the infrequency of traumatic lesions of the thoracic viscera, in civil practice, apply with special force to the *heart* and the *great vessels* immediately connected with it. The relations of these parts, and the protection thereby afforded to them, preserve them from injury in any of the ordinary casualties which come under the notice of the hospital surgeon; and, when such injuries do occur, they are usually so immediately fatal, that there is no opportunity of associating with them the particular diagnostic signs or symptoms by which they may be identified. Indeed, the survival of the patient, under circumstances which might be supposed to implicate this vital organ, may be generally accepted as proof that it has escaped injury; yet many remarkable instances have been recorded, in which even serious wound of the heart has not proved immediately fatal; nay, in which the patient has so far recovered as to live for a considerable period, and the real nature of the lesion has not been verified until after death. One such instance I alluded to in my last lecture as having come under my own observation many years since. A patient was admitted into the hospital with fractured ribs, and survived the accident several hours. At the *post mortem* examination, one of the fractured bones was found to have transfixed the pericardium, and penetrated into the left ventricle of the heart. As this very rare accident was not suspected, unfortunately no special record of the symptoms during life was preserved.

The presence of such a wound may be conjectured from the direction taken by the penetrating weapon or missile; but the attendant symptoms, being dependent chiefly on loss of blood and embarrassment of the heart's action, are necessarily equivocal, as they are equally indicative of other and less serious injuries; and information derived from the stethoscope is scarcely more certain. External violence, such as sudden and forcible compression of the chest, may rupture the heart or one of its large vessels, as occurred in a case which came to my knowledge, in which the aorta was lacerated by the fall of a heavy cask on a man's chest.

In such instances, no doubt, the force acts either by compression of the column of blood within, or by excessive displacement and longitudinal extension of the artery; perhaps by both combined. Survival even for a limited period after these wounds must be due to the obliquity of the opening, or to the sudden syncope which ensues, and the consequent closure, by clot or otherwise, of the laceration or opening. More limited injuries may, for a time, be unattended by symptoms to create alarm, or even to excite suspicion of their existence, as is illustrated in the following instance, which occurred about two years since in St. Thomas's Hospital.

James C., aged 7, was brought to the hospital about mid-day, with the history of having had a fall three hours previously. He was examined by the dresser on duty, who fancied that he detected a fractured rib, and applied a flannel bandage. The child looked pale, and his respiration was somewhat embarrassed, but he did not complain of pain. He was taken home, and seems to have been tolerably comfortable during the afternoon and evening, his condition not exciting any alarm in the minds of his parents. About midnight, he began to complain of some uneasiness about the chest; and at two A.M., fifteen hours after the infliction of the injury, he rose up to pass urine, but fell back fainting, and almost immediately expired. At the *post mortem* examination, it was discovered that a needle had passed through the cartilage of the fifth rib. About an inch of the pointed end had been broken off, and was found free in the pericardium, where it had rested, and lacerated the apex of the heart; and from the wound thus caused hæmorrhage had taken place into the pericardium, to the extent of six or seven ounces. A second part of the needle was imbedded in the cartilage of the rib, not projecting on the pericardial aspect, but slightly on the cutaneous. The third part of the needle, including the eye, was not found. A most careful examination of the skin failed to detect the aperture by which the needle had entered. The body was pale and anæmic, but otherwise healthy. The cause of death was evident; viz., embarrassment of the heart's action from the presence of blood in the pericardium: its suddenness was due, apparently, to the abrupt change of position, acting directly on the heart, and indirectly on the brain.

The following very interesting case of a similar injury, but in which recovery took place, has been forwarded to me by my friend and former pupil, Mr. Morton of Guildford, in whose practice it occurred about a year and a half since: the record of the symptoms is an interesting contribution to the diagnosis of these injuries.

M. M., aged 17, a schoolboy, of phlegmatic temperament, was accidentally stabbed with a penknife by another boy, whilst at play. On receiving the wound, he felt scarcely any pain; only a little catch when he drew a full breath. There was scarcely any bleeding from the external opening. Immediately after the accident, he went into school, and remained an hour, feeling, as he expressed it, "all right", but hoping he should not be "put on." At the expiration of an hour, feel-

ing faint, he went out, and then vomited and fainted. Upon recovering he returned into school, but was soon obliged again to leave, in consequence of a return of the nausea and faintness.

At seven o'clock in the evening, three hours after the injury was received, he was seen by Mr. Morton, having confessed the cause of his illness. When Mr. Morton entered the room, he immediately rose and walked to meet him. His face was deadly pale, his lips bloodless, his skin cold and clammy, and pulse almost imperceptible. He had been vomiting frequently since his first attack of faintness. The heart was acting very feebly, with a scarcely perceptible impulse: the sounds were muffled, but there was no bruit, nor was there any increased cardiac dulness to be detected on percussion. The wound was a puncture, three-eighths of an inch wide, made by an ordinary penknife an inch and three-quarters long from point to handle. The situation of the wound was between the third and fourth ribs, an inch and a half from the centre of the sternum, and two inches to the right, and an inch and a half above, the left nipple: the edge of the knife was turned downwards.

There was no hæmorrhage from the external wound, which was at once closed with collodion. He was placed in bed, and, there being no attempt at reaction, hot bottles were placed in contact with the feet and body, and ice was given him to suck, in the hope that it might allay the distressing sickness. He complained of no pain except on deep inspiration, and even then he did not seem to suffer much. There was no cough nor spitting of blood.

At one o'clock on the following morning reaction commenced, and the vomiting was less frequent. Four hours later he had slept a little, and his skin and feet were warm. At nine o'clock, fourteen hours after the accident, the pulse was more distinct, and 120 in the minute. The heart's action was still feeble, and irregular in the force of its beat, but not intermittent. At the close of twenty-four hours, reaction was complete, without fever. On the fourth day, the pulse had fallen to 90. He had no dyspnoea, but the respiration was still quick, and he complained of slight pain in the chest.

A fortnight later, the report states that he had been gaining strength, though the heart's action was still very feeble, and much quickened by any excitement or exertion. There had not been any abnormal sounds or precordial rubbing up to this date, when his pulse ran up suddenly from 84 to 96, and a loud bruit became audible over a limited area, having the seat of the puncture at its loudest point. It was not heard over the apex of the heart, nor in the carotid arteries, but was apparently superficial, and yet difficult to separate from the first sound of the heart; and it was not a to and fro sound.

At this period the boy was removed home, and thus passed from Mr. Morton's observation: but he appears to have had no further serious symptoms, although, at the expiration of three months, his medical attendant reported that he could not satisfy himself that the heart was quite free from impediment in its action. The only stethoscopic signs then present were, indistinctness of the first sound and undue clearness of the second, the interval of repose being lengthened. After the lapse of seven months, all traces of the accident had disappeared.

From the position and depth of the wound, and from the symptoms, which are such as we should look for under such circumstances, there can be little doubt that the pericardium was penetrated in this case, and probably the heart itself punctured. The early faintness, pallor, depressed circulation, and sickness, were those of shock, and of too profound and protracted a character to admit of explanation, considering the nature of the violence inflicted, except on the supposition that some vital organ was injured. The position of the wound indicated the organ; and hæmorrhage to an extent sufficient alone to account for this condition would have been fatal, from the embarrassment of the heart's action which would have been inevitably entailed. The bleeding into the pericardium must have been limited. Reaction was unaccompanied by any striking change in the heart; and more than a fortnight elapsed before pericarditis was manifested by the pain, abnormal sound, and constitutional disturbance. Whether this was followed by any adhesion of the adjoining surfaces of the serous membrane is doubtful; but the negative evidence is opposed to such a conclusion.

By the great kindness of the owner of this preparation, I am enabled to show a remarkable exemplification of the possible protraction of life after the receipt of an injury usually regarded as immediately fatal. The interest associated with the specimen is enhanced by the fact that the heart was taken from a soldier who fought at Corunna, and that the veteran surgeon, Mr. Fuge, of Plymouth, who has kindly permitted me to exhibit it, was the attendant on the wounded man when he was landed at Plymouth just sixty years ago. His story was this. He was struck down by a ball which entered his chest, the wound being to the left of the sternum, between the second and third ribs. He thought he might have been insensible for half an hour. One of his companions, who helped to remove him from the field, said that the loss of blood

did not appear to have been copious at the time. He was carried on board a line-of-battle ship, crowded with wounded soldiers, and sent to England, receiving, on his voyage, no surgical attention beyond the application of a piece of plaster. Mr. Fuge found the external wound healthy-looking and suppurating. A probe was introduced nearly its length without meeting with any resistance. His countenance was pale; respiration frequent and laboured; pulse 120, feeble but regular; temperature nearly natural; distressing restlessness; inability to sleep, and a craving for opium. He complained occasionally of an obtuse pain, but was unable to point to any particular part of the chest as its site. He had also colliquative diarrhoea. He remained in the same condition for two days, and then his intellect became confused, and he was less tractable. He got out of bed for some purpose and nearly fainted. His restlessness increased, and he expired on the following morning, nearly fourteen days after the receipt of the wound, and on the third day after landing.

On examination of the chest, the left pleura was found to contain two quarts of sero-sanguineous fluid, its costal surface exhibiting evidences of acute inflammation, and the lung, shrunk to a small solid mass, was adherent to the spine. The thickened and distended pericardium contained half a pint of the same sort of fluid, and the surface of the heart was covered with a thin layer of adhering lymph, a small clot of blood being attached to its apex. The right ventricle presented a transverse opening about an inch in length, which penetrated to its interior, near the origin of the pulmonary artery. On removing the heart, by cutting through the great vessels, the ball was sought for, and found lying loose in the pericardium. By tracing its course, it became evident that it must have remained in the right auricle, as the tricuspid valve had a circular, lacerated opening in it, near its attachment to the ventricle. The right pleura and lung were healthy.*



The singular problem to solve in this case is, that the hæmorrhage did not immediately destroy life, and that the ventricle could continue to contract on its contents without discharging the blood into the pericardium: perhaps this result was hindered by the laceration of the valve, which allowed the partial regurgitation of the blood into the auricle; and the action of the ventricle would tend rather to contract than to expand the opening. If the coronary artery had been wounded, death must have been instantaneous.

This case is not singular, as regards the nature of the wound; but it is very remarkable, if not unique, in the fact that the patient so long survived so rare an injury.

There is a closer analogy in the condition and consequences of lesions of the brain and lungs than might be supposed, from the contrast in structure and function existing between these organs. Partial fracture may occur in either case without involving the contained viscus; contusion is represented in each instance by apoplectic extravasation—if I may be permitted this generic but questionable use of the word—on the surface, or in the interior of either organ. Even concussion of the nerve-centre would seem to have its parallel in those functional disturbances which result from mechanical violence offered to the lung, without organic lesion; as exemplified in the effects of blows and of compression. Hæmorrhage with one or other viscus may be fatal from interference

with function; and the consequences of mechanical injury correspond, inflammation endangering the integrity of the organ and the life of the patient in either case, though usually fatal in injuries of the head, and rarely so in injuries of the chest. Lastly, the pleura, as the arachnoid, is obnoxious to the usual consequences of inflammation; and in each instance life may be jeopardised by encroachment of its products on the contained viscus.

The vicarious performance of function, dependent on the duality of each organ, is more effective in preserving life in lesions of the lung than in those of the brain; but the relative mortality in either instance is due rather to the facility with which the disintegrated tissue and the products of inflammation are discharged from the chest than from the skull. I may observe also, in following out this parallel, that there seems to be a greater tendency, in lung-injury, to limitation of inflammation to the proximity of the injured part; whereas, in brain-lesion, the fatal issue from secondary causes is almost invariably the effect of extension of inflammation, and consequent disorganisation of texture, involving some immediately vital part of the encephalon.

The mutual relations and interdependence in function of these important organs is brought out into bolder relief by the lesions to which they are subject. As the respiratory effort fails under privation of nerve-force, so do the functions of the brain languish when it is starved of its due supply of oxygenated blood, at once its stimulant and its food. Each organ is invoked at times to perform extra duty, under the coercive influence of necessity; and each has its intervals of comparative repose. The unremitting activity of the lungs is more apparent, though scarcely more real, than that of the brain. In both, their voluntary functions have rest in sleep. Each has its own peculiar susceptibilities; but it is rarely that these are rudely aroused in the one without the sympathy of the other being awakened. Shock is experienced when either is seriously hurt; but this appears to be incidental rather to the general concussion caused by the violence, than to the appeal made directly to the organ—though certainly more apparent, the degree of violence sustained being taken into account, in injury of the lung than in that of the brain.

That lesions of the heart are attended by profound collapse, and are more certainly and speedily mortal than those of either brain or lungs, is readily intelligible, when we consider its larger supply of ganglionic nerves, and the immediate importance of its uniform function to the vitality of every other organ. Its irregularity or intermittent action is alarming; and even the brief suspension of its rhythmic beat is death.

OBSTETRIC MEMORANDA.

[UNDER this head, we shall, from time to time, as materials come to hand from correspondents, publish records of cases remarkable in themselves, or illustrating points of interest in obstetric practice, therapeutic or manipulative. We shall probably in this way preserve from oblivion the notes of very many useful and instructive occurrences in private practice; for the great obstetric experience is that—for the most part hitherto unwritten—of the great body of general practitioners throughout Great Britain. We will only ask those who may forward cases for record, to relate them with the utmost brevity, and equally to condense any appended remarks.]

THE USE OF OBSTETRIC INSTRUMENTS.

By JOHN D. SCURRAH, M.D.(Lond.), Birmingham.

I GLADLY confirm by my experience the remarks of Dr. Savage in the JOURNAL on the more frequent use of the forceps. Next to the use of anæsthetics, the timely use of the forceps seems to me one of the most valuable means for alleviating pain and preserving life which our profession possesses. Anyone who has seen much midwifery practice, especially in large towns, will recognise how frequent are the cases, "especially in primiparæ," as Dr. Savage so well puts it, "where much pain, anxiety and exhaustion are spared" by the use of the forceps. By this practice, I am satisfied the lives of many infants are preserved which would otherwise be lost.

For a long time, I adhered to the old orthodox objection to the use of the forceps. But I find their more frequent use to be so beneficial and preservative, and so few, if any, injurious results or valid objections, that I think I should not be justified in limiting their use to one in five hundred or one thousand cases, as is done by some authorities.

In my last five hundred cases, I have used the forceps thirty-eight times, or about one in thirteen. Not a single maternal death occurred, and generally the mothers recovered very rapidly. There were only four children stillborn, and of these, two had been dead some little time. So that properly there were only two; and in these two cases the cord was round the neck, and I waited some hours before using the forceps.

* This case is reported in the *Edinburgh Medical Journal*, vol. xiv.

LECTURES ON THE HISTOLOGY OF THE EYE:

(BEING THE ARRIS AND GALE ANATOMICAL LECTURES.)

Delivered at the Royal College of Surgeons of England, June 1869.

BY

JOHN WHITAKER HULKE, F.R.S., F.R.C.S.,

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LECTURE III.

MR. PRESIDENT AND GENTLEMEN,—Last Thursday, the clock struck before I had finished the anatomy of the tunica uvea, and obliged me to leave the structure of the ciliary processes undescribed. I regret that I cannot now supply this omission; but the exigencies of my present task—which is to try to make clear what is known of the fine structure of the retina—leave me no choice but to apply myself at once to its accomplishment. The best plan, perhaps, having regard to the short time at my disposal, although in other respects not altogether a good one, will be for me to portray, in a diagrammatic manner, the general forms of the elementary tissues, with the order of their superposition in parallel layers, as seen in a vertical section; afterwards to trace the modifications which these tissues undergo; and lastly, if I have a few minutes left, I wish to devote these to a short account of some of the morbid alterations which reveal themselves by characters recognisable in the living eye with the ophthalmoscope.

In all vertebrates (except the lowest fishes, *e.g.*, myxine and lancelet) a section vertical to the surfaces of the retina shows the following superposed layers.

First, there is a layer of columnar bodies, the rods and cones abutting against the choroid—the bacillary layer, known also as Jacob's membrane. To this succeeds the layer of corpuscles called the outer granules. Next follows a fibrillated stratum—the inter-granule layer; then another layer of corpuscles, the inner granules; next to this the layer called by some the granular layer, by others the grey vesicular, or grey nervous layer; then a stratum of ganglion-cells; and, finally, a stratum of optic nerve-fibres, bounded internally by a thin membrane, the “membrana limitans interna retinae.”

In all these layers, nervous and connective tissues are intimately commingled; and it is just this interpenetration of the two tissues which constitutes our principal difficulty whenever we attempt to decide the nature of a particular retinal element.

Before proceeding to a detailed account of its tissues, a few words on the best methods of studying the retina may be useful to some present. First, it is absolutely essential that the eyes be perfectly fresh—the lapse of half an hour after the circulation has ceased, or even of a few minutes if the eye have been opened, makes differences in the appearance of the bacillary elements. Next, the outer surface of the fresh retina should be carefully scrutinised, in order to learn if both rods and cones are present. The latter will be known by their greater stoutness, and by their outer ends lying in a deeper level than those of the rods; while in birds, in some reptiles, and in the batrachians, they are immediately betrayed by their bright coloured beads.

But there are many things which cannot be made out in the fresh retina, or which can only be recognised by a practised observer already familiar with their characters when they have been artificially hardened and stained. The fresh retina is also too soft to allow us to cut vertical sections sufficiently thin without greatly disturbing the tissues. The most useful agents are chromic and osmic acids. Of the former acid, solutions of about a half per cent. are most useful; they have a pale straw tint; small eyes may be placed in them entire, but large ones should be cut in two before immersion. After remaining during three or four days in this solution, the retina will be hard enough to allow sections to be cut sufficiently thin for study with one-twenty-fifth-inch object-glass. The usefulness of chromic acid lies chiefly in its hardening the retina well, with little alteration in the shapes of most of its elementary tissues, and enabling us to cut our sections in any given direction we choose—for instance, through the fovea, or tangential to it. But it has the disadvantage of distorting the elements by distending them, when the solution is too weak, or by shrinking them when it is too concentrated. It also renders them granular and proportionately opaque. Sections so prepared may be still stained with carmine.

Osmic acid is, in some respects, more useful than chromic. It was first brought into notice by Max Schultze of Bonn, whose labours have

thrown much light on retinal histology. Solutions of from a quarter to a half per cent. are best. It not only blackens the transparent nervous tissues, making them distinct, but it enables us, with a couple of fine needles, to split the retina in vertical planes, which afford us beautiful sections much thinner and clearer than any that the most practised hand can cut with the sharpest knife. Another advantage is, that it does not make the tissues so granular as chromic acid; but it has this drawback, that with it we cannot run the section in any direction we choose. It is of greater service in those vertebrates whose retinae are devoid of blood-vessels, because their presence seriously interferes with clean cleavage. The retina, stained and hardened by osmic acid, may be kept for use in distilled water without undergoing any further change during several weeks. It is best mounted in glycerine for microscopic examination.

To return from this digression to the description of the retinal layers; in the outermost or bacillary there are two sorts of elements, distinguished as *rods* and *cones*.

Every rod and every cone consists of two segments—an outer one, the bacillus or shaft; and an inner one, the appendage or body. The shafts of both rods and cones are highly refracting conspicuous microscopic objects; whilst the appendages are pale, have a low refractive index, and are less evident.

The inner and the outer segment are separated by a sharp, transverse line, where the slightest violence snaps them asunder.

The rod-shaft is a long, slender cylinder—in profile, a narrow rectangle. The ends are truncated; the outer rests on the choroidal epithelium, and the inner joins the appendage. In the perfectly fresh shaft I cannot discern any differentiation of parts, except an external outline indicative of a containing membrane, and a homogeneous contained substance; but very soon after death the shafts begin to alter. The fresh perceptible change is, I think, a very faint longitudinal striation, and this is followed by the appearance of cross lines, which divide the shaft into light and dark segments; at the same time the shafts swell and bend and lose their rectilinear figure. This segmentation, which must have been familiar to every one since Hannover first wrote on the retina, I have never seen in absolutely fresh shafts examined instantly after death; so that, in common with others, regarding it as a *post mortem* change, I did not attach much importance to it. Professor Schultze, however, has founded upon it the ingenious view that the shafts are built up of discs of alternately nervous and connective substances. The segmentation is often very distinctly perceptible in chromic and in osmic acid preparations.

The inner segment or rod-appendage has commonly the shape of a slender triangle or spindle; and one of the outer granules, as I shall shortly show, is always associated with its inner end. In its outer end, immediately inside the line which marks it off from the shaft, there may often be seen, particularly in the large rods of amphibia, a small hemispherical body of the same refractive index as the shaft to which it sometimes remains attached when the shaft and appendage separate. It was long ago described by the late H. Müller, whose loss every histologist deplores, and I figured it myself in a communication to the Royal Society in 1862. Schultze, who has lately called attention to it, suggests that it may act as a collecting lens.

The outer segment of the cones—the cone-shaft—is usually shorter than the rod-shaft, and it commonly tapers slightly outwards, the outward end being slightly narrower than the inner. The cone appendage is usually flask-shaped or bulbous; and, like the corresponding part of the rod, its inner end always has its associated “outer granule.” In the outer end of the appendage in birds, in some reptiles and in batrachians, lies the well known coloured bead which forms so exquisitely beautiful a microscopic object in the retina of these animals.

The interstices between the bacillary elements are occupied by a soft, homogeneous connective substance, which in all vertebrates below mammals contains a granular pigment. This extends inwards from the choroidal epithelium around and between the shafts as far as their line of union with the appendages. It completely insulates the shafts, and would have the effect of absorbing any pencil of light which, making a relatively small incident angle, might escape laterally outwards through the shaft-wall, and in this way the escaped pencil would be prevented from entering a neighbouring shaft.

In mammals, the greater slenderness of the shafts probably renders such a provision unnecessary, because the incident pencil, to enter the shaft, must nearly coincide with its axis; and, as regards the side of the shaft, the angle of incidence would be so large that the pencil would probably be totally reflected.

The inner ends of the rods and cones pass through apertures in the connective membrane, called the *membrana limitans externa retinae*, and are produced inwards amongst the outer granules as slender bands or fibres. The *membrana limitans externa* is the sharp hard line, always

perceptible in vertical sections between the bacillary and the outer granule layers.

That the rods and cones are the percipient elements in the retina is now universally received, so that it needs hardly be mentioned; but it may be well to adduce the chief considerations on which this presumption rests. First, they alone of all the retinal tissues are so arranged as to be capable of receiving separate and distinct stimuli from small incident pencils of light. Next, their absence entails absence of perception. Mariotte's experiment proves this as regards the optic nerve disc, and the increase of the size of the blind-spot in myopia from posterior staphyloma, proportionately to the extent of the white atrophic crescent—a fact which is easily roughly verified—is another proof of the same thing; because here, together with the disappearance of the choroidal epithelium and chorio-capillaris, I have had opportunities of proving microscopically the absence of the cones and rods.

When we endeavour to press our inquiries further, and try to ascertain what may be the respective functions of the outer and the inner segment of the rods and cones, and in what respect the functions of the rods and cones differ, we meet with difficulties which have yet to be overcome.

As regards the first part of this inquiry, the high refractive index of the shafts, and their insulation by a coat of pigment in many animals, points to a physical optical rôle; while the association of a nucleus (an outer granule) with the appendage, suggests a more vital dynamical share. If this be so, then the junction between the shaft and appendage marks the line where, so to say, the physical vibrations of light are converted into nerve-force.

Towards the solution of the second point of the inquiry, Schultze contributes the important fact that nocturnal mammals, as the mouse, bat, hedgehog, have no cones; and that in owls they want the bright orange and ruby beads of diurnal birds; and from this he conjectures that the cones may be concerned in perception of colour.

The *outer granules*, to which I must now pass on, are not minute, angular, solid particles, as their name implies, but cells or nuclei of very appreciable dimensions. Their numbers are directly proportionate to those of the rods and cones; and it is very probable—I may say certain—that each outer granule is associated with a rod or cone, and this in one of two ways. When the rod or cone-appendage is large enough to hold it, the outer granule lies inside the appendage in the plane of the membrana limitans interna, or at its inner surface; but, when the appendage is too slender to contain the granule, it is joined to the granule by a communicating fibre, the length of which is determined by the distance between the inner end of the appendage and the granule. In either case, the appendage is prolonged inwards in the form of a band or fibre beyond the “outer granule” towards the next stratum. This fibre I call the primitive bacillary fibre, or the primitive rod or cone-fibre, when I wish to distinguish it more particularly.

The *intergranule layer*, which, as its name conveys, lies between the outer and the inner granules, is a fibrous stratum. Some of its component fibres are nervous, passing between the outer and inner granules, and others are connective tissue. Of the latter set of fibres, those which traverse the layer vertically belong to the system of connective radial fibres, known by the name of their discoverer, H. Müller. The others, which extend parallel to the direction of the layer, constitute its proper substratum; and amongst these lie imbedded small nuclei, and in some of the lower animals, *e.g.*, chelonians and fishes, large branched corpuscles of very considerable dimensions.

The *inner granules*, like the outer ones, are also cells or nuclei. According to their sizes, which vary much, they fall into two sets—smaller granules, everywhere numerous; and larger ones, most abundant near the inner surface of the layer, which I cannot distinguish from ganglion-cells. On the one side, the inner granules receive the fibres sent inwards towards them through the intergranular layer from the outer granules; and, on the other side, they send fibres inwards into the granular layer towards the ganglion cells.

The *granular layer*, as Schultze correctly pointed out, is resolved, by a sufficiently high magnifying power, into a very finely fibrillated spongy web, which manifestly hangs together with, and is in great part a derivative of, the connective radial fibres entering it. The only nervous elements occurring in it are the internuncial fibres which traverse it, and the outermost ganglion-cells bedded in its inner surface. The term granular, which simply expresses its appearance under a low power, is therefore preferable to that of grey vesicular or grey serous layer, which gives a wrong idea of its essential composition.

The cells of the ganglionic layer possess a very distinct roundish nucleus, imbedded in a pale and very soft protoplasm, about which there is not generally any distinct cell-wall perceptible. Often the nucleus only is visible, the protoplasm having been damaged in preparing the sections for the microscope. I believe that all the cells are branched.

The outer branches, which are the more numerous, run outwards into the granular layer to join those coming inwards from the inner granules, while their inner branches join the bundles of optic nerve-fibres.

These last radiate in a plexiform manner from the optic nerve entrance. Where there is a fovea centralis, as in men, apes, some birds, and reptiles, the nerve-bundles are so distributed that those only destined for the fovea and its surrounding maculæ pass directly to it; while those bundles going to more distant parts beyond the fovea arch around it. With some exceptions, the nerve-fibres are devoid of the medulla, or white substance, of Schwann. In our own eyes, this ceases at the lamina cribrosa; and only pale fibres, equivalent to axis-cylinders, with perhaps an investment of the sheathing membrane, are produced into the retina.

The connective tissue-frame, which supports and holds together the nervous elements, consists of three segments. First, there are the two membranes;—the outer limiting membrane, which I have already described; and the membrana limitans interna, which some identify with the hyaloid capsule of the vitreous humour, but which I regard as a distinct membrane. This distinctness cannot be always demonstrated at pleasure; but I believe it to be a fact, because I have found the two membranes separated by inflammatory effusions, and because in the eyes of a Burchell's zebra, for which I was indebted to the liberality of the Zoological Society, I found a beautiful pavement epithelium on the outer surface of the capsula hyaloidea. The second member of the connective substances is a system of short pillar-like fibres, which arise by expanded wing-like roots from the outer surface of the limitans interna, and traverse vertically all the layers in a direction radial from the centre of the eye-ball. These are the fibres which, when originally discovered by H. Müller, were believed by him to link the percipient elements on the outer side of the retina—the rods and cones—with the conducting optic nerve-fibres at the inner surface of the retina, an error which he himself was one of the first to correct. These radial fibres (Müller's fibres) form a frame, which mechanically binds together the several layers in their order. Lastly, the retina contains a large amount of interstitial connective tissue, which is accumulated in larger quantity between the inner and outer granules, and between the inner granules and ganglionic layer, but which also pervades, in smaller quantity, all the nervous layers except the bacillary. Spinning an excessively fine web around the cells and fibres, it maintains them all in position, and it supports the blood-vessels when these are present. To sum up, the connective tissue occurs in three forms—membranous, as the membrana limitans externa and interna; fibrous, as Müller's radial fibres; and as an excessively finely fibrillated interstitial web.

[To be concluded.]

ON SLEEPLESSNESS IN INFANTS.

By EUSTACE SMITH, M.D., M.R.C.P.,

Physician Extraordinary to H.M. the King of the Belgians; Physician to the North-West London Free Dispensary for Sick Children; etc.

It often happens that infants, apparently in good health, are seized with wakefulness at night. The child will not sleep; he is uneasy, restless, peevish, breaks out into violent fits of crying, and is with difficulty pacified, even when hushed in his mother's arms. For this condition, numerous specifics have been recommended, ranging from “soothing syrups” to bromide of potassium. In almost all cases, however, careful inquiry will discover some special cause to which this nocturnal restlessness of the infant may be referred, the removal of which is followed by the disappearance of the troublesome symptom under consideration.

All acute diseases in the child are accompanied by more or less restlessness at night, and fever; but in these cases, unusual irritability of the infant during the day, and other symptoms pointing unmistakably to some derangement of health, will have been observed. It is when the child is, to all appearance, in good health, or when, at any rate, no symptoms of functional derangement have been noticed during the day, that sleeplessness at night becomes a condition often as puzzling to the medical practitioner, as it is distressing to those in immediate attendance upon the infant.

If the infant be very young, *hunger* is commonly the cause to which his restlessness is attributed by the mother; for the tendency of mothers is to refer all crying in their infants to that one cause. Occasionally they may be right. Infants nourished solely by the breast, and deriving their entire support from a scanty supply of watery milk, are almost constantly hungry. The amount of fluid they swallow is scarcely sufficient to satisfy their appetite even for the time; and, being

rapidly digested, the meal is soon followed by renewed demands for nourishment. After a few days of such a diet, the weakly condition of the infant, induced by semi-starvation, draws attention to his state of health; but crying at night from hunger is an invariable forerunner of his loss of flesh.

The milk may be considered to be scanty when the infant constantly requires the breast, and sucks with very great effort. A hungry infant will suck at any thing within reach of his lips. At night he is excessively peevish, but during the day he often lies quietly with one or both thumbs in his mouth, sucking at them until the skin is raw. At sight of the breast, he shews his desire for food by clenching his hands and flexing his limbs, and his cries usually cease at once. A child crying from griping pains manifests little interest at sight of the breast, and is often with difficulty persuaded to take the nipple into his mouth.

When the milk is scanty, it is always of very inferior quality, but very abundant milk may be also very poor and watery. In this case the infant, instead of being peevish, is exceedingly drowsy, sleeping almost all day as well as at night, and occasionally falling asleep even while in the act of taking the breast, holding the nipple still in his mouth. When this occurs, suspicions of serous milk should always be excited.

By far the most common cause of restlessness at night is *injudicious feeding*, the child being stuffed with food, which, although not necessarily in itself injurious, is yet ill-adapted to the nourishment of the particular infant to whom it is given. It is a common practice amongst mothers—especially those of the poorer classes—to make up for any deficiency in the amount of breast-milk by farinaceous food, long before the digestive power of the child is suited to such a diet. The stomach of an infant of about two months old is thus often filled with a mass of starchy matters, which the absence of saliva will not permit him to digest. This mass, fermenting in his bowels, is a source of continual discomfort until it is evacuated. Even when cow's milk is used as an addition to the breast-milk, it is very frequently ill-digested, although diluted with water. The clot formed by the coagulation of cow's milk is particularly firm and solid, and differs very much in that respect from the clot of human milk, which is exceedingly light and flocculent. In very young infants, therefore, and in older infants of delicate stomachs, the digestive juices can make little impression upon the mass of curd. Feeding so conducted cannot be continued for long together, without producing very evident signs that the nutrition of the body is no longer efficiently maintained. The child, deriving very little nourishment from the food, which, however, he eagerly swallows, will soon begin to waste, in spite of his voracity. But before nutrition has become impaired so decidedly as to produce emaciation, certain symptoms are noticed shewing the uneasiness of the digestive organs; and one of the earliest of these signs is restlessness at night. The child starts out of his sleep crying violently. His skin is hot, his belly tense, his upper lip livid and drawn up at the corners; and the griping pains from which he is suffering are shewn by the violent contortions of his body, and the uneasy, jerking movements of his limbs. Even when taken up into the arms of his mother he is not pacified, but breaks out into piercing cries, which nothing is able to quiet until he becomes exhausted. Other signs of his unsuitable food consist in frequent hic-cough, flatulence, sour eructations, and constipation. The sluggishness of the bowels is due to excessive secretion of mucus in the alimentary canal, excited by constantly renewed irritation of its lining membrane. The mucus being coagulated by the acid, resulting from the decomposition of starchy matters, covers the masses of food, and lines the inner surface of the bowel, so that the slippery surfaces glide over one another, and the contents of the intestine are not properly forced along. The stools themselves consist of little round masses, remarkably firm, and of a yellowish colour, exhibiting, when crushed, a cheesy appearance. They are evidently composed of curds and undigested farinaceous matter. The smell is often offensively sour, and they are accompanied by a considerable quantity of tough mucus, either covering the little lumps, or appearing in the form of strings, which have been mistaken for portions of parasitic worms.

This cause of wakefulness at night is so excessively common, that in every case where this distressing symptom is complained of, inquiry should at once be made into the diet of the infant, so that, by a proper adjustment of the quality and quantity of his food to his powers of digestion, the child may be supplied with a diet which he is able completely to assimilate. When this has been done, and the bowels have been assisted by a gentle laxative to expel their undigested contents, the improvement is immediate; the child sleeps soundly, and his irritability ceases at once.

It must be remembered that plumpness in an infant is no proof that his feeding is judiciously conducted. Badly fed children may be exceedingly fat, as we sometimes see in cases of commencing rickets,

where the adipose tissue is in great excess, although the general nutrition of the body is by no means satisfactory; and, in commencing rickets partly from this cause, but partly, no doubt, from another cause which will be afterwards referred to, sleeplessness and irritability at night are exceedingly common symptoms.

Cold feet are a not unfrequent cause of wakefulness in infants. Delicate infants, in whom the circulation is languid, are very subject to coldness of the extremities; and griping pains in the belly are common accompaniments of the same condition. In all cases of abdominal pain in infants, the feet should be at once examined. When these are found to be cold, warming them by frictions with the hand, or by hot applications, usually causes the manifestations of pain to cease.

The feet in infants should be always carefully warmed before the children are put to bed; and should, in cold weather, be afterwards wrapped in flannel, or be covered with thick woollen socks.

In *hereditary syphilis*, infants are exceedingly fretful at night; and, by their uncontrollable crying, are a source of great distress to the mother. This symptom is usually the first sign of the disease, preceding the snuffling and the other characteristic symptoms of the outbreak of the inherited taint. The crying is possibly excited by nocturnal pains in the bones, similar to those affecting adults previous to the outbreak of the constitutional symptoms. On the appearance of the rash, the sleeplessness does not subside, but it soon disappears under the influence of specific treatment—a few doses of grey powder being sufficient to produce this result.

Worms, in older children, are well known to be a common cause of night terrors and restlessness; but even in infants, crying at night is sometimes found to be due to this cause. Amongst the poorer classes, where infants are allowed early to share in their parents' meals, it is not so very uncommon to find them suffering from the presence of oxyuris vermicularis. To give one instance out of many which have lately come under my notice: A child of nineteen months, well nourished, strong on his legs, who had walked from the age of ten months, had cut eighteen teeth, and could talk, the mother said, well, was brought for fits of violent screaming, which began about 8 P.M., and lasted the greater part of the night. From the condition of the tongue, worms were suspected,* and a purgative of rhubarb and jalap brought away a large quantity of the small thread-worms. Afterwards, a careful regulation of the diet, and the administration of compound decoction of aloes, with a little iron, soon restored the alimentary canal to a healthy condition. The night screaming ceased from the very commencement of the treatment.

Besides the causes which have been enumerated, there are two others of not uncommon occurrence, and which are frequently overlooked. One of these is the influence of *habit* upon the infant. Children who are too much petted and indulged, easily contract habits which are sources of great annoyance, not only to themselves, but also to those through whose uncalculating tenderness the habit has been acquired. Thus, in young children little attention should be paid to cries excited by other causes than actual suffering or discomfort. Cries from wilfulness or fretfulness should be entirely disregarded. If a young child, whose diet is properly arranged, and who has taken his usual meal before being put to bed, wake crying in the night, the mother may satisfy herself that his cries are not produced by cold feet or colicky pains; and if the skin be not hot, and no cause can be discovered for his restlessness, he should be left in his cot to cry himself to sleep. If not, and he be taken up and hushed in the arms of his mother, the probabilities are very strongly in favour of his waking and crying at about the same hour on the succeeding night, and requiring to be pacified by the same means. A habit is thus gradually acquired, which it is very difficult afterwards to overcome. Infants accustomed to be suckled at frequent intervals during the night are also exceedingly restless. This is a practice which cannot be too strongly condemned. Children should be accustomed early to take no food during the night. A very young infant, who has been suckled immediately before the mother retires to rest, will do well until five or six o'clock on the following morning without a further supply of nourishment. He is easily made to understand that this is a rule which cannot be infringed, and will wake and sleep again without disturbance if he knows it is useless to complain.

Exhaustion of nerve-force, the reaction following over-excitement of the nervous system, is another not uncommon cause of wakefulness at night in children. Children of three or four years old, after the excitement of a child's party, or a visit to some place of amusement, are often found to be troubled with sleeplessness; the child either finding a difficulty in composing himself to sleep, or waking up after a short slumber.

* I have elsewhere described an appearance of the tongue, which is very characteristic of the condition of the stomach and bowels so often accompanying the presence of worms in the alimentary canal.—See *Wasting Diseases of Infants and Children*, 8vo. London: 1868.

The same thing is frequently seen in young infants who have been played with and over excited immediately before being put to bed. The infant is uneasy and restless, starting frequently, and waking up with a fretful cry. This is not found with all infants, but is especially noticeable in those of delicate organisation and great impressibility of the nervous system, and is, therefore, a frequent symptom of commencing rickets, where the irritability of the nervous system is very great.

Sleeplessness in infants is thus produced by many different causes, each of which will require a different method of treatment for its removal. To look upon such a condition as a distinct disease, removable by any so-called specific, is in the highest degree unphilosophical and unpractical. Opiates, and perhaps bromide of potassium, may be occasionally useful in quieting excessive irritability of the nervous system, and may be, therefore, of service in the treatment of sleeplessness arising from the last two causes which have been mentioned; but to employ either as a universal remedy in such cases would be at least useless, even if it were not injurious. The screams of an infant suffering from an accumulation of undigested food—to take the commonest case—may certainly be quieted for the time by a narcotic; but so long as the cause remains, the screams will be renewed as soon as the soporific effect of the drug has had time to pass away. In such a case, bromide of potassium produces no effect whatever. In every case of sleeplessness in infants, the cause may be easily ascertained by careful investigation; and, when it is discovered, there is little difficulty about its removal.

AN ADDRESS

DELIVERED IN

THE SECTION OF PHYSIOLOGY,

*At the Annual Meeting of the British Medical Association,
in Leeds, July 1869.*

By JOHN HUGHES BENNETT, M.D., F.R.S.E.,
President of the Section.

GENTLEMEN,—Three years ago, in the Address in Medicine which I had the honour of delivering at Chester, I reviewed the existing state of medicine as a science and as an art. I pointed out that the former, by which may be understood physiology, was now so far advanced, owing to the progress of collateral sciences, that one could by its aid solve most of those problems which rendered the latter so uncertain. In other words, it was my endeavour to show that certain questions as to whether any remedial agents or plan of treatment could produce a definite influence on the living body, was now within the reach of experiment. I argued, therefore, that what we required was combined labour to solve these problems, and that, if this British Medical Association would advance the necessary funds, exact knowledge might be made to assume the place of vague opinion. As a result of the appeal then made, grants of money were given to a Committee under my direction, which undertook to answer the question whether mercury was or was not a cholagogue—and this question, after two years' laborious inquiry, has been decisively answered in the negative. No pains have been spared by the Committee in making their inquiry exhaustive. Their experiments and observations were so planned, so carefully performed, and so fully considered, that up to this time no adverse criticism has been advanced. The results have been laid before full meetings of the Association in Dublin and in Oxford, and before the Physiological Section of the British Association for the Advancement of Science, at its last meeting in Norwich. They have also been extensively published, and no one has endeavoured to show that they were erroneous. It may, therefore, now be received as an unquestionable fact, contrary to the almost universal opinion which previously existed, that mercury has no special action on the liver, nor possesses any power whatever of increasing the flow of bile from that organ. The Committee has further shown that such action and power have been also erroneously attributed to taraxacum and podophylline. Considering that, up to this moment, every book, and every lecturer on the *Materia Medica* and on *Therapeutics*, has assumed that these drugs do possess the properties referred to; further, that they have been universally given to stimulate or control biliary formation; and, lastly, that to this end their administration in countries where hepatic diseases are common, has been such as too frequently to injure rather than benefit mankind—the demonstration of such an error must be admitted to be of the utmost importance to medical knowledge and to medical practice. It may be said, as it has been said, that this in no way alters the value of mercury as a purgative. But if this drug, henceforth, is only to rank

in such a category—that is, as an *evacuater* and not a *secreter* of bile, many other aperients, less dangerous to the system, will answer the purpose.

But there are other important problems which physiological experiment has the means of solving with like certainty; and I have now to ask whether the Association is to stop in its attempt to further scientific and practical progress? Can we not appoint another Committee, and entrust to it the solution of another great difficulty in medicine?

Let me refer shortly to one of these difficulties, the practical value of which cannot be too highly estimated, one, which if scientifically investigated, must throw a flood of light on the whole subject of therapeutics, and one which is certainly within the reach of careful experiment.

It has been proved beyond the possibility of doubt, that certain medicinal agents, such as morphia, atropine, conium, digitaline, strychnine, woorara, and others, possess distinct, yet apparently opposing, actions on the nervous system. Some of them act primarily on the brain; others on the spinal cord. Some excite and others paralyse nervous action. Some keep persons awake, such as green tea; others put them asleep, such as morphia. One certainly excites the motor powers of the cord, such as nux vomica; another as certainly depresses or paralyses it, such as hemlock. These facts necessarily give rise to a question, that, in the present state of science, requires to be authoritatively answered. It is this.—Does there exist an antagonism between these substances, and, if so, to what extent? In other words, what truth is there in the idea that one drug is capable of counteracting the agency of another. Does it follow that, because we can excite the motor powers of the cord with strychnine, that when so excited we can tranquillise them with hemlock? Again, how far does the combination of drugs having similar or different actions assist or impede their influence? Further, to what extent are these substances capable of controlling functional or organic diseases of the nerve centres? Without entering into other inquiries that such an investigation naturally suggests, I think no one will doubt the utility of having the questions I have put *positively answered*; and, for example, the fact ascertained whether, as has been suggested, tobacco really is an antidote to strychnine, or whether coffee, tea, or belladonna, are or are not antagonistic in their action to opium.

The instruments of precision now in the possession of the physiologist, enable him to determine many of these questions with the utmost exactitude. All that is required is time and labour properly directed, and a careful report of the results. But the experience acquired in directing the Edinburgh Mercurial Committee has satisfied me that it will be impossible to carry out a sustained effort in this or any other direction without means to remunerate the investigators. Not only would the actual expense for drugs, instruments, animals and their food and service, be considerable, but the unrequited and unacknowledged work in all Committees must be remunerated. It should be remembered that special skill, knowledge, and reputation, must necessarily be merged in that of the Committee as a whole, and thereby the great stimulus for individual research, that is reputation, cannot exert itself. Thus, while to attain perfect results, Committees composed of men who excel in different departments are absolutely essential, no return whatever for the time, skill, and knowledge expended can be hoped for without money. In every Committee, some men must work more than others. Certain manipulations are best performed by one or two persons. The chemist has to make laborious analyses and calculations. The physiologist has to perform delicate experiments, and, too often, unpleasant operations on living animals. The histologist has to sacrifice much time in microscopical observations, in drawing, and in putting up numerous preparations. The pharmacist has to furnish the purest drugs, which frequently have to be procured or prepared for the purpose. Even keeping the minutes of such a joint investigation, comparing them with each other, presiding over the discussions to which they give rise, and compiling from the whole a careful report, is in itself a great labour. No one, or at least few, can expect that in any given inquiry such varied researches and such trouble could be continuously carried on for years without remuneration, and with the certainty that the most able individual efforts will only throw honour on a general committee, the names of the members of which may be altogether unknown.

It is worthy of consideration, therefore, how far an annual grant out of the funds of this Association, say to the extent of £200, might not be made, for investigations of this nature. If the plan succeeded, and the funds admitted it, not one only, but several Committees, by and bye, might be engaged in chasing away medical difficulties. Our JOURNAL would be the necessary recipient of the results, and the means of diffusing the information arrived at. The annual meetings, at which some great medical truth evolved, or some error refuted, would receive increased interest, and thus all the different departments of our

Association would assist, in the most effectual way, the great objects of its foundation.

I cannot for a moment suppose that the Council of this Association, if urged by you to do so, would resist such an appeal; and it is to me certain, that, in this manner, real advantage to the profession, and a sure advance in our knowledge, might be annually effected without encroaching upon any other useful objects. Should you agree with me, I would urge that a very strong representation to that effect be sent from this Section to the Council. At any rate, I trust you will forgive my bringing this matter before you, feeling, as I do, that, in the present condition of medicine, what we require is not brilliant hypothesis, or ingenious speculation, but that solid genuine work to which we may look for furnishing us with truthful data. Let us resolve, by means of renewed experiments and careful observations with our modern appliances, to overcome the difficulties which surround us, and there can be little doubt we shall render the practice of our art worthy of the advanced state of science which now prevails.

ON AMPUTATION AT THE ANKLE-JOINT.*

By GEORGE H. B. MACLEOD, M.D., F.R.S.E.,

Professor of Surgery in the Andersonian University, Glasgow, and Surgeon to the Royal Infirmary and Lock Hospital; formerly Senior Surgeon to the General Hospital in Camp before Sebastopol.

THE great frequency of disease implicating the tarsus and the tibio-tarsal articulation makes amputation at that joint a very common operation. Various methods were resorted to by Vacca, Brasdor, Textor, Baudens, and others, before our great surgeon, Mr. Syme, perfected it in our own time; and, as experience has declared against amputation low in the leg, and also through the tarsus, it very often falls to the hospital surgeon to perform his operation. I had, during and after the Crimean war, considerable opportunities of judging of the success attending the *sus-malleolaire* amputation of Lenoir, and was strongly impressed with its drawbacks. The only valid argument in its favour is the small mortality which attends it; and, in that respect, circumstances (as during a military campaign) may occur in which it might be desirable to have recourse to it, notwithstanding its disadvantages of a painful ill-covered stump. It is very rarely the case, so far as I have observed, that disease of the ankle-joint implicates the bones of the leg so extensively as to render Syme's amputation inapplicable. Further, in those cases of disease of the tarsus, or in destruction of the foot, as by round shot or a wheel, in which it might be possible to amputate through the tarsus by Chopart's method, or by any of those plans by which the astragalus or os calcis are retained, experience has, I think, proved the greater advantage of disarticulating at the ankle, and retaining, if possible, the thick cushion of the heel as a covering for the ends of the leg-bones.

The opinions expressed in the following paper are founded on a series of fifty amputations at the ankle, performed during the last fifteen years, and with only one death. So low a mortality is quite exceptional, especially when it is considered that the majority of these operations were performed in public institutions, many of them in military service, and for most severe accidents. The only fatal case of the series was the last but one, where death followed an amputation performed for disease on the first of this month; the patient, a young lad, dying of purulent infection on the sixteenth day. No doubt several other patients suffered from severe complications, and were nearly lost; but ultimately all recovered from the operation, except the one referred to. A long run of success such as this is not unfrequently observed by surgeons in connexion with certain operations—when, without apparent cause, the tide turns, and in the end the average mortality becomes equalised to that experienced by others. It was doubtless in the belief of such a fact that, on a celebrated surgeon meeting a professional friend in the street, and boastfully telling him he had cut so many patients for stone without a death, he was met by his friend's remark that, "under the circumstances, he would be very sorry to be his next patient."

The patient who died under my charge was by no means in so unfavourable a condition for operation as many others who recovered without a bad symptom.

The mortality following amputation at the ankle has been variously stated. My friend M. Legouest, in his *Traité de Chirurgie de l'Armée*, puts it at 23.2 per cent. In our army, during the latter and best period of the Crimean war, it was 22.2 per cent. In the American

civil war, it was 13 per cent.; and the most favourable civil experience with which I am acquainted reckons it at 8 to 10 per cent. Weber, one of the most recent authorities, calls it 16 per cent.

Of the entire number of operations, thirty-two were by Syme's method; and it is chiefly on some details connected with this procedure that I wish to dwell in this paper. Eleven were by postero-internal flap, as first proposed by Jules Roux of Toulon, and ably advocated by my late much valued friend, Dr. Richard McKenzie of Edinburgh; three were by Pirogoff's method, or its modification by Sédillot; two were irregular, the soft parts being much destroyed, and the coverings taken from different sides of the joint; and two were by long anterior flap, after Baudens' plan, in cases in which the heel was destroyed.

Only fourteen of the patients were females, and the ages ranged from five to sixty-nine. In most of the cases, the patients varied in age from ten to eighteen; these operations were almost all necessitated by disease, as, with few exceptions, the traumatic cases occurred in adult males.

In one case (twice counted), a Pirogoff had, after an interval of two and a half years, to be converted into a Syme, from the os calcis becoming caries; and, in another patient (also counted as two), both feet were removed at different times for disease. Thus, for fifty amputations, there were but forty-eight patients.

Of the fifty cases, thirteen only were traumatic. Some of these occurred in the East during the war; the rest in civil practice in Glasgow. Ten of the thirteen operations were primary—i. e., performed within twenty-four hours of the accident; the rest were had recourse to after suppuration had set in.

Of the thirty-seven operations undertaken for disease, three were performed on Jewish children during my residence in the Levant. Extensive caries of the tarsal bones, combined or not with disorganisation of the ankle-joint, was, in the great majority of cases, the cause necessitating the operation. In many, the disease was of long standing, and the general health grievously impaired. Two were for fungous disease of the sole of the foot; one was occasioned by the presence of a fibrous tumour, which had burst up the tarsus; one was to get quit of a defective stump resulting from a Chopart, in which the cicatrix was weak and irritable, and the heel retracted; two were for severe burns of the foot; and two for old and intractable ulcers of the dorsum, which had received only temporary benefit from plastic operations and other measures.

Such, then, is a short analysis of the series of cases I wish to submit to this distinguished assemblage, and on which I would further beg their permission to make a few remarks.

Having myself, then, had considerable experience of amputation at the ankle, and having, in the hands of others, seen a large number of cases, I have very decidedly been led to consider Syme's method as that which best fulfils the requirements of the vast majority of those cases in which we wish to remove the foot. It is not my wish at present to discuss the question of excision, either of the articulation, or of special bones in the neighbourhood of the joint; nor do I stop to insist that the cases I operated on were such as could not have been managed by any procedure short of amputation. I will simply say that I did not believe them capable of being cured by any other method than amputation, though it is possible that a certain measure of success might have been temporarily obtained from a less serious alternative.

In the series of cases alluded to, then, the great majority were examples of Syme's amputation; and my experience of it, as compared with other modes of operating, is so favourable, that in the future I intend to adhere to it in all cases fitted for its employment. That the proceeding of Roux, by internal flap, gives most admirable results, no one can, I think, deny, who has tried it fairly. In cases in which the outer surface of the heel is destroyed, that operation is capable of supplying a most excellent substitute for Syme's amputation. The covering is ample, the blood-supply good, the proceeding easy, the drainage excellent, and the position of the cicatrix perfectly satisfactory. The drawbacks to it are, that the blood-vessels and nerves are drawn across the end of the bones; and that, if sloughing attack the flaps, they cannot spare much of their extent without becoming deficient. The quadrilateral internal flap of Sédillot is very much the same thing, as is Soupart's amputation by internal flap.

Pirogoff's amputation, though ingenious, and theoretically superior to Syme's, is in reality much inferior to it. It is not at all fitted for cases of disease, as the portion of bone left becomes again in time the seat of disease. It certainly saves the dissection of the heel-flap, which many find so difficult; and the greater length and increased firmness of the stump, together with the non-interference with the blood-vessels of the heel, are made the most of by its partisans. In traumatic cases, it succeeds very well; but it is found that, as regards the fitting of a false foot, the presence of the heel-bone is a great drawback; and the back

* Read in the Surgical Section before the Annual Meeting of the British Medical Association in Leeds, July 1869.

part of the heel, and not the firm plantar pad, is what comes into contact with the ground.

The other methods of amputation at the ankle—as Baudens' by anterior dorsal flap, the external, the circular, two lateral flaps, Teale's and Quain's modifications—may, in certain conditions of the soft parts, present advantages; but, in the immense preponderance of cases demanding the removal of the foot at the tibio-tarsal joint, Syme's, in my humble opinion, is the best.

Let me, then, draw attention to a few details connected with that mode of operating, which, I think, are not sufficiently understood, and on which success, I believe, in a great measure turns.

First, let me ask, what are the essentials of any good method of amputation? Whatever else may be said, the following are evidently of the utmost importance.

That the whole disease or injured parts should be removed; and that with as little mutilation as possible, and with as great a saving of the body (especially of bone) as can be.

That the covering retained for the ends of the bones should be ample in amount, healthy and firm in quality, so as to make it capable of withstanding pressure and attrition; that the blood-vessels and nerves should be placed out of the way of pressure, and that they should be well covered and protected; that the flap or flaps should be well supplied with blood, and fall easily together, and be capable of easy retention; that secretions should have easy exit; that the resulting cicatrix should be out of the line of pressure; and, lastly, that the stump should be one to which the mechanist can with greatest facility adjust a substitute for the removed part.

Such, as it appears to me, are the desiderata for any perfect amputation; and the more nearly these conditions are supplied, the more worthy of confidence will the procedure be. Now, I take it, every one of these conditions are supplied in Mr. Syme's method. The only one which can be fairly questioned is that which relates to drainage. The cup-like shape of the heel-flap makes the escape of pus from it sometimes very difficult, but that depends, in a great measure, on a slight error often committed in fashioning it, and in the after management, as I will presently show; while, if a slit is made in the dependant part of this heel-flap, all difficulty is overcome, and no harm is done. When properly performed, all the other conditions are most perfectly fulfilled in Syme's amputation.

Mr. Syme has himself drawn attention to several important details connected with this operation, but in so terse a manner that they are apt to be overlooked till one comes personally and frequently to study them at the operating table. I wish to dwell for a moment on some of these.

It is well known that the external malleolus lies considerably lower, or rather is considerably longer, and comes nearer the sole of the foot, than the internal, and it is a little more posterior in its position. Further, the articulation between the tibia and astragalus is most open and loosest in front, and there lies higher than it does behind. The posterior tibial artery again divides beneath the internal annular ligament of the joint into its internal and external plantar branches, so that, if we cut quite up to the internal malleolus, in forming out plantar flap, we divide the vessel prematurely, and so greatly injure the blood-supply.

The knife best fitted for amputation at the ankle is a short, strong-bladed one, of which a good hold can be got, and yet that the blade is quite within command of the hand.

In making the first incision, the foot is held at right angles to the leg, while in making the dorsal flap, the foot is extended on the leg. The first incision begins immediately below the *middle* of the external malleolus, and extends to a point exactly corresponding (as to height from the sole) on the inner side. This will be about half-an-inch below the extremity of the internal malleolus. By attending to this, two important ends are gained; 1, the flap will be symmetrical and not too deep; and 2, the posterior tibial artery will not be prematurely cut. It will be observed that there is no sloping of the incision forwards or backwards, as is sometimes done. Forwards is never required, and introduces a very grave difficulty into the subsequent dissection; and backwards is very rarely called for, and only when the heel is very prominent. The plantar incision I have been speaking of goes down to the bone, dividing all the tissues. The flap thus marked out should now be dissected backwards by a series of small cuts, made between the left thumb-nail and the bone, till the heel is turned. This is, unquestionably, the most difficult part of the operation, as it requires time and care; but, by freeing the flap well at its outer angle, and keeping the line of incision described in which too deep a hollow is not made, the dissection is accomplished in a little time. No sweeping cuts can be ventured on, otherwise the cushion of the heel will be severely, and possibly fatally, injured in its structure and blood-supply. It has not infrequently happened to me, in operating for disease, to find the periosteum so thickened and loosely attached to the bone that, having got below it, I have separated the heel-flap with the nails of my thumbs; and some of these cases have given the firmest and best stumps afterwards.

If great care is taken to keep close to the bone, the greater part of the heel-flap can be quite safely and more expeditiously dissected off from above; *i.e.*, from within outwards, after disarticulation. I have repeatedly done this, after the advice of my old master and friend, M. Alphonse Guérin, though I am well aware that it does not meet with the approval of the distinguished surgeon who proposed the operation.

The anterior flap is made by an incision straight across the instep, between the cornua of the first cut. No convexity should be given to this flap if the heel is sound, as the tissues of which the anterior flap is composed are thin and weak; and it is desirable to keep the cicatrix well forward on the stump. There is less chance, too, of missing the articulation, as a beginner is apt to do, and getting below the astragalus. A little movement communicated to the joint, or attention to the position of the malleoli, will obviate any difficulty in finding the articulation. The anterior and lateral attachments of the bones are now to be divided, and the joint opened. In separating what remains of the soft parts, we carefully keep close to, and cut on, the bone.

In clearing the extremities of the tibia and fibula, we must be careful to keep very close to the bones, so as not to risk injuring the arteries. A fine resection saw answers best to remove the malleoli, and the section should be accurately perpendicular to the shafts of the leg-bones. If any portion of the tibia is removed except its malleolus, it should be only the thinnest possible slice, by which the cartilage is removed with the cup-like articular surface of the tibia, but all fear of annoyance from the cartilage may be abandoned; and if the bone is healthy, it is far better not to interfere with it than run any risk of exposing its interior. The cartilage may be gently sliced off, if it is thought desirable, with a knife, and any limited portions of disease may be picked out with a gouge; but attention is often required to distinguish changed from diseased bone; and there is no doubt but that one of the chief sources of danger, after all amputations, is the opening by the saw of the interior of a bone. It is in this, as I take it, that the great advantage of amputations in the contiguity, as contrasted with those in the continuity, of bones exists. The less the action of the saw, the less the destruction of periosteum, the less roughness in the ends of the bones to irritate afterwards the soft parts, the less bleeding from the bone implicated, the better for the result.

I believe that the plan advocated, of first disarticulating and then sawing the leg-bones, is much superior in all respects to the other sometimes adopted, of at once dissecting up the flaps sufficiently far to allow of the bones being divided. There is much less fear of injuring the blood-vessels, and thus causing sloughing; and the difference in time is very slight.

As to securing blood-vessels, I prefer torsion in this amputation to the ligature or acupressure. It is quite efficient in most cases, though occasionally the ligature has to be employed. It has not infrequently occurred to me to have no vessels to tie at all, as neither at the time of the operation, nor afterwards, have any bled. This is, of course, the rare exception, and always makes one anxious about secondary hæmorrhage. Much more frequently many minute vessels have bled, especially from any periosteum which may have been left in the heel-flap; and in such cases, if torsion, cold, elevation, and pressure, has not sufficed to arrest it, the sutures should not be fastened (though put into place); and, after the patient is put to bed, the limb should be well elevated, and an ice-bag, or a compress and bandage, used to stop the bleeding; the clots may then be washed out, and the flaps put together. It is most undesirable to put the flaps into position so long as there is any oozing, as the cup-like heel will get full of blood, and union delayed immensely. I may say, in passing, that I have found torsion forceps much more easily worked when made with a spring catch, like the artery forceps of Signorini, than constructed with a sliding catch, as they generally are.

In traumatic amputations we can, after all bleeding has ceased, at once adjust the flaps; but, when there is much disease in the soft tissues, and so a profuse suppuration to be apprehended, we will sadly regret doing so. In such cases the sutures being put in place, the flaps are not to be pressed together, but a piece of wet-lint inserted between them, and adhesion by granulation afterwards sought for.

I have employed various disinfectants and antiseptics in the after-treatment of these and other wounds, and am strongly impressed with their advantages in lessening discharge and destroying smell. Carbolic acid dissolved in water (1 to 30), or Condry's fluid or chloride of zinc (gr. 15 or 20 to the ounce), are very useful indeed, when used to wash over the flaps at the time of the operation; and carbolic acid or Condry's fluid should always be mingled with the water used for syringing out the

stump (which I always do at each dressing, so long as pus lodges in its interior). A pad placed below the heel-flap, and kept firmly applied by means of a bandage, materially prevents bagging with pus, and promotes adhesion and recovery. The two extremities of the wound should always be left open for the escape of discharge; and some of the sutures should be strong, and placed so deeply as effectually to hold the heel-flap in place. Finer wire sutures may be used between, so as carefully to adjust the edges of the flaps; and narrow stripes of adhesive plaster aid the same result. The sutures should be left in place as long as possible. I never now use a cut in the centre of the heel for drainage; as, if the plantar incision is not carried too far forwards, the open ends of the flaps will sufficiently drain the interior.

I am a strong advocate for dressing as seldom as possible. Unless the suppuration is very profuse, and the drainage bad, it is not necessary to interfere oftener than every second day; and, in fact, if the dressings applied be of the simplest and lightest kind, very little meddling will be required. I rarely make my first dressing till the third or fourth day.

In traumatic cases, a good plan is to put the stump under cold irrigation for some days after amputation. In fact, this admirable application may in many cases be most advantageously continued nearly till the close.

In cases of disease in which many sinuses have existed, it will be some time before the stump becomes firm and healthy; yet these apertures are most useful during healing, and in time, by good dressing and bandaging, close firmly. Abscesses in the course of the tendinous sheaths are occasionally troublesome, and the usual complications of wounds may have to be combated.

I have had very few cases of secondary hæmorrhage, hardly one of sloughing, when Syme's amputation was employed; and none of painful or imperfect stumps. In both cases in which, from the destruction of the soft parts, I was forced to take my flap from the dorsum of the foot, I had sloughing and most imperfect stumps; and at least one of those irregular ones I mentioned, in which the flaps were made up of shreds, as I may say, from different sides of the articulation, would, I fear, have to undergo subsequent amputation; though, having lost sight of them as they were sent to the rear, I was unable to trace their final condition.

I must apologise for detaining the meeting so long; but I hope that I may have suggested some practical points for their consideration.

SUCCESSFUL CASE OF CÆSAREAN OPERATION : MOTHER AND CHILD ALIVE.

By J. S. GAUNT, Esq., M.R.C.S., Alvechurch.

ON the morning of July 29th I received a note from Mr. Parsons of Tanworth, requesting me to meet him and Mr. Kimbell of Tanworth at a case of difficult labour at Aspbury Heath. We met at nine o'clock, when I found that Mrs. B., aged 38, a blacksmith's wife, had been in labour since the 27th. She thought the membranes ruptured on that day, with the first pains; but only a small quantity of fluid escaped. This was her fourth pregnancy. In her first labour, in 1857, she was attended by Mr. Kimbell, and more than a week passed before the child was born; it was still-born. In her second confinement, in 1860, she was attended by the late Mr. Duce of Wednesbury. She was in labour twelve hours, when a very small living child was born, which survived its birth but a few weeks. After this confinement, she suffered from pain and weakness in her back and hips. She was in the General Hospital at Birmingham for ten weeks, under the care of Dr. Russell. In 1865, she was in labour for four days, being this time again attended by Mr. Kimbell. Craniotomy was performed by this gentleman, after consultation with Mr. Smith of Redditch.

On vaginal examination, I was unable to reach the presenting part. The transverse diameter was only one inch, the antero-posterior an inch and a quarter, barely admitting my first three fingers, closed together, up to the first joint. I urged my colleagues not to delay, but to proceed at once to the performance of the Cæsarean section, as being the only hope of saving the mother's life, as well as that of the child. This was consented to. I advised forty minims of Battley's solution of opium to be administered, and we arranged to meet at three o'clock. The bowels had acted in the course of the morning; and water was passed at 2 P.M., so that it was thought unnecessary to introduce the catheter. She was placed on a bed, with her legs drawn over the bottom, the feet resting on pillows. Mr. Kimbell administered chloroform; and, when she was fully under its influence, Mr. Parsons made an incision about four inches in length in the course of the linea alba,

dividing the peritoneum on a director. An incision was then made into the upper part of the uterus, wounding at the same time the placenta, from which issued a slight gush of blood. He then introduced his finger, and upon it divided the uterine wall. I now tore through the membranes, seized the breech, and extracted a well-developed living child, which began to cry lustily. After cutting through the funis, I separated the placenta, which was attached to the anterior and superior part of the uterus. I now introduced my hand into the uterus, passing my forefinger through the os into the vagina, from which there was a slight discharge of blood, continuing to this date. I then placed the fingers of my right hand on each side of the incision, and brought the edges into apposition. With my left hand I grasped the fundus, which contracted very fairly. The wound was closed by means of hare-lip pins passed through the abdominal walls, embracing the peritoneum with intermediate silk sutures. A pledget of lint, secured by adhesive strapping, was then applied, and a bandage carefully adjusted. We agreed to give one drachm of laudanum, to be followed by a quarter of a grain of opium every four hours; the diet to consist of beef-tea and milk.

On the 30th, there was some distension of the abdomen, and an enema was given. The following day, the bowels were relaxed, and they have subsequently acted on alternate days. The catheter was introduced, but was not afterwards required. The opium was inadvertently omitted on August 1st; great depression followed; and the pulse became extremely frequent.

The sutures were removed on August 9th, when firm union was observed to have taken place. Scarcely three ounces of blood were lost at the operation. It should be noted, that a higher temperature was maintained in the chamber, and that the vagina was syringed daily with a weak solution of carbolic acid.

Her father suffered from syphilis, and died from phthisis. Her mother became an inmate of an asylum. She told us that she had been becoming shorter in stature for some time past. I have only to add, that both mother and child are quite well.

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

RETENTION OF URINE WITH HÆMATURIA.

By J. BIRCHENALL, Esq., Macclesfield.

S. S., aged 63, tall, of athletic form, and robust health, actively employed as principal warehouseman in a silk-mill, had accustomed himself for some years to the occasional use of the catheter on account of prostatic enlargement. On May 17th, 1866, on going to bed, he took a strong glassful of hot whiskey-and-water; and, on the following evening, a similar potation of gin-and-water, for the purpose, as he supposed, of throwing off a recent cold. He was thereby necessitated to have recourse to the instrument more frequently than usual; but, as the relief in every instance was incomplete, and the urine highly charged with blood, he placed himself under my care. I passed a full-sized catheter without any difficulty, and drew off an ounce of bloody fluid. There was no tension or tumefaction of the bladder; but, as the uneasy straining sensation continued, I urged him to maintain the recumbent posture as far as possible, and ordered suppositories of opium. On inquiry I ascertained that, six weeks previously, he slipped upon the stairs, falling upon his elbows, that he was thereby much shaken, and that the secretion of urine for some days subsequently was of a slightly bloody hue. As the bowels were free, a mixture of nitrate of potass and carbonate of soda, in doses of five grains each, with thirty drops of tincture of hyoscyamus, was prescribed every four hours. The patient was ordered to observe a farinaceous diet, and to drink barley-water. The treatment afforded relief to the urgent symptoms, although, on every occasion when the catheter was passed, the urine was highly charged with florid blood. On the fifth day of my attendance I found that my patient had ventured to go down to business, but a cutting easterly wind superinduced an aggravation of his symptoms, of which I was not apprised for several days, when I found him in much pain with constant straining, and a sense of faintness; the pulse quick and irregular, and the tongue brown and dry. The catheter had been passed frequently, but it had given issue to slight jets only of bloody fluid. The suppositories were repeated, and port wine and infusion of roses administered at regular intervals. There was no head-ache, nor

any sense of uneasiness in the lumbar region, but a restless, anxious expression of countenance.

On my next visit I found the spasm somewhat relieved; but, as I did not succeed in emptying the bladder, I determined to inject tepid water for this purpose, suspecting that there might be an accumulation of coagula. This presumption was strengthened by the opinion of Mr. Lallemand, who saw the case with me, and pointed to the palpably defined margin of the bladder when our patient was in the supine posture; the body of this viscus, on careful examination, giving to my hand the impression which is presented by the irregular surface of the recently contracted uterus. I threw up about six ounces of tepid water by means of a syphon ear-syringe attached to the catheter. This gave issue to ten or twelve ounces of dark bloody fluid, with considerable relief. The injection was continued twice a day for a week, with the same results, except that the fluid returned, gradually lost its dark bloody tinge, and the urine then presented its natural character. There was extreme debility for some time afterwards, and it was not until after the lapse of five or six weeks that there was any spontaneous action of the bladder. Bark with mineral acids, and port wine, however, aided in the restoration of my patient; and a prolonged residence on the coast effected complete convalescence.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

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HOSPITAL ARCHITECTURE.

THE circumstances under which the Association met at Leeds this year rendered it peculiarly appropriate that a prominent place should be given in the proceedings to a discussion of the architectural conditions necessary for rendering hospitals capable of doing the greatest amount of good with the least amount of harm. The subject was well introduced in the inaugural address of the President, who gave an excellent description of the magnificent Infirmary recently erected in Leeds, and of which the æsthetic taste, at least, of the town may justly feel proud; and who supplemented his description by the addition of remarks founded on a large amount of personal observation and reflection. The address of Dr. Chadwick was well followed up, on a subsequent day, by that of Captain Galton, whose experience in the construction of hospitals entitled him to an attentive hearing, and whose courtesy in consenting to read a paper on the subject deserved the best thanks of the Association; and by a discussion which, at first following the reading of Captain Galton's paper, was subsequently carried on in the Section of State Medicine. The report of this discussion, as given in last week's JOURNAL, shows that very great diversity of opinion existed among the speakers; that, indeed, there was but one point in which all seemed to agree—that the poor ought to be provided with such accommodation, when suffering from sickness or injury, as shall enable them to recover their health *cito, tuto, et jucunde*. But that our present hospital arrangements are calculated to carry out these conditions, or that any plan can be devised which shall not meet with opposition, at least in some of its details, from men whose opinions are entitled to attentive consideration, cannot be asserted. The discussion has brought into a focus a vast diversity of opinions on even some of the leading principles of hospital architecture; and shows that the difficulties which surround the

question of the best mode of providing accommodation for the sick poor are numerous and formidable. At any point, indeed, where one imagines that he has found a solution of some important problem, he is liable to be met with some more or less weighty reason why his scheme is not practicable or not advisable. Does he advocate the building of a hospital with a view to permanency?—he is met by the objections of those who regard permanency as a positive disaster, and who rejoice in the ugliness of a hospital, because they are sure that it will not be allowed to remain in existence. Is it urged that the patient ought to be enabled to live his hospital life *jucunde*—that his æsthetic faculties ought to be called into play as a means of relieving him from the depressing influences of a house of disease and death?—a warning against ornamentation, as an impediment to ventilation and a constant source of trouble and cost, is raised. There is, perhaps, no principle more generally recognised than the necessity of a supply of light and air;—but the advocates of this are met with the objection that the opening of the windows in hospital wards gives bronchitis to the patients; and theasserter of this objection does not hesitate to declare his sympathy with the prejudices which lead the patients to shut the windows whenever they find the opportunity. It would seem, too, from Dr. Cormack's letter in last week's JOURNAL, that even the highest authorities in Paris—such men as Cloquet, Larrey, and Nélaton—do not place that value on light and air, as essential elements in the treatment of disease, with which many are accustomed to regard them. Does one advocate the aggregation of patients in large wards?—he finds a formidable opponent in Sir James Simpson, with his statistics of the relative mortality after amputations in hospital and in private practice, and his advocacy of small and scattered institutions. This last plan, again, is met with objection on the score of expense. And so on, through the discussion, there appear opinion on opinion, and objection on objection.

Out of this chaos of opinion which at present exists on the hospital question, we believe that order will ultimately arise, in such a form as shall be for the benefit alike of the sick and of the physician. But how, or when, this desirable result will be brought about, it is not possible to say: the problem is so complicated with elements of difficulty. Dr. Farr, the President of the Section of State Medicine, in his concluding remarks, gave an admirable summary of the question; and we cannot conclude better than by repeating his words.

“The great question was this: hospitals were founded with a view to diminish the mortality of the population. No doubt, the benevolent people who raised these hospitals did it with the best intention of diminishing the suffering of mankind; and there was no doubt, either, that they had been very much mistaken in many of their opinions. The founders of lying-in hospitals, for instance, instead of diminishing mortality, had undoubtedly increased it; and he thought they might say that the founders of the old general hospitals had made the same mistake, although with an excellent intention. They were anxious to put all this right, and to determine whether the greatest good could be accomplished by bringing the patients into small hospitals, leaving them at their homes, or taking them to large improved hospitals. He quite agreed with those who stated that, in the present condition of things, it would be unwise to leave a certain class of sick people in their homes in large towns, with bad house-accommodation. It was impossible to say that such people could be left in their homes with advantage to the community; they must be removed. To what place they should be removed was, of course, a question for consideration.”

PROFESSOR GLUGE has been elected Rector of the University of Brussels.

PROFESSOR SALVATORE TOMMASI has been elected Rector of the University of Naples.

THE Society for the Protection of Children in Paris offers a prize of 500 francs to the author of the best "Guide to Mothers and Nurses," written in the French language.

A PERSON has been lately poisoned in Baltimore, Maryland, through the carelessness of a druggist, who put up a prescription with aqua ammoniæ, instead of aqua cinnamomi, as ordered in the physician's prescription.

AMONG the grants made by the British Association for the Advancement of Science, are one of £30 to Dr. Richardson, for an investigation of the physiological action of organic compounds; and one of £15 to Dr. Gamgee, for researches on the heat developed in arterialisation of the blood.

IT was decided on Monday that the next meeting of the British Association for the Advancement of Science shall be held in Liverpool, under the presidency of Professor Huxley. Invitations were also received from Edinburgh, Brighton, Bradford, and Belfast. The contest ultimately lay between Liverpool and Edinburgh; the former gaining the victory by a majority of 91 votes against 86.

Dr. KRAUS, the editor of the *Allgemeine Wiener Medizinische Zeitung*, against whom an action was brought a short time ago by Dr. Billroth, for having erroneously attributed to him (Dr. Billroth) the leaving of a piece of sponge in the abdomen of a patient after ovariectomy, has been sentenced to pay a fine of 100 florins, or to undergo twenty days' imprisonment, with costs.

MR. WANKLYN has just been elected a Corresponding Member of the Royal Bavarian Academy of Sciences. We rejoice to hear of this recognition of the claims of one who holds a distinguished place among British chemists. Mr. Wanklyn's election by the Bavarian Academy is the more satisfactory, since he has twice failed to obtain similar recognition from our own Royal Society.

CONSUMPTION IN BRAZIL.

ACCORDING to the *Gazeta Medica de Bahia*, phthisis has for some time increased frightfully in Brazil. This increase is attributed to the immigration of foreigners, especially Germans, who have brought with them habits of intemperance. The desire for strong drinks has, it is said, been developed *pari passu* with tubercular disease. When Brazil was colonised only by the Portuguese, a temperate people, tubercular disease was rare.

TREATMENT OF MALIGNANT PUSTULE.

DR. CASPAR of Stassfurth asserts, in the *Deutsche Klinik*, that he has treated several hundred cases of malignant pustule successfully by strong solution of ammonia; and that all the patients recovered except one—a pregnant woman, whose stomach rejected everything. The dose for children was one, two, or three drops; and for adults four drops, given every hour, day and night, in sweetened barley-water. The treatment, he says, must be continued until the inflammation ceases to spread round the pustule. The local application of solution of chlorine is of little or no value.

THE INQUIRY AT ST. PANCRAS WORKHOUSE.

THE inquiry, conducted by Mr. Montagu Bere, into the treatment of the sick poor in St. Pancras Workhouse terminated on Saturday last. The Commissioner stated that his report would not be ready for some days; and therefore we are not in a position to give a full expression of opinion on the subject. But the evidence adduced during the inquiry, as recorded in the public papers, goes very far to show that care for the well-being of the poor inmates of the infirmary has been postponed

to considerations of pseudo-economy, in deference to the opinions of those who are opposed to the extension of the hospital accommodation belonging to the workhouse. The proofs of mismanagement, not to say cruelty, to the sick poor, appear unanswerable. What can be said, for instance, to justify the dismissal from the infirmary of a woman whose very appearance led Dr. Markham, during an official visit, to suspect the presence of renal disease, and in whom such disease was actually found on examination of the urine? We withhold further remark until the Commissioner's report has appeared.

SMALL-POX AT DEWSBURY.

IN consequence of the prevalence of small-pox at Dewsbury, in Yorkshire, the Lords of the Privy Council directed Dr. Wiltshire to go to the town and inquire into the circumstances. At a meeting of the Board of Guardians, last week, a communication from the Medical Officer of the Privy Council was read. It was agreed, in accordance with the suggestion of Dr. Wiltshire, that a house-to-house visitation should be made to ascertain the number of unvaccinated persons, and that a temporary hospital should be formed for the reception of small-pox cases; also, that nurses should be appointed, and that the laws relating to vaccination and small-pox should generally be put into operation.

THE ONTARIO MEDICAL COUNCIL.

THE first meeting of the new Council of the College of Physicians and Surgeons of Ontario, formed under the new Act, was held on July 14th. On calling the roll, there answered—nineteen representatives of regular practitioners, five homœopaths, and five eclectics. After some business of organisation had been transacted, Dr. Agnew gave notice of motion for a committee to memorialise the Colonial Legislature for the repeal of so much of the Act as united the homœopathic and eclectic bodies with the medical profession of the province. Among the reasons which he assigned for the resolution were the following.

"Whereas the Coalition, in a Council, forced upon the Medical Profession, with two other bodies, known as Homœopathists and Eclectics, for the purpose of legislating in regard to questions involving the most vital principles of medical science, is viewed by nearly all the leading and thoughtful members of the profession as fraught with great danger, and likely to lead to the most pernicious consequences—alike subversive of the cause of science and of professional morality—for if the views held by all the great schools of the world are honestly embraced by the Medical Profession of this Province, and if the so-called theories of the other bodies are honestly held by them, they cannot be compromised by either, for any mere expediency, without dishonour."

"Whereas, in addition to all the foregoing objectionable features of the Bill, its operation will, in all probability, cut off the recognition of our Medical diplomas by the Mother country, and thus deprive our young men of privileges they have not been slow to avail themselves of in the past—to their own credit and ours, and which they would no doubt earnestly desire to have still continued open to them."

On the following day, the motion was discussed. Ultimately, an amendment to the following effect was carried by a majority of 20 to 7.

"That inasmuch as three licensing bodies existed in Medicine in the Province of Ontario, whose privilege was to send forth practitioners of an inferior Medical education; and whereas it is highly desirable to protect the public by allowing only thoroughly educated men to receive a licence to practise Medicine, notwithstanding the objections many of the Council may have, and do now entertain towards some clauses of the new Bill, we are prepared to use our best efforts to make it acceptable to the Profession and beneficial to the community at large, by raising the standard of Medical education throughout the country."

It was determined, on the recommendation of a committee, that all students should be required, before the commencement of their studies, to pass a preliminary examination; that the age of twenty-one be the earliest at which any student can register; that four years of study after the preliminary education be required; and that two professional examinations be undergone, viz.

"Final at the end of the fourth year:—1. Surgical Anatomy; 2. Practical Chemistry; 3. Medical Jurisprudence; 4. Sanitary Science; 5. Midwifery (operative); 6. Surgery (operative practical); 7. Materia Medica and Therapeutics; 8. Midwifery; 9. Surgery. 10. Theory and

Practice of Medicine. Primary at the end of the third year on the following subjects:—1. Descriptive Anatomy; 2. Physiology; 3. Theoretical Chemistry; 4. Toxicology; 5. Pathology; 6. Medical Diagnosis; 7. Botany."

A fee of five dollars a day, with travelling expenses, was voted to each member attending the meetings of Council. It is very difficult for us in this country to understand how a Council of practitioners of legitimate medicine, homœopaths, and eclectics, can work together: or how it was that so small a minority were in favour of Dr. Agnew's motion. What would the profession here think of a representative of the homœopathic practitioners in our Medical Council? It is alleged, that the object of admitting the homœopaths and eclectics to seats in the Council is to secure the better education of men licensed by the boards of these sects; and that it is hoped that they will be led to see the evil of their ways and become followers of legitimate medicine. The *Canada Medical Journal*, commenting on the proceedings, has some very pertinent remarks.

"There was no reason why the legislators should not look after the homœopaths and eclectics with the view of protecting the public, but why compel the regular medical profession to do the dirty work? We are not disposed to obstruct reform, and there are generally more ways than one of effecting it. It seems to us the profession of Ontario has entered upon a difficult as well as an unpleasant task, a task which fell not to their lot. A cesspool is undoubtedly a nuisance, but there are different modes of removing the offence. It may be filled up, or drained off, or disinfected, or a current of pure water may be turned into it, or it may be bailed out. If the current of pure water is sufficiently strong, although fearfully contaminated for a time, it may eventually wash away the mass of corruption. Of course, now that the profession have entered upon the disgusting work, we not only hope, but believe they may succeed in exterminating the foul pond. In the meantime, they need not wonder if the medical public refuse to keep company with them until their garments are purified. Our opinion is that the malarious pool could and would have been abolished by the legislature, by the judicious use of disinfectants, and that our profession might have kept their hands clean."

THE ANÆSTHETIC ACTION OF CHLORAL.

At the first meeting of the Physiological Section of the British Association in Exeter, Dr. Richardson was requested by the President, Mr. Busk, to undertake the investigation of chloral, proposed as an anæsthetic by Dr. Oscar Liebreich, of Berlin, during the present year. An important series of experiments upon animals and birds was accordingly carried out in the laboratory of the Devon and Exeter Hospital, by Dr. Richardson, with the able assistance of Dr. Shapter, Dr. Kelburn King of Hull, and the house-surgeon and pupils of the hospital. Chloral was discovered by Liebig, in 1832, and afterwards was investigated by Dumas. It is made by acting on alcohol with dry chlorine gas. It is a colourless volatile liquid, of specific gravity 1.502; and boils at 202 deg. Fahrenheit. Its vapour has a pungent odour. When chloral comes into contact with water it turns into a white crystalline solid substance—hydrate of chloral—which is the substance Dr. Richardson subjected to experiment. When this substance is treated with an alkali, it is decomposed into chloroform and into formiate of the base. Liebreich speculated that, if the hydrate of chloral were introduced into a living body, chloroform would be gradually liberated under the influence of the alkali of the blood, and that sleep would follow as from chloroform, but for a longer time. Liebreich made many experiments in regard to this, putting animals and even human beings to sleep for long periods: in one case a dose of forty-five grains produced sleep in a man for sixteen hours. Dr. Richardson, in his researches, first tested whether chloroform is given off when the hydrate of chloral is mixed with blood, and proved it was so by distilling over the liberated chloroform from the blood. He next made a standard solution, which consisted of one part of chloral to two of water. Afterwards he put Liebreich's experiments to the test, and then made his own series of special investigations. The results of his researches were, that chloral is decomposed in the living body, as Liebreich affirms. It gives off chloroform, and it forms a formiate of soda with the blood. The chloroform thus liberated produces sleep, which is in every sense the same as the sleep

from chloroform itself. The substance can be given either by the mouth or by subcutaneous injection. Two parts of hydrate of chloral are equivalent in physiological value to seven of chloroform; the sleep it produces may be made to extend over four and even five hours; but vomiting is frequently produced previously to sleep, and there is only a brief period of actual insensibility, the body being, if anything, hyper-sensitive to touch and pain, even during the stupor. With great care in regulating the dose, recovery may be pretty certainly insured, but death is very liable to be induced by slight excess of the quantity administered. Death takes place by the continuation of sleep with rapidly falling temperature of body. Having discovered the physiological value of hydrate of chloral in comparison with the like application of pure chloroform, Dr. Richardson next investigated the relative dangers and advantages of these two anæsthetic agents. He further compared the hydrate of chloral with bichloride of methylene, tetrachloride of carbon, and chloride of amyl, and came to the conclusion that all the effects of the hydrate of chloral could be obtained by those other agents simply, and with greater safety. While, therefore, he recognised that Liebreich has brought out a very valuable physiological truth—that the animal body is capable of decomposing some chemical compounds, and that the symptoms in the animal may be due to the formation of secondary products—he did not think that the hydrate of chloral would practically supersede opium, chloroform, and similar narcotising agents now in medical use. On the contrary, he believed that the decomposition of blood which it induces by the formation of formiate of soda is detrimental.

THE INTERNATIONAL MEDICAL CONGRESS.

A MEETING of medical and scientific men residing in Florence was held on the 11th instant, for the purpose of considering the best means of giving a hospitable reception to the visitors attending the International Congress to be holden next month. A programme was presented and approved, and a committee was appointed to put it in execution.

THE UNIVERSITY OF WARSAW.

THE professors in the faculty of medicine and general science in the High School of Warsaw have, it is reported, been ordered to deliver their lectures in the Russian language, and to abstain from political allusions; the school having been converted into a Russian University. How, in the teaching of anatomy, chemistry, surgery, or any thing of the kind, one can drag in political allusions, lecturers in our medical schools will be at some difficulty to imagine.

DR. LUSH, M.P. FOR SALISBURY.

THERE has lately been a report that Dr. Lush, the member of Parliament for Salisbury, had accepted a Commissionership in Lunacy. He writes, however, to a local paper to contradict the statement, saying: "Will you allow me to state, first, that I have not accepted a Commissionership of Lunacy; second, that it has not been offered to me; third, that I am legally ineligible for such an office; fourth, that I have no intention of resigning my seat in Parliament, either now or at any time, so long as I am enabled to preserve the confidence of those who freely placed me in the position I have the honour to occupy."

THE MEDICAL CLUB.

THE members of this club held their last monthly house-dinner for the present season at their club-house, on Wednesday evening. Dr. Lory Marsh occupied the chair, and, in addressing the meeting, gave a sketch of the progress made by the club since it started in 1866. He attributed its success to the fact that it supplied one of the great wants of the day, offering not only a place for the reunion of medical men, but a means also of bringing their opinions to bear upon the rulers of the country. He stated his belief that in the future, when important questions affecting the sanitary condition of the people came to be discussed and legislated upon, the profession will be likely to gain a more considerate hearing, and to exercise a more decided influence, if the

members act in concert, and after full ventilation of their views among themselves. With the object of encouraging united action, he had promoted and established the Medical Club; and he was glad to say that the profession to the number of seven hundred had taken up the matter, and enrolled themselves as members. Other speeches were made, and a very agreeable evening was spent.

THE MERCANTILE MARINE.

DR. W. DOMETT STONE, who is known to have paid much attention to the hygienic arrangements of merchant and passenger ships, communicates in a letter to the *Times* the result of observations made by him in America. He says that the coasting vessels at Boston and New York are far superior to those of England. In every one of these over which he went there was a house on deck, with a height varying from 5 ft. 8 in. to 6 ft. 4 in., for the sleeping accommodation of the master and crew; and the appearance of these quarters, as to cleanliness, was very satisfactory. He states, further, that the ship's cook is required to attend solely to the victualling department—an arrangement which might be adopted with advantage in our vessels.

A CHILDREN'S HOSPITAL AT BOSTON.

A HOSPITAL for Children has during the present year been organised in Boston, and duly incorporated by the legislature of the State; and the managers announce that the house which they have purchased and furnished for the purpose is ready to be opened. Poor children in the city of Boston, between the ages of two and twelve years, will be received as free patients. Those able to pay for treatment, and residents of other places than Boston, will be received on the payment of such sums and under such regulations as may be determined by the Board of Managers. Patients of suitable age suffering from immediate accident will be received at any time, and whatever may be their place of residence. It is in contemplation to utilise the hospital at some future day for the instruction of nurses. The medical staff consists of two physicians and two surgeons.

METROPOLITAN BOARD OF WORKS.

THE Report of the Metropolitan Board of Works for 1868-69 has lately been issued. The Board exercised authority and jurisdiction under no fewer than forty-eight Acts of Parliament; viz., four Metropolitan Management Acts; three Main Drainage Acts; twelve Thames Embankment Acts; seven Improvement Acts; two Metropolitan Building Acts; two New Park Acts; five Supply of Gas Acts; one Fire Brigade Act; and twelve Various Municipal Acts. In reporting on Sewage, the Board state that the subject of ventilation of sewers is under the consideration of a committee; and that experiments have been made by the use of charcoal ventilating grates, by ventilation carried through chimney shafts and furnaces, by pipes carried to the top of buildings, and by dilution of the sewage with water. An inquiry is being made into the number of cases in which these methods have been adopted, and as to their cost and amount of success. The committee have not yet been able to submit their report, but it is hoped that they will soon do so.

SCOTLAND.

DR. NEIL ARNOTT'S BEQUESTS.

IT will be remembered that Dr. Neil Arnott some little time ago left munificent sums of money to the Universities of London, Edinburgh, and Aberdeen, for the purpose of founding scholarships to encourage, especially among medical students, the study of experimental physics and natural philosophy, with which his name is so well known. To afford the same advantages to all the Universities of Scotland, Dr. Arnott has again handsomely come forward and has handed over to the authorities of the Universities of Glasgow and St. Andrews £1,000 each, the sum presented by him to the Universities of Aberdeen and Edinburgh.

UNIVERSITY OF EDINBURGH: THE CHAIR OF PATHOLOGY.

THE Chair of Pathology in the University of Edinburgh, rendered vacant by the resignation of Dr. Henderson, will, we understand, be shortly filled up. Among the candidates, Dr. Sanders and Dr. Grainger Stewart are acknowledged on all hands to be the two most competent. They are both recognised as thoroughly good pathologists, and well fitted to fill the chair with honour to the University. But it is thought that the great success and rising popularity of Dr. Sanders as a teacher, the aptitude for original research which he has shown, and his more mature age, will receive for his candidature the support of the Curators, in whose hands the appointment rests.

WEST OF SCOTLAND SEA-SIDE HOMES, DUNOON.

ON Saturday afternoon, the West of Scotland Sea-Side Homes, situated at Ardvulin, on the road leading from Dunoon to Sandbank, were formally opened by the Right Hon. the Earl of Glasgow, in presence of a large assemblage. The scheme has been mainly promoted by Miss Clugston, of Glasgow. The houses at Dunoon are two in number. They are most beautifully situated, commanding as they do a magnificent view of the Firth of Clyde, and yet at the same time secluded and retired, as they would require to be for those for whose restoration to health and strength they are intended. The larger Home is so arranged as to accommodate about 100 patients at one time—viz., 40 adult males, 40 adult females, and 20 children. The smaller Home will accommodate twelve or fifteen inmates, and will be appropriated to persons of both sexes, such as governesses, clerks, milliners, etc., who can afford a higher board than those for whom the larger house is intended. In terms of the laws, every subscriber of £1 annually, and donor of £10 in one sum, towards the annual expenditure, has the privilege of recommending one person yearly, and an additional person yearly for every additional subscription of £1, or donation of £10. The properties originally cost £11,000, but they were obtained for their present purposes at the reduced price of £6,000. Miss Clugston intends remaining at Dunoon for some time, until, at all events, the Homes are fairly in working order.

IRELAND.

NEGLECT OF SANITARY LAWS.

DR. TUCKER of Sligo has addressed to a local paper a letter on the defective state of sanitary legislation, and its results as shown in the undue proportion of mortality from preventable disease. The sanitary laws are, he says, comparatively dead letters; the Baths and Washhouses Act has remained comparatively inoperative since 1846; and the sanitary code of 1866 must share the same fate, until a complete system of medical and sanitary police be put in force. The remedy on which he insists, is the formation of a special sanitary department. "Until there be a special Minister of Public Health in the cabinet, a Medical Officer of Public Health connected with the Privy Council in Ireland as well as in England, and a staff of Medical Inspectors of Public Health in every corporate town and county, to compel sanitary action in all its departments, it is hopeless to prevent the awful morbidity and mortality that continue to prevail." Dr. Tucker recommends further the application of the surplus revenue of the disestablished Church to the purpose of enforcing sanitary laws. He expresses thanks to Archdeacon Gould for having ably advocated the cause of the medical officers of dispensary districts and of the sick poor.

REPORT

ON THE

MALT LIQUORS SOLD IN THE UNITED KINGDOM:

WITH ANALYSES AND COMMENTS.

III.—BITTER ALE AND BEER.

THE samples of beer referred to in the accompanying table were obtained, as stated, partly from public houses, and partly from the brewers themselves or from their agents. The results of analysis show that there are considerable differences in the quality of the beer sold retail by publicans at the same price, and that there are also differences between it and the best kinds of beer supplied by the brewers. Thus, for instance, the variation in the ale sold at fourpence per pint is from 4.08 to 7.10 per cent. of alcohol, and from 3.22 to 7.53 per cent. of extract—a variation which corresponds to a difference in the amount of malt used in the brewing as much as 1.58 bushel per barrel.

In comparing the results of analysis with the object of judging as to the quality of beer, some considerable allowance must, however, be made for differences in those characters of beer which are not clearly expressed by the amount either of alcohol or of extract, nor even by the proportion of malt used in brewing, as indicated by the original gravity. In this respect, the system of brewing adopted in any particular case may be of far greater influence in determining the quality and character of beer, than the mere amounts of alcohol and of extract that it contains; but, subject to this influence, the amount of malt indi-

cated by the original gravity of beer as having been used in the brewing may be regarded as a fair approximative test of quality.

The relative proportions of alcohol and of extract in beer will also have some influence on its fitness in a medical point of view for certain persons; and, in some instances, thin dry beer, that has had the fermentation carried so far as to reduce the amount of extract to a minimum, may be far preferable to beer containing a larger proportion of extract.

In regard to the nutritive value of beer over and above the stimulant and tonic actions due to the alcohol and to the bitter principle of the hop, it is worth notice that a pint of bitter beer contains from half an ounce to an ounce of solid extract.

The amount of free acid in British beer appears to be uniformly larger than in the Viennese or Bavarian beer, and sometimes it is very much larger. This free acid is represented in the tables as acetic acid; but there is reason to believe that only a part of it is acetic acid, and that beer probably contains lactic acid and some substance analogous to glucic acid, which, according to Graham, Hofmann, and Redwood, appears to be produced in the fermentation of beer-worts, as practised in this country.

In most of these samples of beer, the amounts of alcohol and of extract, as well as the corresponding amount of malt used per bushel, were larger than they were found to be* in the Viennese and Bavarian beer now sold in London, but in one or two cases they were rather less. Taking price into consideration, however, the comparison is generally very much in favour of the home-made beer, notwithstanding the late reduction in the price of the Viennese beer.

For the convenience of medical practitioners, the amounts of alcohol, of extract, and of free acid, have been calculated so as to show the actual quantities contained in a pint of beer.

Table of Analyses of Bitter Ale and Beer.

Kind of Ale.	Obtained from.	Price per imperial pint.	Specific gravity.	Per centage of		Acetic acid.	Original gravity of wort.	Malt per barrel.	Contents per pint.		
				alcohol.	extract.				Alcohol. fl. ozs.	Extract. ozs.	Acid. grs.
1. Allsopp's	Messrs. S. Allsopp and Sons, 61, King William Street.....		1010.38	5.74	4.89	.18	1064.16	2.37	1.46	0.98	15.91
2. Ditto (bottled)	Messrs. J. F. Biggs and Co., Royal Exchange		1013.47	5.75	5.80	.15	1068.45	2.53	1.47	1.17	13.30
3. Ditto	Redan Tavern, Farringdon St.	4d.	1005.61	5.34	3.60	.16	1056.27	2.08	1.35	.72	14.08
4. Ditto	Golden Lion Tavern, Warwick Place, Holborn	4d.	1008.33	4.82	4.19	.14	1054.30	2.01	1.22	.84	12.35
5. Ditto	Ditto.....	4d.	1005.68	4.08	3.22	.18	1044.17	1.64	1.03	0.64	15.84
6. Bass's. Brewed 2nd January, 1869.....	Messrs. Berry Brothers, 3, St. James's Street, Piccadilly ...		1010.21	5.86	5.05	.17	1065.89	2.44	1.49	1.02	15.03
7. Ditto. Brewed 24th December, 1868 ...	Ditto.....		1012.51	5.57	5.37	.16	1065.41	2.42	1.42	1.08	14.17
8. Ditto. Brewed 27th January, 1869	Ditto.....		1011.78	5.76	5.40	.13	1066.67	2.47	1.47	1.09	11.50
9. Ditto	Spiers and Pond's Restaurant, Ludgate Station	4d.	1013.20	5.45	5.85	.28	1067.03	2.48	1.39	1.18	24.82
10. Ditto	Brook's, Fetter Lane... ..	3d.	1010.13	4.78	4.68	.29	1056.52	2.08	1.21	0.93	25.63
11. Crowley's. Alton	260, Holborn	4d.	1008.36	4.48	4.03	.14	1050.77	1.88	1.13	0.81	12.35
12. Flower and Sons	Bull's Head Tavern, Hyde Street, Oxford Street	4d.	1012.53	5.24	5.45	.16	1063.01	2.33	1.33	1.10	14.17
13. Fowler's. Prestonpans Brewery ...	R. Porter & Co., 34, Old Broad Street.....		1013.42	4.27	5.28	.29	1053.55	1.98	1.08	1.07	23.78
14. Ditto	Ditto.....		1012.83	4.30	5.15	.29	1054.76	2.02	1.09	1.04	25.71
15. Ditto	Ditto.....		1006.97	3.96	3.52	.27	1044.99	1.66	1.05	0.71	25.70
16. Ditto	Barber, Holborn.....		1001.68	3.94	2.16	.28	1039.15	1.45	0.99	0.43	24.54
17. Ind and Coope's	Crown Coffee House, Holborn	4d.	1009.93	5.27	4.92	.22	1061.22	2.27	1.33	0.99	19.44
18. Ditto	George Tavern, Brook Street	3½d.	1010.12	5.30	4.71	.14	1060.39	2.23	1.35	0.95	12.37
19. Nunneley's	Old Bell Tavern, Holborn Hill	4d.	1018.71	7.10	7.53	.27	1086.96	3.22	1.81	1.53	32.98
20. Perry's	Brixton Brewery	1½d.	1006.48	3.87	3.65	.14	1045.82	1.69	0.98	0.73	7.97
21. Usher's. Park Brewery, Edinburgh	22, Waterloo Road	4d.	1004.52	5.69	3.66	.15	1058.96	2.18	1.44	0.73	13.80
22. Ditto (bottled)	Ditto.....		1005.54	5.31	3.63	.15	1055.96	2.07	1.34	0.73	13.20
23. Worthington's	Prince Albert Tavern, Gray's Inn Road	4d.	1011.17	6.50	5.55	.40	1074.98	2.77	1.65	1.12	35.39

* See BRITISH MEDICAL JOURNAL, No. 421, page 83; and No. 427, page 218.

THIRTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in LEEDS, July 27th, 28th, 29th, and 30th, 1869.

SECTION A.—MEDICINE. President, W. T. GAIRDNER, M.D.

Wednesday, July 28th, 1869.

President's Address.—The PRESIDENT, after some remarks on the conduct of the business of the Section, offered a few reflections on the mode and tone of criticism desirable to be encouraged. He submitted for approval three rules or canons of criticism, attention to which would render the debates at once profitable and pleasing. 1. The discussions should be free. On this, as a general proposition, there was no need to insist; for the essential freedom of modern medical science, in its search after truth, would scarcely be disputed. In medicine, there were no incontrovertible dogmas, no unassailable traditions, no fixed and formal creeds or systems of belief. The field was open to every competent man to advance indefinitely, as the result of independent investigation, from old to new forms of truth; and it was equally open to every one to attack the most venerable errors by placing them under the decomposing influence of new facts, new experiments, and the theories arising from these. The reign of authority in medicine was over. It was no longer a master who spoke from the professor's chair; but Nature that, through a disciple, opened her secrets to disciples, no one of whom could presume to lord it over the rest. Therefore it was that we could speak our minds so freely upon all subjects within the range of our knowledge and experience, without being brought into judgment other than by the free knowledge and experience of others; so that, "being hurt by no persecutions" ourselves, we could well afford to be large-minded and tolerant as respects our brethren. 2. All our discussions should be *loyal* to the art we profess. Truly said Hippocrates (or some follower writing in the very spirit, if not the words, of the old wise man of Cos), "There are those who make it an art to vilify the arts; not, indeed, that they succeed in this, their object being to exhibit their own knowledge." This saying was probably directed against those false teachers whom he (Dr. Gairdner) must not pronounce without excuse, since Mr. Grote and Mr. Lewes have defended them, but whom Plato depicted as the impersonation of insincere and mercenary philosophy. But, whether or not this reproach was rightly applied to the Greek sophists, all knew very well the class of persons to whom, in medicine, these words might be applied at this hour. *Procul este, profani!* The more we felt our own freedom, the more it became a duty and an honour to cherish and maintain the great body of real truth transmitted through the ages. Even in correcting errors, in remarking on the defects of our knowledge, it was possible to do so without violating the reverence due to the past. Dissent from great authorities is never incompatible with respect for the efforts they made in their day and generation to attain the true objects of the medical art. One of the signs of honest thought and good work was an unfailing reverence for all that indicated a like spirit, even when it became necessary to displace what was imperfect or erroneous by what was more in accordance with modern investigation. Two thousand years had not exhausted or diminished the value of the words of the old Hippocratist. He wrote further: "To discover something hitherto unknown, and valuable when known, or to complete an unfinished discovery, is a proper object and work of intelligence; but to disparage by an unseemly use of words the projects of others, without improving upon them, or to run down the discoveries of informed persons in the presence of the uninformed, is not at all the proper object and work of intelligence, but rather an evidence of an evil nature, or of want of skill: it is a business fitted for the unskilled alone to have the desire, even without having the power, of doing disservice to another's work, either by misrepresenting it when right, or by blaming it when wrong." (Hippocrates, *περί τέχνης*, i.) 3. The discussions should not only be free and loyal, but also *sympathetic*. In medicine, as in everything else, there was room occasionally for a purely destructive, or even hostile, criticism. But, on the other hand, such criticism involved serious risk. Under the influence of harsh and acrimonious criticism, especially when tinged with personalities, the truth became more difficult of attainment; or, if the truth were brought out, qualifying circumstances were neglected, and simple statements of opinion hardened into *dogmas*. Then party spirit took hold on these, and converted them into rules of action; and thus many lives might be sacrificed to a mere medical

squabble. Such was the history of Brunonianism in the last century, as of many other forms of false medical doctrine. Therefore even unsympathetic criticism, in questions relating to the medical art, was always, if possible, to be avoided; not merely or chiefly in the interest of the profession, but still more in the interest of the sick. The true physician would instinctively abstain from polemical discussions and controversial excesses in argument, not because he was indifferent to the truth, but because he was conscious at all times of a higher vocation than mere argument.

The Nitrogenous Waters of Buxton. By W. H. ROBERTSON, M.D. —[The paper was read by Dr. Clifford Allbutt, one of the Secretaries of the Section.] Buxton was chiefly celebrated on account of the use of its tepid nitrogenous water in cases of rheumatism, gout, and the allied morbid conditions. The water had a temperature of 82° Fahr., was clear and brilliant, with a faintly blue colour; was slightly alkaline; and was charged with nitrogen gas in the proportion, according to Dr. Sheridan Muspratt, of 504 cubic inches per gallon. The water was both used in the form of baths, and taken internally: the bath exerted a greater and more lasting effect on the disease. It was first stimulant, and secondarily alterative; and might, if used injudiciously, aggravate the localisation of rheumatism or gout in the first instance. Recovery was more rapid, as a rule, in proportion to the youth of the patient, the recent origin of the disease, and the nearness of the affected part to the surface. The stronger the evidence of hereditary predisposition, the more difficult was the cure. Total or partial immersion of the trunk and limbs was commonly needful. Ten minutes was the average time required; but sometimes only one minute could be borne. The effect of the baths depended closely on the amount of friction used during immersion, and not on absorption through the skin. The paper concluded with a brief notice of the Devonshire Hospital at Buxton, and of the physical geography of the town.

On Uræmic Diarrhœa. By J. MILNER FOTHERGILL, M.D., Darlington.—The writer commenced by alluding to the power possessed by the secreting cells of certain excretory organs of not only appropriating their own peculiar materials, but of eliminating other materials when in excess. As an example, the kidneys in some cases of jaundice excreted biliary matter; and all were aware of the capacity of the intestinal canal to supplement the kidneys. He then drew attention to the diarrhœa frequently accompanying chronic renal disease, advancing the view that it was to be regarded as a salutary action, freeing the blood from effete products, and relieving the kidneys of their work. It was rather a compensatory or vicarious excretion than a morbid process. After illustrating his view by several cases, he urged strongly that the treatment was not to arrest the alvine flow until some other channel be patent. The rational treatment, he contended, was to act freely on the skin, and to restore the action of the kidneys, and only to arrest the diarrhœa by the use of powerful astringents when the renal action was re-established, or the diarrhœa was in itself likely to prove fatal. Afterwards, the action of the skin must be fostered, and the patient protected from atmospheric changes, and treated with iron and other adjuncts to nutrition.

The PRESIDENT said that he would like to hear a discussion on this subject. It appeared to be an extremely interesting one. He dared say that Dr. Fothergill claimed nothing extremely novel for it; but, at the same time, the cases he had recorded were very instructive, and he (Dr. Gairdner) must say for himself that nothing had been more often brought before his mind than the necessity for this sort of paper being read in a general assembly of medical men, because, notwithstanding all that was known about the pathology of this important subject, he was afraid there were numerous instances where the consequences of giving opium under such circumstances, and restraining the diarrhœa, were not sufficiently apprehended. It had happened to himself many a time that he had been the witness of practices under which he did not hesitate to say the patient had either been imperilled or lost. He remembered one of the most experienced practitioners in Scotland coming to him and asking him if he ever knew so small a dose as three-quarters of a drachm of solution of morphia killing a patient. He went on to describe the circumstances of the case; and he (Dr. Gairdner) said to him he thought his patient could not have died; and the man went on to say he had been all forenoon with her, and had been in terror of her life. He told him to get some of the patient's urine; and he found it loaded with albumen. No doubt Dr. Fothergill would admit that he ought to have been aware of that; but when gentlemen of fair standing and largely relied upon, having no one to advise with, were put in a state of surprise and worry about these cases, it showed how useful it would be to have more attention called to this subject. He remembered another case, in which epileptic symptoms had been produced by a small dose of opium. It appeared to him that the condition of the pupil and tongue might be important under

such circumstances. They might be important guides when there were not the means of getting access to the urine in time for the purpose. He agreed with Dr. Fothergill as to the effect of hot air; and he had known cases in which the Turkish bath had been extremely successful.

Dr. FOTHERGILL said his object had not been to instruct the Section, but get attention drawn a little more to the subject, for, somehow or other, there was no large work on uræmic disease, and in the country the practitioner had often only his books to fall back upon, but this subject they almost altogether passed over. He could not arrest the disease in all cases in the way described, but his object had been to give the subject a little more ventilation.

Remarks on Clinical Thermometers. By C. B. FOX, M.D., Scarborough. The remarks were arranged under four heads:—1. The Accuracy of Clinical Thermometers; 2. The Different kinds of Clinical Thermometers; 3. The Stethoscope and Clinical Thermometer combined; 4. Suggestions to the purchasers of Clinical Thermometers. The errors, to which all thermometers were liable were described, and the want of harmony between the observations on temperature of various observers was thus accounted for. The results of an examination of the instruments of different manufacturers were given. The necessity for a verification of each instrument at the Kew Observatory was strongly insisted on, as a comparison with a standard thermometer verified at Kew was shown to be useless. Under the second heading, all the various clinical thermometers were described, whilst their respective merits and faults were pointed out. The fourth division of the subject consisted of a description of a convenient combination of the stethoscope and thermometer, whereby the former acted as a tube for the protection of the latter, the addition of a cap to the stethoscope being alone needful. The paper concluded with some hints for the assistance of purchasers of clinical thermometers, and a few observations tending to encourage the study of "the thermometry of disease."

The PRESIDENT asked Dr. Fox as to the comparative value and importance which attached to observations made in the axilla and observations made in the rectum. The point had been raised in the JOURNAL; and there appeared to be difference of opinion among the highest authorities on the subject.

Dr. FOX had not made comparative observations. Dr. Wunderlich usually placed the thermometer in the rectum; but he believed that the observations made in this country tended to convey the idea that the application of the thermometer to the axilla was the accurate test of the temperature of the human body, and of course a less objectionable mode of examining the patient. As to the testing of heat by placing the thermometer under the tongue, that was a mode now quite out of date, on account of the cooling of the thermometer by the passage of air in inspiration.

Dr. ANSTIE (London) said that the fine bulb thermometers were coming more into use; but, because of the restlessness of patients in long illness and some kinds of fever, when the readings of the thermometer could not be thoroughly reliable except by close personal superintendence on the part of the medical man, he thought it was not desirable to proceed too far with the reduction in the size of the bulb. As to the application to the rectum, he apprehended that there were many difficulties, so that, except in the case of children, the instrument could hardly be so applied. It might be thought that the struggles of children would make this mode of using the thermometer difficult. But if the back were turned and the head were laid over the shoulder, children were not frightened. That was a very effective way of using the thermometer.

Dr. SIMPSON (Manchester) said the only remark he would make as to the temperature of the rectum was, that it was a degree higher on the average than that of the axilla. As regarded applying the thermometer to the rectum, it was more certain on the whole; but, in cases of adults, there were many objections to it on various grounds; and he should think in England the axilla was almost universally used. Some of the German medical men in Manchester held a strong opinion that the rectum should always be the place for the application of the thermometer, but that was not the opinion held by two or three other German medical men who frequently used the thermometer.

The PRESIDENT said his own attention had been called to this subject in a remarkable way. In 1866, before he had made many thermometric observations himself, he went to London for two days for the purpose of observing the first cases of cholera when it was thoroughly epidemic in the east of London, and he found the physicians making careful axilla observations, and arriving at certain conclusions, which appeared doubtful to his own mind. He asked them if they had taken any observations in the rectum. They then began a new set of investigations, and the result was that their rectum observations, at a late stage of the cholera, were not only different, but diametrically opposed to those got from the axilla—when there was a rapid rising in the axilla there was a

rapid falling in the rectum. The results of these observations were afterwards fully confirmed in a very elaborate paper by a German writer, which showed particularly clearly that the circumstances under which the observations were made were of immense importance. He might state that, although he had not had the opportunity of following out these experiments with sufficient minuteness to satisfy his mind, Dr. Russell, of the Hospital in Parliament Road, Glasgow, in many cases of typhoid fever, had made comparative observations; and the conclusion at which he had arrived was that, generally speaking, there was a constant relation between the two in the individual—that is, in the particular individual there was a constant difference in the rising and falling of the thermometer, the temperature in the rectum being a fraction of a degree in advance of that in the axilla. When there were rapid shiftings of the temperature, such as cold sweats and rapid changes of vitality in the patient, then the differences so marked became of great practical importance. The conclusion to which he (Dr. Gairdner) came was, that he could not say they were safe in adopting the habitual routine of confining their observations to the axilla. He would be glad to hear Dr. Allbutt's opinion on the question.

Dr. ALLBUTT (Leeds) felt that nothing could be said on this subject unless it were backed up by a series of very careful comparative observations. He had not made many comparisons between the axilla and the rectum, because he had been tolerably well satisfied with the uniformity of the results which he had got by his own examinations of the axilla. But he had been struck with the want of uniformity in the results recorded by students and clerks, which showed him that a great deal depended upon the care with which the examinations were made and recorded. But he thought the axilla-ranges generally were so uniform that he had not been led to suppose there was any source of error. If he had found that the thermometer readings varied in a way which did not seem to coincide with the progress of the disease, then he should have been prepared to make a series of observations in the rectum. He was not prepared to say that an examination in the mouth by the thermometer was to be distrusted, as the air, he thought, need not be allowed to interfere with the observations.

Dr. BURDON SANDERSON (London) thought that the argument as to the regularity of results did not dispose of the question. When the temperature of the axilla and that of the rectum were measured, results were obtained which referred to different things altogether. To know the temperature of the blood, the observer must have recourse to the rectum; but, to ascertain the heat nearer the surface, the temperature of the axilla must be taken. In cases of ague, observations in the rectum showed quite different results from those in the axilla; and during the paroxysm, while the temperature rose in one, it fell in the other. The same, no doubt, would apply to cholera, were the condition as transient as it was in ague. There might be regular results from observations in the axilla, and yet they would be incorrect as regarded the temperature of the blood. If an animal were varnished, a great diminution of temperature was produced, but the temperature of the skin was much higher. In the axilla of the rabbit there would be, as the result of the varnishing, increased temperature, but in the rectum there would be diminished temperature. That was the principle which guided them in disease; and, where there was a probability of great variation in the state of the skin and of the internal organs, he should think that observations in the axilla were of comparatively little use.

Dr. FOX, in reply, remarked as to the difference in the size of the bulb, that he found it more difficult to get the correct temperature with a small bulb than with a large one.

Treatment of Rheumatic Fever by Perchloride of Iron. By J. RUSSELL REYNOLDS, M.D., F.R.S., London. The marked effects of tincture of perchloride of iron in such diseases as erysipelas and diphtheroid sore throat had induced Dr. Reynolds to try it in acute rheumatism—which agreed with the others in coming under the class of "spreading" inflammatory affections. He had given it in eight cases, with such success as would justify a further trial. Having given brief histories of the eight cases, he directed attention to certain points. 1. The relief of the joint-affections was definite, uniform, and speedy. In four cases it was removed in one day; and the longest period of suffering after the commencement of the treatment was five days. 2. Excluding one fatal case with cerebral symptoms, and another where there was intercurrent pneumonia, the temperature became normal between the second and the seventh days; the mean duration of pyrexia being a little less than five days and a-half. 3. Excluding again the two exceptional cases already mentioned, the total duration of rheumatic fever from the outset varied from seven to fifteen days, giving a mean of ten and a-half days. 4. The earlier the iron was given, the shorter was the duration of the disease. No headache or other symptom of discomfort was produced by the iron.

Dr. SIBSON (London) said that, notwithstanding what some might

have supposed, it appeared that iron did no harm, and therefore they should not be without hope that in many cases of rheumatism it might be administered. With regard to the effect of it on the joint-affections, they could not put out of view the advantages of good nursing and complete rest, and the removal of all external pressure on the inflamed parts. So far as he could learn, Dr. Russell Reynolds' cases did not appear to be decisive of the question, and Dr. Reynolds did not wish to put them forward as being so. But the duration of the raised temperature was as long as the average duration in those cases that were treated by rest. Very probably further observations would be made with this most valuable medicine; and it might be discovered that, in addition to the careful use of this means, absolute rest and removal of pressure should be rigorously employed in acute rheumatism. If with advantage tincture of perchloride of iron could be used, then confessedly they would have gained a good deal by Dr. Reynolds' paper.

Dr. HESLOP (Birmingham) saw no reason for withholding this important tincture in other diseases as well as in rheumatism.

Dr. HEATON (Leeds) said it was not for him to use an *à priori* argument; and, as an additional remedy, he would suggest the use of alkali rather than an acid like perchloride of iron. It was only the treatment of inflammatory complaints, such as erysipelas, that had suggested this plan of treatment for rheumatism; but, as by practice and experience the treatment of perchloride of iron had been found useful, he had no right to assume any *à priori* objections to it further.

Sir H. COOPER (Hull) said the cases given by Dr. Reynolds were important, as showing how effectual this important medicine was in cases of acute disease, such as those described by Dr. Reynolds evidently were. But it would be wrong to assume that a few cases established the use of this medicine as a general rule. They could not know whether in the cases mentioned the perchloride of iron acted as a remedy in any way: the writer of the paper had not attempted to give any theory by which the remedy could have acted in contravention of the disease. The disease would not be affected by that, but only by the effect upon the general system, had the advantages described been derived.

Dr. C. J. HARE (London) said Dr. Russell Reynolds' treatment was certainly not only much opposed to the views of the profession generally, but to the mode of practice generally prevalent in cases of rheumatic fever. It appeared that the average duration of his cases had been considerably less than others, both as regarded the duration of pain and the duration of high temperature. As to the condition of rest advocated by Dr. Sibson, the cases would be under precisely similar circumstances to those treated by other means. A patient suffering from acute rheumatism was never removed from bed, and could not be. The treatment might, therefore, be compared fairly with the other treatment in hospitals; and if the duration in these and other cases in hospitals were found to be less by such treatment, it might be put down to the medicine, and not to anything else. As to the comparative duration, the results of Dr. Reynolds' cases were better than those which he knew were the results of the general treatment of rheumatism in the hospital.

Dr. BURDON SANDERSON had not had many cases of treatment with mint-water, but he had with rest, and the duration was considerably greater than had been observed in Dr. Reynolds' cases. It would very ill accord with his practice that mere rest as a precaution from pressure produced results so good as those related by Dr. Reynolds.

Dr. BROADBENT (London) had been led to anticipate good effects from salts of iron in rheumatism and other acute cases. He had not tried it in rheumatic fever, but in other diseases he had given it. In cases of typhoid fever, he had given sulphate of iron in doses of three grains and six grains every three hours in about fifty instances. He had not yet tabulated the results or examined them closely; but a superficial examination of the results, and the impressions left upon him by watching the cases, led him to think no harm was done; and in one at least the result was good.

The PRESIDENT said that obviously it would be quite premature, and Dr. Russell Reynolds did not wish it, to draw definite conclusions from his paper. He thought the results were very striking, and would induce him for one to give a fair and extended trial to this remedy. His own treatment of rheumatism had been, on the whole, tending to alkaline drinks, with a moderate application of blister treatment, which had been found remarkably effective in a considerable number of cases. He had hardly ventured to dissociate the one from the other, but had combined the treatment. When the tincture of perchloride of iron was first introduced in connection with erysipelas, he, along with Dr. C. Bell, made many trials of it, and the contrasts in the results were such as convinced him that they could not decide any point with respect to it without a great number of cases.

Dr. SIMPSON (Manchester) inquired if Dr. Russell Reynolds had given the salt of iron or the perchloride in preference to any other sort.

Dr. SIBSON asked if he thought it had at all checked perspiration.

Dr. H. DAY (Stafford) wished to ask Dr. Reynolds whether his cases had been subjected to any other treatment prior to coming under his care. He thought they must have been of some standing before Dr. Reynolds saw them; and the administration of iron might have been opportunely commenced at the period when that remedy was peculiarly serviceable. The subject of rheumatism was so debatable, and its origin so little understood, that the administration of any medicine was more or less experimentalising; and he (Dr. Day) was himself disposed to go with the President in putting faith in the treatment by blisters.

Dr. REYNOLDS, in reply, referred, first, to Dr. Broadbent's inquiry, and said that as to the nature of the salt of iron, he had no special reason for choosing one more than another; but when he had to deal with something in the nature of spreading inflammations, he selected the tincture called perchloride of iron in the *British Pharmacopæia*. The cases were treated with that tincture because the disease of the back and joints was analogous, to some extent, to spreading inflammations elsewhere. As to the treatment of the cases before admission to the hospital, he could not speak positively, but some of his cases had not been treated at all. In none of the cases was there albumen in the urine, but in some it was alkaline, and in others acid. With regard to Dr. Sibson's inquiry as to perspiration, he did not think the medicine produced any definite effect. The patients perspired when taking the iron just as they usually did, and ceased to perspire at certain periods of the day as usual. A question had been raised as to the duration of the disease. His own experience of the duration of these cases was that there were five-and-a-half days of elevation of temperature after commencement of the treatment, and considerably less than half the time occupied by rise of temperature when they were treated with mint-water or camphor mixture. Some years ago, patients were treated with camphor mixture, and the duration was something under fifteen days. In cases of his own, treated with nothing at all, that was the average duration; but the duration under iron he could roughly say was five-and-a-half days. He thought, however, the number of cases far too small to draw any general inferences. He merely threw out suggestions, so that others might try a medicine which apparently had relieved pain in a singular degree. The patients not only within four or five hours of taking the first dose were relieved, but they felt better altogether.

SECTION B.—SURGERY. President, WILLIAM HEY, Esq., F.R.C.S.

Wednesday, July 28th, 1869.

Opening Remarks by the President.—In opening the proceedings, the PRESIDENT said his first duty was to express his sense of the great honour conferred upon him by being assigned to so important a post as that of President of the Surgical Section. In 1842, when the Society last met at Leeds, under the presidency of his late father, he had the honour of reading the Address in Surgery; but on the present occasion, having retired from the active practice of the profession, and having passed the period of life when most men considered themselves entitled to give up work, it was not his wish to occupy any prominent place in the business of the meeting. But the presidency of the Surgical Section was so strongly pressed upon him by those whose wishes he felt bound to respect, that he resolved to accept it, especially as two gentlemen so able as Mr. Southam and Mr. Stokes had been appointed as Vice-Presidents. He had looked forward for many years to that meeting with anticipations of great pleasure and profit. His enjoyment, however, had been a little damped by one circumstance—viz., that his late colleagues at the Infirmary, Mr. Smith and Mr. Teale, who also looked forward to the meeting with great pleasure, had not been spared to take part in it. Having worked with them at the Infirmary for a great number of years with the utmost cordiality, and having entertained the highest respect and esteem for both, he might be allowed just for one moment to pay a passing tribute to their memory. Mr. Smith held the office of surgeon to the Infirmary for forty-five years; and during the whole of that period he never flagged in the discharge of his duties, or in the interest he took in them. He was an excellent surgeon, a good and successful operator, fertile in resources; and his great experience and sound judgment rendered his opinion of great value in all difficult cases requiring consultation. With regard to Mr. Teale, he need not say much, as that gentleman was well known for his many and valuable contributions to surgical literature, and for the well-earned and deserved reputation he enjoyed. One other event served somewhat to damp the enjoyment of the meeting, and that was the painful circumstances which had rendered the absence of their President necessary. They all sympathised deeply with Dr. Chadwick and, although the business of the meeting must go on as usual to the end, the President's absence would be a great drawback to the pleasure the members would otherwise have felt.

On some of the Advantages of Tapping in the Treatment of Ovarian Tumours. By GEORGE SOUTHAM, Esq., Manchester.—The author remarked that ovariectomy was now considered a legitimate operation; but, as the mortality was still very high, it ought not to be resorted to so long as the disease for which it was undertaken could be kept in check by other means, provided they did not impair the patient's general health and interfere with the success of ovariectomy. This, he believed, could be frequently effected by tapping. He gave the particulars of three cases, showing that it was sometimes followed by such favourable results, that it might be regarded almost in the light of a curative agent. One patient was tapped in 1843, and again in 1846. On each occasion, upwards of twenty quarts of fluid were removed. After the second operation, there was no return of the disease for nineteen years. Another was tapped in the same year, six quarts of fluid being removed; she has remained in perfect health up to the present time. A third was tapped in 1865, when upwards of twenty quarts of fluid were extracted; and she also continues free from any return of the swelling. The cases were all unilocular cysts; and, as a fair proportion of ovarian tumours were of this character, he considered that, by resorting to tapping, the risk of ovariectomy might occasionally be avoided. Should tapping not prove successful, he considered that it generally placed the patient in a more favourable condition for ovariectomy. He referred to seven cases where he had performed ovariectomy subsequently to tapping, only one of which was fatal. He considered that patients submitted to ovariectomy in any early stage of the disease did not recover so favourably as those where the affection had been of longer duration; and, as tapping enabled the surgeon to delay the extirpation, he advised that it should be first resorted to, except under especial circumstances. He had found that ovariectomy in recent cases was frequently fatal from peritonitis. This, he considered, arose from the extreme sensitiveness of the peritoneum, which was lessened by the continual friction of the walls of the tumour against that membrane. He did not recommend a repetition of tapplings, having found the second and third operations to be not unfrequently followed by suppuration of the cyst. He concluded by comparing tapping, as performed in former days, when it was attended with considerable danger, with the plan now adopted, which had rendered it comparatively free from risk.

Mr. S. HEY (Leeds) stated that, in his own practice at the Leeds Infirmary, tapping had frequently been resorted to; and he agreed with Mr. Southam in thinking that, as the result of tapping, a state of health was obtained which saved the patient from undergoing an operation. On three occasions, he had operated for ovariectomy—twice with success. In the first instance, after tapping had been performed once, a hard solid tumour was removed with perfect success, the patient being cured in a month. In the second case, the cyst was tapped six times, and was also tapped just before the operation, so as to diminish the size of the tumour. The point which he wished to impress upon members was, that in both cases tapping had taken place previously to the operation being performed.

Mr. HENRY LEE (London) hoped that Mr. Southam did not take credit for originating the tapping with the patient in a recumbent position, as the plan had been tried for many years. [Mr. SOUTHAM: Oh no; I merely said that was the position now generally adopted.] Mr. Lee said the operation was of so recent a date, that full details as to its success could hardly yet be obtained. He suspected that the best plan would be for the surgeon to tap the patient one week, and operate the next, when the tumour was very small. He had done that once himself; and, although the case, from other reasons, did not turn out successful, he should certainly do it again.

Mr. BLYTHMAN (Rotherham) said that in 1828 he was requested to see a patient about two miles and a half from where he resided. She had an ovarian tumour of considerable size, from which, on tapping, he extracted twelve pints of fluid. She never underwent any other operation; and, although the tumour retained the size to which it was reduced by the tapping, it never increased in size; and the woman lived thirty years afterwards. He was sorry to say that he was denied an inspection of the body after death. The second case occurred in the year 1838. The patient had an immense cyst, from which he extracted fifty-three imperial pints, in addition to what was spilled by his assistant. At that time, a surgeon had written to the *Medical Times and Gazette*, advising strapping with adhesive plaster. Immediately after the operation, he adopted the plan; and the result was, that for thirty years the patient never complained again. At the end of that time, she was tapped again, and, being worn out, died.

Mr. DE MÉRIC (London) said there were four points to which he wished to refer. In the first place, he must congratulate Mr. Southam upon the success of his first case. The fact that the patient lived so long after the first tapping showed that surgeons must never despair, or be too quick in deciding upon operations that might be avoided. His

second point had respect to the injection of iodine, which, he believed, had never been fairly tried in this country, out of London, although in Paris it had succeeded. In the third place, Mr. Southam had very properly and very judiciously hinted at the advisability of tapping, under certain circumstances, with the view of enabling the surgeon to judge what really was before him. He had a case in point. At the German Hospital in London, he tapped twice a woman who had a very largely developed abdomen. At the second tapping, he found that she was suffering from a cancerous tumour; and, as the members might suppose, he left her alone. The preliminary step of tapping he looked upon as a most important one; and the Association, he considered, was much indebted to those who brought forward papers on the subject. His fourth point was this: the last speaker had alluded to the plan of pressure by strapping, which was introduced many years ago in London by Mr. Baker Brown. It should not be forgotten that surgeons were now adopting gentler means of dealing with these tumours, and pressure was one of them.

Mr. JESSOP (Leeds) wished to correct a mistake into which Mr. De Méric appeared to have fallen in stating that, unless in London, iodine injection had not been fairly tried in this country. So far as Leeds was concerned, it had been fairly tried twelve or fifteen years ago. It was given up, however, as almost wholly unsuccessful.

Mr. S. HEY said that the late Mr. Teale had no less than three successful cases with the iodine injection. The patients nearly died, however, during the process.

Mr. TERRY (Bradford) asked whether there was anything in the fluid on which a surgeon could depend, with the view of proving whether ovarian disease existed. He himself had two cases where patients had been tapped—one twice, one three times. On the last named case a consultation was held, and it was decided that ovarian disease existed; but, when the operator made the incision, he found no cysts at all.

Mr. FOLKER (Hanley) was of opinion that tapping, as recommended by Mr. Southam, was most important for the purposes of diagnosis.

Mr. SOUTHAM felt gratified with the general opinion expressed as to the propriety of the course he had recommended. With regard to the mode of tapping, he did not claim any originality in that. Like a great many other operations, that in connexion with ovariectomy had been very much changed and improved of late years. He could not say where he first saw tapping performed in a recumbent position; but he did not think he was the first to do it. All he wished in his paper to do was to point out a few remarkable facts in connexion with this operation—one of the simplest operations in surgery.

On the Beneficial Results of Undesigned and Accidental Hæmorrhage in Certain Cases. By SAMUEL HEY, Esq., Leeds.—Every physician was well acquainted with what were called critical hæmorrhages; something similar occurred to the surgeon, which had probably been little noticed. 1. In severe injuries, excessive hæmorrhage was often followed by speedy recovery; the destructive results of inflammation being prevented, and sufficient power left for the adhesive process. In primary amputations, for instance, after severe previous hæmorrhage, which reduced the case to amputation for chronic disease, the patients often recovered quickly. The same was observed in cases of cut-throat. 2. In other cases, accidental bleeding was beneficial, although the patients were apparently unable to bear the slightest loss of blood. He related a case where paracentesis was performed three times at the interval of six weeks; in the last operation a vein was wounded, and the patient appeared for several hours to be dying. The dropsy, however, disappeared; and the patient was now well, twenty years afterwards, at the age of 75. 3. Sloughing and phagedenic ulcers of the most serious kind were often cured by bleeding from an opened vessel. These considerations had both a practical and a physiological bearing.

Dr. LUNN (Hull) wished to bear testimony to the truth of the remarks which Mr. Hey had made. He had himself, as an operative surgeon, observed in some hopeless case, especially a case of amputation, how admirable were the results flowing from an accidental hæmorrhage. In one case, this had particularly struck him. An out-patient in the Hull Infirmary—a strictly strumous subject—had a bad attack of lupus. On one occasion, he was struck violently with a cricket ball, so as to produce hæmorrhage from the nose. He began to mend from that time. The bleeding from the nose seemed to relieve him, and he recovered at once.

Mr. GRIFFITH (Wrexham) pointed out the great advantages to be derived from such a meeting. In their respective localities, the impressions of country surgeons were few, and could not readily become the rule; but here they had the authority of a gentleman like Mr. Hey and the statements of other surgeons with regard to a fact which would now become more noticeable, and would be better considered. It was most gratifying to hear that systematic observations had been made on such cases by those who had better opportunities for doing this than he had.

Mr. HENRY LEE (London) wished to know whether it had been observed that most benefit resulted from general bleeding or from local bleeding. In his practice at the old Lock Hospital, he had certainly seen great good result from accidental or unintentional hæmorrhage, where the bleeding was local. What the explanation might be, it was of course difficult to determine; but he thought that surgeons ought to see what advantages might be derived from it.

Mr. MACNAMARA (Dublin) wished to draw the attention of the Section to a most remarkable case which he had under his care. A very beautiful young lady was troubled with some peculiar affection which he never rightly understood. She was almost cataleptic. She would be playing a piece of music; and yet, struggle as she would, she would drop off asleep. She might be going upstairs, and would go so soundly to sleep, that a gun fired close to her ears would not have aroused her. All sorts of things were tried, without doing her a particle of good. An accidental hæmorrhage occurred by which she bled very freely, and shortly after that she recovered, and was now quite well.

Mr. SOUTHAM (Manchester) said that, like Mr. Hey, he had occasionally seen cases benefited by accidental hæmorrhage. His own idea was that, whilst they frequently saw an individual relieved by this local hæmorrhage, very often the loss of blood was fatal to a patient. He spoke more especially of cases where a person had sustained serious injury to the leg, and where a great shock to the constitution had followed. He thought that in these cases an accidental hæmorrhage would be almost sure to be followed by fatal results. In cases where the injury was not attended by any great mental shock, a little less blood did no harm, frequently did good; whilst in other cases, attended by a considerable shock to the system, such as operation for lithotomy, if there were excessive hæmorrhage, the result might be very serious. His point, therefore, was this. Where there was no great shock, a local hæmorrhage might do no harm, but, in operations attended with great shock, the less blood a patient lost the better.

Mr. HUSBAND (York) expressed the opinion, along with Mr. Southam, that a weak patient, suffering from a strong mental shock, should be protected as much as possible from the loss of blood.

Mr. S. HEY briefly replied, remarking that he should not like to be understood as sanctioning bleeding. In a great number of cases he should be as careful in that respect as he believed any of his brethren.

SECTION C.—MIDWIFERY. *President, A. FARRE, M.D., F.R.S.* *Wednesday, July 28th, 1869.*

Opening Remarks by the President.—The PRESIDENT, commencing his duties, expressed his sense of the honour conferred upon him in nominating him to the chair. He regretted that the importance of the papers brought before the Section was greater than their number. He very much wished that the number of the papers had been much larger. Since he was appointed President of the Section, he had endeavoured to increase the number of them by applying to several of his friends. He regretted to say that they had all offered the same excuse—not want of ability, but want of opportunity and time. This excuse applied to all branches of the profession, but with more force, he thought, to midwifery than to any other. He thought, however, there was another reason. A consideration of the manner in which the papers originated would show generally that they began somewhat in the way of accident. A man was led by his duties to confine his attention to a particular subject, and the results of his observations he shaped out into a paper. It seemed to him that it would be a better plan if the members in each section were to agree upon those branches of knowledge which stood most in need of investigation; and if some working members would take upon themselves this task, there would be a larger number of important subjects investigated.

The Treatment of Chronic Uterine Catarrh. By W. S. PLAYFAIR, M.D., London.—The author commenced his paper by a review of the symptomatology and pathology of the affection variously described by some such name as “chronic uterine catarrh”, “uterine leucorrhœa”, and “chronic endometritis”. He quoted from Scanzoni and other writers to prove the extreme intractability of the complaint. Passing to the treatment, he referred to the unfounded dread entertained in this country to any such local applications directly to the seat of the disease as would undoubtedly be employed in similar affections of the mucous membranes in other parts of the body. He contrasted this with the treatment employed by many of the most distinguished gynecologists on the Continent and in America, quoting their opinions in favour of systematic intrauterine applications. He next discussed the various modes by which these might be applied. Describing the treatment by intrauterine injections, he referred to their dangers and drawbacks; and stated his belief that all the good they were capable of effecting might

be accomplished by other and safer means. He next described the treatment he himself employed, by swabbing out the interior of the uterine cavity with cotton-wool saturated in a solution of carbolic acid, the wool being thinly wrapped round a flexible probe of metal or whalebone. Dr. Playfair concluded by adverting to the success which had followed this treatment, averring that he had not yet met with a case of the disease which had not either been entirely cured, or at least greatly ameliorated; and that he had never seen any bad consequences follow his practice.

Dr. BEATTY (Dublin) said that it was a remarkable fact that the opening paper at the meeting in Dublin should have been on the same subject as that of Dr. Playfair. It was a proof of the importance of the subject. He (Dr. Beatty) took occasion at Dublin to say that, although Dr. Churchill then produced a very valuable paper on the subject, they should not forget that it had been ably and satisfactorily handled by Dr. Henry Bennet in the very first edition of his very valuable work. At the same time they felt greatly indebted to Dr. Playfair and to every man who brought a paper forward on the subject, because it was a matter which could not be too much talked about. He might mention a case in which Dr. Kidd removed a polypus by means of nitric acid, and no bad symptom showed itself. These cases showed that they need not be afraid of handling the uterus even roughly.

Dr. KIDD (Dublin) said the author of this paper had not mentioned one mode of treating these cases brought before the profession by Dr. Braxton Hicks, and very frequently used by himself. That was the introduction of points of sulphate of zinc, a method which was brought by Dr. Hicks before the Obstetrical Society in London. These points were very easily introduced into the cervix, and he had found them very beneficial in cases of uterine catarrh. With regard to uterine injection, he had seen so much pain and uterine colic produced by vaginal injection when the injection entered the uterus, that he had never ventured to use it. Dr. Beatty had mentioned the use of strong nitric acid. He (Dr. Kidd) had frequently used it, and had never seen the least injurious result produced by it. When it was used the pulse never rose, and there was neither pain nor tenderness produced by it. He believed that in many cases the application of nitric acid, after dilating the uterus, was very beneficial in obstinate cases of uterine catarrh. He had also used sulphate of zinc in many cases with advantage.

Dr. HENRY BENNET (London) thoroughly agreed with all the pathological facts which Dr. Playfair had brought before the meeting; but these facts had been exemplified in his own practice for very many years, and had been detailed in the early edition of his work. There were some points in connection with this interesting question which had established themselves as positive facts, but which, perhaps, were not so received by the profession at large. He should like to hear what Sir James Simpson had to say on this question. His own investigations in reference to this subject had led him, he might say, to a discovery—for he was not aware it was pointed out in any medical book—that there was a sphincter of the os uteri, which during life had the power of opening and shutting under provocation, and that this sphincter of the os uteri was assimilated to that of the bladder and stomach, and had a considerable part to play in uterine catarrh. He had formerly used injection for this uterine catarrh, with no bad results; but when it was not possible to pass into the cavity of the uterine canal, however healthy, without resistance, he began to question whether the injection reached the uterus, and whether the bloody discharges which followed the injection came from the uterus. He accordingly used a small instrument to dilate the cavity of the os uteri, and the moment he did that he had a serious accident, although he only injected nine or ten drops. He used nitrate of silver in such cases long before the French gentleman mentioned by Dr. Playfair, and long before the application of the instrument for dilating the male urethra. When he used it, he had no accident whatever. Subsequently he had used arsenuret of mercury without accident; but the moment he carried it through the uterine cavity, he had accidents. His own impression was that, although uterine injections, limited to nine or ten drops, carried into the cavity of the uterus, might not produce these effects, there was a risk in their use. From experiments which he made, he became gradually convinced that those cases of uterine catarrh were confined to the cervical canal, and did not reach the cavity of the uterus. He believed that all that had been written upon injection of the cavity of the uterus by French and German writers had been written under a mistake, and that the fluid they had used had roused the vitality of the os uteri to reject it. In 1839, when at the St. Louis Hospital, Paris, he made an injection with sulphate of zinc into the cavity of the uterus in the case of a female, who died in consequence. He thought that the introduction of carbolic acid into the practice of surgery was one of the greatest triumphs of the last few years. It added to the means of treating the mucous membrane. Dentists throughout the kingdom were now using it, with the best results, in

the case of the teeth. Of its beneficial effects in this respect he himself was a living witness.

Dr. ROUTH (London) had pushed a piece of caustic within the cavity of the uterus, and quite within the sphincter of which Dr. Bennet had spoken, and he had never yet had a bad accident from so doing. With regard to such a use of caustic, he had no hesitation in saying it was perfectly safe. He thought, however, in speaking of these sort of cases, a distinction ought to be made between cases in which it should be employed and those in which it should not. As to the question of injection, brought before the Obstetrical Society some years ago, the invention was that of his colleague Dr. Savage, but he himself carried out most of the experiments; and he remembered that, when the paper was read before the Obstetrical Society, those present listened to it with astonishment. He thought that the great merit of the discovery was due to his colleague Dr. Savage, for he brought out this point that they could inject with any agent if they previously dilated. It had been the practice at the Samaritan Hospital in a great many cases, where there was chronic catarrh, to pass in the sponge-tent. The results had been most satisfactory. Many of those cases of chronic catarrh which had gone the round of hospitals and been treated by different practitioners without being cured, had by undergoing this treatment been cured. He was the more happy at being able, in some measure, to deny the ground on which he had heard Sir James Simpson condemn the practice; namely, that on one occasion a patient, brought into the operating room and injected, fell down dead immediately afterwards. That that patient was injected and did die was true; but the death was not owing to the injection, but to the mistake in making the patient walk upstairs, the woman at the time being so weak that she died from mere fainting. At the time of taking her to the hospital she was perfectly blanched; and, instead of being carried upstairs, she had to walk up, and died; but her death was not due to the injection. In making the injection, he had a silver point which he passed some length up the uterus; then he injected, and the overflow came down immediately afterwards. Immediately after dilating, he pushed up the point. He thought that the point on which Dr. Playfair had not sufficiently dwelt was this. Instead of looking abroad in connection with this subject, he should have looked a little nearer home, and then he would have felt it proper to give more credit to Englishmen than he had done. His own experience showed him that, if they previously dilated the uterus, no bad effects followed. The effect of passing the sponge-tent within the uterus, while in itself safe, was to bring about the absorption of previous deposits. The amount of injection used was from one to two ounces of tincture of iodine or perchloride of iron.

Dr. HENRY BENNET (London) thought these injections might be more properly described as a washing out the uterus.

Dr. PROTHEROE SMITH (London) mentioned a case of chronic catarrh which had been treated by various obstetricians with all the usual remedies, which failing, it was resolved to try carbolic acid, under which the catarrh entirely disappeared. His own impression when he first saw the case was, that the application of the acid would be injurious; but he was exceedingly pleased to find that it bore out Dr. Playfair's idea of the extreme advantage to be derived from the employment of carbolic acid. He had also found sulphuric acid of great value. With regard to the injection of fluids into the vagina and into the uterus, he could only add his testimony to that of others, that he had seen not only evil but fatal results follow the practice, and in consequence he gave up for some time the use of fluids in treating uterine disease, and the substitute he used had been already mentioned—a solid application such as nitrate of silver; and this he had used constantly without the slightest ill result following; but he had also used other remedies when treating disease of the uterus which would not yield to nitrate of silver. This he was induced to do, in the first instance, by accident. In applying various remedies in connection with ulceration of the uterus, a piece of caustic which he was using slipped, by accident, into the uterus. They might imagine his feelings, expecting every moment that some great mischief would ensue; but very soon it reappeared and passed away with the discharge. No bad symptoms followed; indeed, the patient recovered. Ten or twelve years ago he had an instrument made to enable him to reach the interior of the uterus. It was so constructed that by giving a turn one way the caustic was shut off, and by giving it one the other way the caustic was applied to the part. He had used it frequently with no evil results whatever. He had used latterly not only solid substances, but fluid also, in treating the interior of the uterus. There was a power in the Fallopian tubes, with which they were all familiar, of drawing up fluids into the upper cavity of the uterus. Therefore, when fluids were injected into the upper cavity of the uterus without previously taking the precaution of dilating the sphincter, it had occurred to him that the fluid might pass into the Fallopian tubes, and produce the fatal peritonitis which had been spoken of. He used an instrument by which he could inject any quantity of fluid he liked into the cavity of the uterus; but

before withdrawing the instrument he took care to withdraw every portion of the fluid, so that he just washed the surface without leaving anything behind. This practice he had found to be attended with very great advantage. He had used for this purpose a strong solution of perchloride of iron. He was satisfied that disease of the upper cavity of the uterus might be beneficially treated by both liquid and solid applications, if care were taken that no fluid was left after the application.

Dr. DESMOND (Liverpool) said the treatment of disease of the uterus was greatly facilitated by dilating the os and cervical canal. He believed a very material point to be attended to in throwing injections into the uterus, or lotions to wash it out, was to have the instrument by which they introduced it very much smaller than the passage itself, so as to allow the liquid to run out. He believed that attention to this point was a very material element in a successful application. If they threw a few drops of liquid into the uterus through an instrument which blocked up the cervical canal, they at once blocked up the cavity of the uterus, and therefore they brought on spasmodic pain. He could not say he quite agreed with Dr. Routh as to the value of the sponge-tent. He had given up the use of carbolic and other strong acids because he believed they had produced sterility in several patients. The concentrated solution of iodide of potassium was much better.

Sir JAMES SIMPSON observed that Dr. Routh had stated that he (Sir James) had at one time or somewhere declared against fluid injections into the uterus as dangerous. It might be so, but he did not exactly remember it. He might mention an anecdote of Dr. Priestley, which he heard from his grandnephew. Dr. Priestley once bought a book at a bookstall in Leeds on a controversial point of theology. He took it home, read it, and was very wroth at its contents. He wrote a flaming answer to it, when, just as he was closing it, he discovered that he had written the book himself. When a person had written so much as he himself had, it was not unlikely he might forget some things which he had written in his early professional life, when he had a great, far too great, fear about fluid injection. It arose from a case treated by a friend of his, the late Dr. Rigby. Dr. Rigby told him that on one occasion, when injecting a strong fluid into the cavity of the uterus, the patient perished, not from the injection, but from the tearing up of the lining membrane of the uterus and the passing of air into the veins. Dr. Beatty perhaps knew of the case which happened in Dublin, where death was caused by throwing air into the uterus. The gentleman in whose hands it had happened took the lady upstairs, and laid her on the bed; and, air having been blown into the cavity of the uterus, she died in a few minutes. It had passed into the veins of the uterus and thence into the general circulation. For his own part, he could not say what was called uterine catarrh was so very common as some of his friends around him seemed to suppose. He saw a great deal of uterine disease; and when he observed there were eruptions upon the mucous membrane, he very often found on examination that the patient had mucous eruption elsewhere. He must say that in such cases, besides local treatment, the patients were often greatly benefited by general treatment. To him injections appeared to have this disadvantage, that they required to be repeated constantly; and it was a disagreeable thing for patients to be constantly subjected to them. He himself had used nitrate of silver for many a long year, and also solid nitrate of silver pounded. He had used all the articles mentioned in the treatment of disease of the uterus; but he thought there was one far superior to any other, and that was dry sulphite of zinc. He knew that if they put it upon a surface slightly abraded or ulcerated, it would attack the surface and spare the true skin. He had tried various others. Gentlemen present had spoken about carbolic acid. He had published one or two cases where he had used it in 1859. He thought that as at one time they had the great sulphur cure, they were now going through the carbolic acid cure, and no doubt after it they would have some other cure; but they might rest assured it was not of such value as some gentlemen said. Since its introduction, in Glasgow Hospital, the mortality from compound fracture during the last year had been greater than in any previous year.

Dr. HENRY BENNET said that what he questioned was the published statements of the American and French writers as to cures of uterine catarrh by injection five or six times, whether the cavity of the uterus had ever been reached. As to the cavity of the uterus bearing the application of nitrate of silver, he learned that twenty-five years ago. There he thoroughly coincided with Sir James Simpson. It would be found that uterine catarrh confined to the cavity of the uterus was a very rare disease. What was often described as uterine catarrh, was merely disease of the cervical canal, and if that was treated it would soon disappear.

Dr. LLOYD ROBERTS (Manchester) said that in a large number of cases of chronic catarrh and chronic endometritis the os and cervix uteri were so patulous that a large catheter could be easily passed

into the uterus, thus doing away with the necessity of dilating the cervix with tents. The application of carbolic acid to cauterisation of the uterus produced no pain in the great mass of cases.

Dr. PLAYFAIR, in reply, trusted there was nothing that would cause him to overlook the very valuable observations of Dr. Bennet. They all owed very much to his important researches, and to his careful examination of the internal organs. He quite agreed with Dr. Bennet that in long-standing cases where there was a profuse discharge from the uterus, the whole of the cavity was in such a patulous condition that whatever instrument they passed into it passed in readily; but he must remind him that they were discussing morbid and not healthy conditions. With regard to Dr. Routh, he wished to say that he (Dr. Playfair) particularly insisted upon dilatation of the os uteri before injection. He believed that repeated applications were necessary. As to what Sir James Simpson had said about the application of carbolic acid, he might state that he was in the habit of using it in the proportion of about 80 per cent. of acid to 20 of water. He was perfectly convinced that in a morbid condition of the uterus it might be used without injury.

REPORT OF THE PARLIAMENTARY COMMITTEE.

THE following report was presented at the Annual Meeting held in Leeds, July 30th, 1869.

The Committee, in presenting their Sixth Annual Report, have to regret that, in consequence of protracted and exciting debates on the question of disestablishing and disendowing the Irish Church, little progress has been made during the present session with matters that more immediately affect the interests of the medical profession.

The new Branch of the Association, established for the counties of Cumberland and Westmorland, has, during the past year, appointed W. B. Page, Esq., F.R.C.S. Eng., of Carlisle, as its representative. Twelve branches, therefore, have had able representatives on your Committee; forty-four members were elected at the last annual meeting at Oxford, so that, with the officers and Council of the Metropolitan Counties Branch, your Committee now consists of seventy-five members. It is desirable that every phase and interest of medical practice in the United Kingdom should be represented on the Committee, but there are practical objections to so numerous a Committee; firstly, in the additional expense it entails on the very limited funds at the disposal of the Committee; secondly, in the additional labour it imposes on the Committee's honorary secretary. Your Committee, therefore, would suggest that in future the Parliamentary Committee should not comprise more than fifty members. In order to meet these difficulties during the past year, your Committee, at their first meeting, appointed a subcommittee of twenty-five members, and they made application to the Committee of Council for an additional grant of money towards their expenses, whereupon that Committee voted them five pounds in addition to the annual contribution of ten pounds.

The Pharmacy Act (1868) Amendment Bill.—Early in the present session, a Bill was introduced by Lord Robert Montagu "to exempt from the provisions of the Pharmacy Act (1868) all duly qualified medical practitioners and veterinary surgeons in Scotland." Your Committee had in the previous session, whilst the Pharmacy Act was before the House of Commons, pointed out to his Lordship, then Vice-President of the Council, that he was wrong in introducing an amendment into the Bill restricting the future right of dispensing medicines to legally qualified *apothecaries*. Your Committee told his Lordship that such a provision was an unjust and undesirable invasion of the vested rights of all medical practitioners who were not members of an Apothecaries' Society, and that it would tend to serious loss and inconvenience. His Lordship, however, thought well to persist in his amendment. The immediate consequence was that the Act had no sooner received the royal assent, than an outcry was raised in Scotland—where no such professional grade or title as that of apothecary is known—for its repeal, and his Lordship was compelled to introduce the present measure in order to repeal the obnoxious restriction so far as Scotland was concerned. It appeared to your Committee to be unwise and unjust to grant an immunity from the pains and penalties of the Pharmacy Act only to practitioners in Scotland, as prior to its enactment there were hundreds, if not thousands, in England, who had enjoyed the right of dispensing medicines. At the instance of your Committee, therefore, the Lord Advocate kindly undertook to move the omission of the words "in Scotland," with a view to extend to medical practitioners in Great Britain generally the protection which the Bill was designed to afford to practitioners in Scotland. The clause which he framed with the assistance of Dr. Brewer, M.P., and Dr. A.

P. Stewart, a valuable member of your Committee, was as follows. "Nothing contained in the first fifteen sections of the Pharmacy Act (1868) shall affect any person who has been registered as a legally qualified medical practitioner before the passing of this Act, and the said clauses shall not apply to any person who may hereafter be registered as a legally qualified practitioner, and who, in order to obtain his diploma for such registration, shall have passed an examination in pharmacy." This secures the right of dispensing medicine not only to present, but also to future registered medical practitioners, provided they have passed an examination in pharmacy.

An effort was made to get the more commonly used and the more powerful patent and proprietary medicines, such as chlorodyne, etc., placed in the Schedule of Poisons. Experience shows that these secret remedies are frequent agents in accidental, if not in criminal, poisonings, more especially as regards infantile life; but it was argued that before scheduling such articles as poisons in an Act of Parliament, their ingredients ought to be accurately known. Last year, during the passage of this Pharmacy Act through the Legislature, your Committee called the attention of the Government to the evils attending the sale of patent, quack, and other secret remedies; therefore it was not thought expedient again to press the matter on *their* notice, but the attention of Dr. Brewer and some other private members of the House of Commons was directed to it. Inasmuch as this Pharmacy Act (1868) Amendment Bill has passed the House of Commons and received a second reading in the Lords, there can be little doubt but that it will become law in a few days. It is a satisfaction to your Committee to have been instrumental in mitigating, however slightly, the injury the Pharmacy Act of last session was calculated to inflict on the profession.

Medical Officers' (Ireland) Superannuation Bill.—A Bill to provide "for superannuation allowances to medical officers of Poor-law unions and of dispensary districts of such unions in Ireland" was introduced by Dr. Brady, M.P., a member of your Committee, "giving power to guardians, with consent of the Poor-law Commissioners, to grant superannuations to any officer who shall at any time become incapable of discharging the duties of his office with efficiency by reason of infirmity of mind or body, or of old age, not exceeding two-thirds of the income derived by such officer from his said office." Your Committee, in 1865, enlisted Dr. Brady's services to amend a Bill introduced by Sir Robert Peel, Bart., the then chief Secretary for Ireland, "to provide for superannuation allowances to officers of unions in Ireland," by moving the omission of the words "whose whole time has been devoted to the service of the union." Inasmuch as he had now spontaneously introduced a measure to remove the injustice which he then, at the request of your Committee, did his best to prevent, your Committee determined to give him all the support they could in carrying this Bill through Parliament. The measure has passed the House of Commons and several of its stages in the House of Lords, and there can be little doubt but that it will receive the royal assent in the course of a few days. Just before the measure left the House of Commons, the following words, on the motion of Mr. Ayrton, were added to Clause 1: "And no contribution shall be made thereto out of any money voted by Parliament." Inasmuch as one-third of the medical officers' salaries is voted by the House of Commons, it appears only fair that one-third part of the superannuation allowance should come from the same source, more especially as the grant of every superannuation is subject to the veto of the Poor-law Commissioners.

Draft Medical Acts Amendment Bill.—Believing that the General Medical Council were pledged to have this measure, which was drawn up and approved by that Council so far back as May 1866, submitted to Parliament during the present session, your Committee gave an early and careful attention to its provisions. Its clauses related—to the qualification of members of Council; to regulations concerning the *Register*; to the registration of foreign and colonial qualification; to additions to the list of qualifications; and to the assumption of titles by unregistered persons. Your Committee took objection to one regulation concerning the *Register*; viz., the erasure of every practitioner's name on his ceasing to practise as unnecessary and objectionable; because such erasure will render the *Register* imperfect as a list of qualified practitioners.

Clause 11, relating to the Registration and of foreign and colonial qualifications, appeared to your Committee objectionable, as it would enable colonial and foreign practitioners, after twelve months' residence in the United Kingdom, to register German and American diplomas, of whose real value the Council could have no proper knowledge. It was the unanimous opinion of your Committee that the facilities for obtaining *ad eundem* degrees and diplomas in the British Universities and medical corporations were such that little inconvenience would be entailed on foreign practitioners by expunging this clause.

The Clauses 12, 13, and 14, relating to additions to the list of qualifications, seemed to be very objectionable; because they not only enabled

the Degree of Bachelor of Surgery to be inscribed in Schedule (A) as a qualification virtually to practise every branch of the profession, but gave power to the Privy Council on representation by the General Medical Council, without the consent of Parliament, to multiply indefinitely the number of qualifications to practise, which are already too numerous. The great defect in this Amendment Bill was the absence of provision for the direct representation of the profession on the General Medical Council. Your Committee, after full consideration of four plans and several suggestions for providing such *direct* representation, agreed to the following resolution:—"That the *seventeen* members of Council at present elected by the Universities and Corporations be reduced, by a further extension of the principle of grouping, to nine; and that eight seats thus provided, be filled by the votes of the registered medical practitioners of the United Kingdom." In asking for a larger proportion of the representation (one-third, instead of one-fourth) than your special representation Committee had done, your Committee emphatically disclaim any intention of either challenging the judgment, or thwarting the action of that Committee: but they felt that it would be alike unwise and impolitic to ask on behalf of the actually practising portion of the profession for an inadequate number of representatives.

Your Committee's Honorary Secretary respectfully submitted the foregoing amendments to the General Medical Council. They were referred, together with suggestions on the same subject from other parties, to a Committee presided over by Dr. Paget. The Registrar of the Council has communicated several copies of that Report to your Committee, stating that the Report itself was not adopted, but that certain resolutions founded upon it were agreed to by the Council, July 12, 1869. The Report of the Committee recites sundry reasons and arguments, inadequate and inconclusive as they appear to your Committee, against giving direct representation to the profession.

The resolutions of the Medical Council were as follows:

1. "That Clause XI in the proposed Medical Amendment Act shall stand as follows: 'It shall be lawful for the General Council, by Special Orders, to dispense with such provisions of the Medical Acts, or with such parts of any Regulations made by the authority of the said Acts, as to them shall seem fit, in favour of persons applying to have their names entered on the Medical Register in virtue of Foreign or Colonial Diplomas or Degrees'."
2. "That in the opinion of this Council it is desirable that power be given to the Medical Council to refuse Registration to any one who has not been sufficiently examined both in Medicine and Surgery."
3. "That having carefully considered the objects of the Medical Act of 1858, and the constitution of the Council appointed under that Act to carry out its objects, the Council are of opinion, that for the purposes of the existing Act, the present Council is essentially well constituted."
4. "That the Council are of opinion, that if the Legislature should think proper to invest the Council with extended powers and fresh duties, by which the profession at large would be brought more under the direct influence of the Council, then in that case the profession at large should have more direct influence in the appointment of Members of Council."
5. "That in any future Act provision should be made for instituting prosecutions by a Public Prosecutor, or other authorised functionary, instead of leaving the enforcement of the law to the voluntary action of individuals of the public."

Your Committee approve of the 2nd and 5th resolutions.

As to the 3rd and 4th resolutions, your Committee would simply remark that, in fact the General Medical Council does assume to represent the general interests of the profession before the Government and the Legislature, as was notably exemplified last Session in the case of the Colonial Medical Practitioners' and the Pharmacy Bills. If in future the Council were strictly to confine itself to the letter of its duties as laid down by the Medical Act (1858) and act only as amateur Inspectors of Examinations and as Registrars of Medical Qualifications, however numerous, your Committee are disposed to believe that the results would not be worth the enormous cost of the machinery to a hard-worked and ill-paid profession.

In the very important function of really controlling and directing medical education and examinations, your Committee entertain serious doubts whether physicians out of practice and professors of abstract sciences are better advisers than actual practitioners for directing the acquirement of an art so thoroughly and essentially practical as the "Art of Healing."

Your Committee regret that another Session has been allowed to pass without any Medical Acts Amendment Bill having been submitted to Parliament, and would advise the Association to take steps to get such a measure of reform as it desires introduced during the next Session.

The Metropolitan Poor Act (1867) Amendment Bill was carefully considered, when it was resolved, on the motion of Dr. Joseph Rogers, President of the Poor-law Medical Officers' Association, to endeavour to get Clause 6 omitted, because it makes the appointment of the Dispensary Committee under Mr. Hardy's Act optional instead of compulsory; little or no progress has been made with the Bill up to the present time, so that it is very doubtful whether it will become law during the present Session.

The Hospitals, etc., Rating Exemption Bill.—This Bill, which exempts every public hospital, infirmary, dispensary, or asylum that has twenty subscribers from liability to rating, excited some difference of opinion in your Committee as to the merits of its principle, although they were agreed that its details needed considerable amendment. Accordingly, the Committee unanimously agreed to the following resolution—"That inasmuch as the Bill appears to be objectionable, the Committee do decline to afford the assistance they have been asked for towards carrying it through Parliament." The Bill has not yet passed its Second Reading, so that it will probably be withdrawn for the present Session.

The County Coroners' Bill was a much needed measure, designed to amend the law relating to the office and appointment of coroners and for granting retiring allowances. Your Committee took active steps to oppose the main provision of the measure, which was to place the appointment in the hands of the Lord Chancellor or of the Home Secretary. It appeared to your Committee that whichever of these alterations were adopted by Parliament, few, if any, medical men would in future be chosen for this ancient and honourable office.

Your Committee proposed to vest the election either in the freeholders who are on the parliamentary register, the county paying the expenses of the election, or in the justices of the peace acting in and for the county. The first of these alterations, excepting that portion imposing the expense of election on the county, was adopted by the Committee of the House of Commons, and subsequently the electorate was enlarged so as to include all voters, leaseholders, and copyholders, as well as freeholders, that are on the parliamentary register. Your Committee approved the provision for superannuation allowances. Unfortunately for the profession this Bill was withdrawn yesterday, as was also

The Adulteration of Food or Drink Act (1860) Amendment Bill.—This measure differed from the original Act in making the appointment of a food analyst by the local authority *compulsory* instead of optional, and in extending its provisions to drugs. Inasmuch as the analysts under the Bill would be required "to give a certificate of the result of his analysis, specifying not only whether the article is adulterated, but also, if it be an article of food or drink, if it is so adulterated as to be injurious to the health of persons eating or drinking the same," it seemed desirable, if not absolutely necessary, that the analyst should be a duly qualified medical practitioner. This was not provided for in the Bill; therefore Dr. Donald Dalrymple, M.P., a member of your Committee, gave notice to insert in Clause 3 after the words "possessing competent medical, chemical, and microscopical knowledge," the words "and possessing the diploma of some Corporation or Society authorised to grant medical or pharmaceutical degrees in Great Britain and Ireland."

Your Committee have also examined, in the interests of the profession, Bills for amending the Contagious Diseases Act, 1866, the Vaccination Act, 1867, and other bills. Acting on a suggestion from Dr. Bryan of Northampton, your Committee have directed their Honorary Secretary to call the attention of the Lords of Her Majesty's Council to the fact that, while the penalties of the Vaccination Act of 1867 are being enforced against public vaccinators and other medical men, many Boards of Guardians decline entering into fresh contracts, and thereby avoid the new and rather increased scale of fees that the Act assigns to the public vaccinators, especially in workhouses and in country districts.

It is a matter of congratulation that the interests of the profession are better appreciated and more strongly represented in the present than in the last two Parliaments; and your Committee cannot but acknowledge with gratitude the cordial and liberal support they have received from many members of both Houses, especially from the Lord Advocate and the medical members Dr. Brady, Dr. Brewer, Dr. D. Dalrymple, Mr. Clement, Sir John Gray, and Dr. Lush.

In conclusion, the Committee desire to record their appreciation of the great assistance which they have received from their Honorary Secretary during the past Session, and they desire to tender him their cordial thanks for the great sacrifices of time and labour which he has made and the ability and disinterested zeal which he has shown in attending to the business of the Committee.

(Signed)

July 23, 1869.

WALLER LEWIS, *Chairman.*
SEPTIMUS GIBBON, *Hon. Sec.*

SPECIAL CORRESPONDENCE.

BIRMINGHAM.

[FROM OUR OWN CORRESPONDENT.]

As usual in the summer, medical affairs are rather quiet. The lull is an advantage, as it gives time to prepare for the hard college and hospital work of the winter session, and for the meetings of the medical societies.

The year just concluded, which is the first year after the amalgamation of the two medical schools, has been most successful. The lectures have been delivered with great punctuality and regularity, and have been attended with diligence. Thirty-one students have passed their anatomical examination at the College of Surgeons, while only three have been rejected.

At the first M.B. examination at the London University, Mr. Ernest A. Elkington has carried off the first honours in anatomy, viz., the scholarship and exhibition—a distinction which is the more gratifying as his father is a much esteemed practitioner in this town, and has been himself a teacher and writer on anatomy. These successes are in themselves a testimony to the energy and ability of our medical tutor, Dr. James Hinds. Report says that this gentleman is about to resign his office in order to commence practice. It will be very difficult to replace him at the Queen's College by a gentleman equally able and enthusiastic in his work, and one who will as thoroughly gain the respect and esteem of both professors and students.

Mr. J. F. West has been recently elected co-Professor of Anatomy with Professor Bracey. His position as senior surgeon at the Queen's Hospital, as well as his fitness for the office, render his election very suitable.

The work of the College has progressed most harmoniously, and I have heard of no instance of annoyance of any kind arising from the amalgamation and the consequent doubling of the occupants of the various chairs.

The want of any representation *as such*, of the professors on the Council of the College, renders the action of the latter very difficult, and not always very satisfactory. The presence on the Council of representatives elected by the professors, and the recognition of the professors' meeting would obviate this, and would much increase the confidence felt in the school.

The last mistake of the Council has been in the appointment of a gentleman to deliver the introductory lecture in October. The expressed feeling of the professors was that such honour should be offered to Dr. Russell, the senior professor of medicine, and in fact the senior active lecturer in the school. It is reported that another physician, not a professor, and junior in every way to Dr. Russell, has been appointed by the Council. Surely, those who do the hard work should have their honours. It is at the least discourteous on the part of the Council to pass over professors able and willing for this duty, for any one, still more for one who has no other special claim than that he is a member of the Council—the electing body.

Active preparations for the clinical work of the coming session are being made at the General and Queen's Hospitals. The General Hospital has rearranged its library, and added to it a valuable supply of books specially adapted for students' use.

The staff of the Queen's Hospital have a little raised the fee for its medical and surgical practice, which hitherto has been rather more than half that at the General Hospital. A nearer approximation of the two in amount is surely justified by the position which the Queen's Hospital has attained.

The value of medical education has been too cheaply estimated at most provincial schools. The result here has been that men have been tempted into a profession for which they were socially unfit, and at which they have been unable to succeed without carrying on a competition damaging not only to their medical brethren, but still more to the credit and dignity of our profession. It seems a pity that a common fee cannot be arranged between the two hospitals, admitting students to attendance at either hospital; this would be a great advantage to the students, and would remove all other rivalry between the two than the honourable one as to who could teach best.

The Queen's Hospital Working Men's Fund is at last reaching proportions which will render it an useful addition to the funds of the charity. Its promoters deserve every credit for their patience and perseverance, and for sticking hard to their project when faced by difficulty and disappointment. At the Queen's Hospital, Dr. Fleming has recently had and reported two interesting cases of moveable kidneys.

Mr. Goodall, at the General Hospital, has, within the last few weeks, twice successfully performed ovariectomy—a proof, if such were wanting, that such cases can do well even in large old hospitals. Dr. Foster has also been making some interesting observations at the General Hospital with reference to the proportionate elimination of urea in cases of diabetes, when treated with or without drugs. His remarks tend to show that the increase in weight of patients under certain kinds of treatment is due rather to the diminution of the urea excreted than of the sugar.

The Nursing Institution has quite gained the public confidence, as was to be expected from the energy shown by the Ladies' Committee in its management. It is now less in want of funds than of probationers. It will be much to be regretted if, after all the talk of providing suitable employment for women, the women are not forthcoming for the work.

The annual meeting of our Branch, and also the dinner following, had the largest attendance for some years. The President, Mr. Vose Solomon, gave an excellent address, in which full justice was done to the workers in the Branch during the past session.

ASSOCIATION INTELLIGENCE.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held in Birmingham, August 24th, 1869.

PRESENT:—W. D. Husband, Esq. (in the Chair); Mr. Bartlett; Dr. Chadwick; Dr. Charlton, Mr. Clayton; Dr. Falconer; Mr. Fowler; Dr. Radclyffe Hall; Dr. Heslop; Mr. Hodgson; Dr. Latham; Mr. Nunneley; Dr. Sibson, F.R.S.; Dr. Simpson; Mr. Southam; Mr. H. Smith; Dr. Stewart; Dr. Vose; Dr. E. Waters; Dr. A. T. H. Waters; Dr. Wilkinson; Mr. Wheelhouse; Mr. Wood; and Mr. Williams (General Secretary).

The following resolutions were agreed to.

1. That at the next annual meeting a Psychological Section be established.
2. That Jonathan Hutchinson, Esq., be elected Editor of the BRITISH MEDICAL JOURNAL.
3. That the annual meeting be held in the second week in August, commencing on Tuesday, August 9th, 1870.
4. That there shall be two Addresses, viz., in Medicine and Surgery.
5. That Dr. Heath of Newcastle be requested to deliver the Address in Surgery.
6. That Dr. Sibson, F.R.S., be requested to deliver the Address in Medicine.
7. That the subject for competition for the Hastings Medal for 1871 be "On the Action of Bromide of Potassium."
8. That a sum not exceeding ten pounds be granted towards the expenses of the State Medicine Committee.
9. That Professor Hughes Bennett, M.D., and the Professor of Chemistry in the University of Edinburgh, with their assistants, be appointed a Committee to investigate the effects of antidotes to the effects of strychnine and opium; and that the sum of fifty pounds be granted to the assistants.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary.*

Birmingham, August 25th, 1869.

CORRESPONDENCE.

THE VISIT TO LEEDS.

SIR,—You will have much of your space occupied for some time with accounts of the scientific events of this most successful meeting; but I trust you will find room for a narrative of events from an entirely different point of view.

On our arrival on Tuesday, after obtaining our tickets, and finding out our places of abode, beginning the pleasure of finding old friends and making new ones, we dispersed for dinner, previously to the general meeting. As one who has been a recipient of Leeds hospitality in a private house, I can say nothing personally about the catering at the various large hotels of the place. I heard nothing but complete approval expressed.

We more fortunate individuals were entertained as many of us were never entertained before, and met daily parties of distinguished men whose pleasant converse at the table more than equalled their reputation in the world of science. The liveliness of anecdote and the active interchange of thought told well for the bodily and mental state of

our members; and as to the former, if there were any lack of appetite for the good things of the table, which I must confess I nowhere witnessed, it would have been overcome by the delicacies so profusely laid before us.

At the evening meeting, after a few remarks from Dr. Acland, Dr. Chadwick read his Presidential Address, which was listened to with attention and pleasure, but which was interrupted in the middle by a telegram calling him away to a member of his family who was dangerously ill, and whose death shortly afterwards gave a tinge of gloom to many of the subsequent proceedings of the meeting. After the reading of the Address and of the Report of the Council, there was a jolly row between the Conservatives and Radicals on some matters connected with the politics and constitution of the Council, which ended in the complete discomfiture of the Radicals: like Britons, however, they hardly seemed to know that they were beaten, and expressed a plucky determination to renew the combat next year.

On Wednesday morning, we had a very good breakfast at the Town Hall, in the magnificently decorated Victoria Hall, of almost unequalled beauty. This custom of a public breakfast early in the meeting is a great advantage, as it gives an opportunity to see and hear who are come and coming, and to make plans and appointments.

Sir W. Jenner's excellent Address, some medical politics, and the sections, occupied the day. The Mayor gave a grand dinner to a large party, who duly appreciated his hospitality and good fare; and in the evening we went to the President's *soirée*, at the Town Hall, which was well attended, but, thanks to the size of the building, not inconveniently crowded. Many ladies were present, who encouraged our scientific ardour by looking into the microscopes, and at some other interesting objects on view there. Some performances on the grand organ, by Dr. Spark, the organist, were among the most enjoyable parts of the evening.

We began the next day, Thursday, by attending, to the number of nearly two hundred, a breakfast at the Great Northern Hotel, at the invitation of Mr. Baines, the member for Leeds, who, with Mr. Bowly, and some other representatives of the Temperance League, addressed the assembly on the subject of teetotalism. The remarks were well received, and were replied to by some present on various grounds; and the meeting will, doubtless, be of some service in the good cause of temperance. One gentleman present alluded to the difficulty of getting fluids adapted for drinking; and for London water-drinkers, Sir W. Jenner's address certainly was not encouraging; and indeed the arguments of our host were not enforced by the quality of the coffee provided by the hotel, and recommended as a substitute for alcohol, for it was as bad as could be.

The Address in Midwifery was listened to with pleasure, and was made as attractive as the subject will admit of by the genial utterances of its accomplished author. The public dinner in the evening went off as such things usually do, Dr. Heaton, one of the Leeds physicians, being obliged to take the chair, in the absence of Dr. Chadwick. The chairman performed his duties well. Dr. Woodforde, the Vicar of Leeds, made an excellent speech, audible throughout the Hall; and the Rev. Dr. Haughton made a lively Hibernian address, which, from the reception it met with, was clearly the speech of the evening.

On Friday, after Mr. Nunneley's practical Address in Surgery, and after attending, as in duty bound, some of the sections, about a hundred and fifty of us went, by the invitation of the medical men, to Harrogate. There we were royally entertained, the inhabitants turning out to receive us at the station, and watching us as we drove along in a grand procession of private carriages, as if we were Wombwell's Menagerie just arrived at the place. We went, first, to the Queen's Hotel, where we were introduced to some of the local medical magnates, and refreshed with a glass of claret-cup, and thence we drove to the top of the hill, to see the view, and then to the springs, to see and taste the waters, which were certainly nasty enough to be as effective as any physic. Having swallowed, as in duty bound, a small dose, the odour was distinctly perceptible in the secretions afterwards. We then returned to the hotel, where we had a "*déjeuner à la fourchette*," of the most comfortable and tasteful kind, shewing that the place can provide good things as freely as those of an opposite flavour. There were some good speeches; and we returned early in the afternoon, delighted with our trip. Harrogate must, no doubt, independently of its mineral waters, be a fine healthy place to go to for change of air and scene, to rest from the toils and anxieties of daily life.

In the evening, we went to the *soirée* at the Philosophical Hall, given by the President of the Society, Dr. Heaton. The fine museum was thrown open, and well lighted and illustrated with many very interesting and valuable paintings and drawings, and among them were the Abyssinian photographs. Some optical and physiological experiments were made during the evening; among others an unfortunate rabbit was killed by nitrous oxide gas, and brought to life again by Dr. Rich-

ardson's very ingenious apparatus for artificial respiration. Among the company present was Dr. Blanc, one of the Abyssinian captives, who had in his possession the bullet which killed King Theodore. The *soirée* went off remarkably well, but the rooms would conveniently have held more visitors. No ladies were present, except those of the president's family.

The last day, Saturday—being, in fact, the day after the meeting—was spent by a large number going by invitation to Scarborough. We went by special train, and stayed at York to see the minster, which was shown and explained to us by Canon Hey, a brother of the Leeds surgeon. At Scarborough, we saw the whole place, and wandered about over the terraces, gardens, and castle; and then, after inspecting the magnificent hotel, we were entertained at a most sumptuous dinner, served in the most complete and comfortable way. The whole affair was by the invitation of the directors of the Hotel Company, and they certainly spared no expense in their hospitality. The hotel is so splendidly situated, so comfortable and complete, and, I hear, so reasonable in its charges, that it must command success, and the name of the queen of watering-places seems deserved by Scarborough itself. After some speeches, we were taken home to Leeds by special train, many of the members making experiments on the way to investigate the effects of nicotiana, and arrived at twelve o'clock, leaving behind some of our members, some intentionally and some undesignedly.

And thus ended this most successful meeting, distinguished by the choice and friendly hospitality of the Leeds men, and by the unusual and profuse liberality of the public authorities of Leeds and of the medical men of Harrogate and Scarborough, as well as by the soundness and activity of scientific life and the completeness of the whole arrangements.

The towns which follow in receiving us will have hard work to keep the pace.

I am, etc.,

August 7th.

VIATOR.

DOES PHTHISIS OCCUR IN ICELAND?

SIR,—It will be remembered that, in the early part of the present year, a discussion was carried on in the BRITISH MEDICAL JOURNAL between Dr. Mac Cormac and myself, as to the cause of phthisis. I then brought forward the remarkable immunity of the Icelanders from this disease, notwithstanding that they live in probably the worst ventilated houses of any people on earth, as being fatal to Dr. Mac Cormac's theory that pre-breathed air is the only factor in the production of phthisis. Dr. Mac Cormac, relying on Schleisner, a Danish authority, maintained that I was wrong in stating that phthisis does not originate in Iceland. I pointed out, however, from Dr. Mac Cormac's own work, that, even admitting that Schleisner had to deal with true tubercular phthisis, Schleisner's statistics go to show that phthisis is far less common in Iceland than in Denmark (BRITISH MEDICAL JOURNAL, Feb. 13, 1869); and that, all circumstances considered, this alone was greatly opposed to Dr. Mac Cormac's views. It was also stated that I hoped to have, in due time, the direct evidence of Dr. Hjaltelin, a gentleman of much distinction in his profession. This evidence I have now great pleasure in making public, and allowing your readers to judge between the relative value of the statements made by a man who, having long practised in Germany, must necessarily have become familiar with phthisis, and who has subsequently practised many years in Iceland, and the allegations of one, in reference to the diseases of Iceland, who never lived in the country.

I beg to assure Dr. Mac Cormac that truth is my only object in this important investigation. If it were possible, I would gladly accept his explanation of the etiology of phthisis; but, in face of facts such as I have brought forward, this is not possible.

I am, etc., ARTHUR LEARED, M.D.

“Reykjavik, July 26th, 1869.

“MY DEAR Dr. LEARED,—As you wish to know my opinion with regard to the existence of phthisis in Iceland, I have to inform you that the disease very seldom occurs in this country, and *never*, as far as I know, without having been contracted in a foreign country. This circumstance is regarded here as an established fact, and Dr. Mac Cormac is greatly mistaken in his conclusions. Pulmonary diseases are very often mentioned by Dr. Schleisner and other Danish writers as existing in Iceland. Chronic bronchitis, emphysema, hydatids in the lung, disease of the heart, etc., are by the Icelanders commonly called “Brjóstveiki” (disease of the lungs). This, therefore, only means one or other disease of the chest. But, in the Danish language, “Brjóstveiki” is translated into “Brystsyege”; and from this it has often, in Denmark, been used synonymously with “consumption”; and this last word generally means “phthisis tuberculosa”. In this manner, not a little confusion has been imported into our medical nomenclature. This was re-

marked by Dr. Schleisner himself, who was very well acquainted with that confusion, as may be seen from his work *Island undersøgt fra et Lægevidenskabeligt Synspunkt* (Kjöbenhavn, 1849, p. 40), where he states that by far the greatest part of those who are registered as having died of consumption ("tørende Syge"), had fallen victims to hydatids in the lungs. Some mistakes may also have occurred in the Icelandic medical reports to the College of Physicians in Copenhagen, although I have not remarked them. Be this as it may, it is certain that tubercular phthisis may be said to be unknown in Iceland, except when imported by Icelanders who have contracted it in foreign countries. *This you may rely upon*, although so much opposed to the theory promulgated by Dr. Mac Cormac, that prebreathed air is the only cause of consumption. If this theory were true, few countries would have more of the disease than this; for, in a great many instances, Icelandic huts do not afford more than 100 cubic feet of air to each individual. *Pest mortem* examinations become every year more common, and I have myself made numerous autopsies; and yet not a single case of tubercle of the lungs has, up to the present, been in this way discovered. During a period of fifteen years, I have had more than thirty thousand patients, without having met with a single case of indigenous consumption. In order to give you farther information on this subject, I wrote to an honoured colleague of mine who happens just now to be in our little town; and this is his reply:

"In answer to your letter of yesterday's date, regarding phthisis tuberculosa, I shall only remark that, during my thirty-two years' practice in this country, I have not seen a single case of this disease. I have seen a great many cases of other diseases of the lungs, but phthisis tuberculosa never. In all the autopsies I have made, I have never observed the least trace of tubercles in the lungs.—J. Skaptason, Reykjavik, April 27th, 1869."

"To this I beg to add, that Dr. Skaptason is the oldest and most experienced physician in this country; he is an accurate observer and an excellent anatomist. His practice has been most extensive; and, from my knowledge of him, I feel confident that he would write nothing but what he believed to be absolutely true.

"Yours very faithfully, "J. HJALTELIN."

PARLIAMENTARY COMMITTEE.

SIR,—In answer to a question that I see by the JOURNAL was asked at Leeds about the constitution of this Committee, allow me to state that thirty members are appointed by the branches, with power to add to their number; but that last year, when it was judged by the Committee to be more convenient to present their report at the annual meeting of the Parent Association than at that of the Metropolitan Branch, as was previously done, the additional members, forty-four in number, were appointed at Oxford. This year the Committee had agreed to recommend twenty additional members at Leeds, and I much regret that my late arrival at the meeting on Friday afternoon apparently prevented the meeting from exercising its suffrage on the matter.

It is due to the gentlemen who devote so much valuable time and labour to the work of this Committee that I should explain the steps I took for the due presentation of their Report, etc. On July 15th I wrote to Mr. T. Watkin Williams, the General Secretary, asking him to fix a time and insert it in the programme for its reception. I received no reply to my letter; nine days afterwards I had occasion to write to him on other business, when I alluded to my previous communication; he replied July 25th—"I also duly received your note of the 15th inst., but did not consider it required any further reply than what appeared in the programme as published in the JOURNAL, viz., that reports from the several Committees will be received on Thursday morning." On Thursday morning, as time was precious, with the courteous permission of the Chairman (Dr. Radclyffe Hall), I suggested to the meeting that only the paragraph of the Report relating to the Draft Medical Acts Amendment Bill need be read, and that the rest of the document relating to the irrevocable past might be taken as read; the suggestion was not accepted, so that the Report was deferred until Friday morning, when Mr. Nunneley very liberally gave me precedence, for which I beg he will accept my best thanks, and at the same time my sincere apology for trespassing more than I anticipated on the time allotted to his Address. After a long promised and hurried visit to Saltaire in the middle of the day, I arrived at the afternoon meeting about a quarter past four o'clock, in time to hear a well-merited eulogium on the profession at Leeds, but too late, according to the ruling of the Chairman (Dr. R. W. Falconer's), to submit the list of gentlemen recommended for election as extra members during the ensuing year.

I am, etc.,

SEPTIMUS GIBBON.

THE LONDON DIALECTICAL SOCIETY.

SIR,—With reference to the allegations concerning the London Dialectical Society contained in your report of Dr. Beatty's address at Leeds, I am directed by the Council of that Society to state that the whole of those allegations are entirely untrue.

The Society does not advocate Malthusianism or anti-Malthusianism, or any other view or theory of any kind; and, although the utmost freedom of debate is the fundamental principle of its constitution, no member or visitor has ever mentioned, except to reprobate, the odious practice for the carrying out of which it has been stated that the Society has sought the co-operation of the medical profession. Neither has any book whatever at any time been published under the auspices of the Society.

I enclose a prospectus, etc., of the Society (a copy of which I shall be happy to forward to any of your readers making application for the same), from which it will be seen that the following propositions are the basis of its constitution.

That truth is of all things the most to be desired, and is best elicited by the conflict of opposing opinions.

That the Society should afford a field for the philosophical consideration of all questions without reserve, but especially of those comprised in the domain of ethics, metaphysics, and theology.

That it should be unsectarian in the widest possible sense, and allow the most absolute freedom of debate; no subject whatever being excluded from consideration, except on the ground of its triviality.

The following remarks by Professor Bain may be considered to embody the leading principle of the Society, and show the origin of its title:—"The essence of the dialectic method is to place side by side, with every doctrine and its reasons, all opposing doctrines and their reasons, allowing these to be stated in full by the persons holding them. No doctrine is to be held as expounded, far less proved, unless it stands in parallel array to every other counter-theory, with all that can be said for each. For a short time, this system was actually maintained and practised; but the execution of Socrates gave it its first check, and the natural intolerance of mankind rendered its continuance impossible. Since the Reformation, struggles have been made to regain for the discussion of questions generally—philosophical, political, moral, and religious—the two-sided procedure of the law-courts; and perhaps never more strenuously than now."

I am, etc., D. H. DYTE, *Honorary Secretary*.

32A, George Street, Hanover Square, W., August 23rd, 1869.

. We feel satisfaction in publishing this official repudiation, by the Council of the Dialectical Society, of any countenance of the "odious practices" properly denounced by Dr. Beatty. At the same time, we must express regret that the Council has so long allowed a grievous charge to hang over the Society, and has not, as far as we are aware, taken steps to remove the prevalent impression, that the propriety of resorting to certain abominable proceedings for the purpose of keeping down the numbers of our population was discussed in, and found favour in, the Society. With Mr. Dyte's letter, we have received a copy of the rules and list of members of the Society, with the titles of the papers and discussions during 1867 and 1868. In looking over the list, we notice the names of members of our profession (such as Dr. Andrew Clark, a Vice-President) whom we cannot believe capable of remaining in a Society which would advocate utterly degrading principles.

MR. NUNNELEY AND THE ANTISEPTIC TREATMENT.

SIR,—Mr. Nunneley's recent attack (see the BRITISH MEDICAL JOURNAL, Aug. 7th, 1869) seems to me little calculated to impede the progress of the antiseptic treatment; nor do I feel called upon to point out in how many respects he has misapprehended my published views. That he should dogmatically oppose a treatment which he so little understands, and which, by his own admission, he has never tried, is a matter of small moment. But I was grieved to find him stating that his colleagues, who had once adopted the system, were now abandoning it as untrustworthy. It was therefore with much pleasure that I received a very different account of the matter from Mr. Teale in a letter which, with his permission, I now request you to publish.

I am, etc., JOSEPH LISTER.

Glasgow, 24th August, 1869.

"20, Park Row, Leeds, Aug. 11th, 1869.

"MY DEAR SIR,—May I call your attention to the attack upon the 'antiseptic treatment' in Mr. Nunneley's surgical address, in which he quotes the experience of his colleagues as unfavourable to it.

"I think it due to yourself to inform you that Mr. Nunneley was in

Aug. 1869.

no sense justified in making such a statement; that we still use, and have as much confidence as ever in antiseptic treatment; and that we hope shortly, in some way or other, to have Mr. Nunneley's misstatement corrected.

"Any want of success in our practice may fairly be attributed to imperfections in carrying out your rules. Yours truly,

T. PRIDGIN TEALE."

MEDICAL NEWS.

INDIAN MEDICAL SERVICE.—The following is a list of the candidates for Her Majesty's Indian Medical Service who were successful at the competitive examination at Chelsea, on August 9th. Forty candidates competed for forty appointments. Thirty-nine were reported qualified. [Maximum number of marks, 3400.]

Order of merit.	Names.	No. of marks.	Order of merit.	Names.	No. of marks.
1.	Duke, O. T.	2,570	21.	Keefer, W. N.	1,655
2.	Nicholson, F.	2,225	22.	Carswell, J. S.	1,650
3.	Gunn, J. S.	2,150	23.	Roe, W. A. C.	1,640
4.	Gregg, W. H.	2,055	24.	Murray, W. F.	1,595
5.	Hendley, T. H.	2,005	25.	Kelly, A. H.	1,575
6.	Ghose, Fakcer Chunder	2,000	26.	Robinson, T.	1,570
7.	Sinclair, D.	1,955	27.	Hughes, A. H.	1,565
8.	Seaman, A. B.	1,925	28.	Ruttledge, E. B.	1,560
9.	Smyth, F. A.	1,905	29.	Dean, A.	1,510
10.	Salamon, S. M.	1,885	30.	M'Conaghy, W.	1,450
11.	Barker, F. C.	1,870	31.	Waters, G.	1,425
12.	Boyd, H.	1,865	32.	Fawcett, E.	1,410
13.	Strahan, A. B.	1,805	33.	Paterson, F. R.	1,390
14.	Lloyd, J.	1,800	34.	Hastings, W.	1,365
15.	Caldecott, R.	1,770	35.	Spencer, F. C. H.	1,340
16.	Courtney, W. M.	1,770	36.	Wall, R. M.	1,290
17.	Jones, F.	1,755	37.	Jones, H. J.	1,155
18.	Meadows, C. J. W.	1,725	38.	North, J.	1,130
19.	Murphy, P.	1,705	39.	Holl, H. G.	1,090
20.	Martin, D. N.	1,665			

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, August 19th, 1869.

Baddeley, William, Whalley, Lancashire
Mickle, William Julius, Puckridge, Herts
Nell, Richard Frederick, Warwick
Snell, Enoch, Leeds
Warburton, Edmund Samuel, Betley, Crewe
Wilson, George, Claverton Street, Pimlico
Wing, Charles Edward, Bury St. Edmunds
Wood, Richard, Malden Road, N.W.

The following gentlemen also on the same day passed their first professional examination.

Harvey, Christopher, Westminster Hospital
Hill, Thomas, St. Bartholomew's Hospital

As an Assistant in compounding and dispensing medicines.
Bird, George William James, Birmingham

MEDICAL VACANCIES.

The following vacancies are declared:—

ARDEE UNION, co. Louth—Medical Officer for the Collon Dispensary District (£100 per annum, and Vaccination Fees): applications, 7th Sept.; election, 8th.
BALLYSHANNON UNION, co. Donegal—Medical Officer for the Ballintra Dispensary District (£60 per annum, and Vaccination Fees): election, 7th Sept.
BISHOP AUCKLAND, co. Durham—Medical Officer and Public Vaccinator for the Whitworth District.
BOOTLE HOSPITAL AND DISPENSARY—House-Surgeon (£80 per annum, with board, etc.).
BOURNEMOUTH GENERAL DISPENSARY—Resident Surgeon (£100 per annum, with furnished apartments, coal, gas, and attendance): applications, 9th September; duties, 18th October.
BRANCEPETH COLLIERIES, co. Durham—Surgeon.
BRIGHTON AND HOVE LYING-IN INSTITUTION—Resident House-Surgeon (£100 per annum, with furnished apartments, coal, gas, and attendance): applications, 1st Sept.; election, 9th Sept.
BROMSGROVE UNION, Worcestershire—Medical Officer for the Romsley District (£12 per annum).
CARLISLE UNION—Medical Officer for the Stanwix District (£70 per annum, to include medicine, and extra fees): applications, 8th Sept.; election, 9th Sept.
CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road—Surgeon.
DROVERS' SICK AND BENEVOLENT SOCIETY, "Butchers' Arms", York Road, Islington—Medical Officer: applications, 30th.
EASTBOURNE UNION, Sussex—Medical Officer and Public Vaccinator for District No. 1 (£90 per annum, 11s. each Midwifery case, 2s. 6d. each successful Vaccination, and other extras): applications, 2nd Sept.; election, 3rd Sept.
GLASGOW UNIVERSITY—Regius Professor of Surgery.
GLASSARY, Argyllshire—Medical Officer for the Kilmichael District: applications, 1st September.
GLOUCESTER DISPENSARY—Medical Officer.
GLOUCESTER GENERAL INFIRMARY—Assistant-Physician.
GREAT NORTHERN HOSPITAL, Caledonian Road—House-Surgeon (applications, 7th Sept.

GUILDFORD UNION—Medical Officer for the Albury District (£60 per annum, 15s. each case of Midwifery, and other extras): applications, 3rd Sept.; election, 4th Sept.

KILMUIR, Parish of, and part of the Parish of Snizort, Isle of Skye (£140 per annum, with house and enclosure of land).

KINGSBRIDGE UNION, Devon—Medical Officer and Public Vaccinator for Stokenham (£56:10 per annum, and Vaccination Fees): applications, 3rd Sept.; election, 11th Sept.

LEXDEN AND WINSTREE UNION, Essex—Medical Officer for District No. 9 (£65 per annum).

LONDONDERRY COUNTY INFIRMARY—Surgeon.

LONDONDERRY GAOL—Surgeon.

METROPOLITAN FREE HOSPITAL, Devonshire Square—Assistant-Physician: applications, 31st August.

"N." DISTRICT, GENERAL POST OFFICE—Surgeon.

NEWENT UNION, Gloucestershire—Medical Officer for the Redmarley District (£50 per annum).

ROYAL GENERAL DISPENSARY, Bartholomew Close—Physician (£40 per annum): applications, 2nd Sept.; election, 15th Sept.

ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road—Physician.

ROYAL MATERNITY CHARITY—Physician for the Eastern Districts of London: applications, 28th.

SANDAY, Island of, Orkney—Medical Man (public appointment, £50 per annum; population, 2000): applications, 8th Sept.

SPENNYMOOR, co. Durham—Certifying Factory Surgeon.

TIVERTON UNION, Devon—Medical Officer for the Tiverton East District (£70 per annum): election, 7th Sept.

TOWER HAMLETS DISPENSARY, Commercial Road—Medical Resident (£100 per annum, with residence, coal, and candles): applications, 6th Sept.; election, 20th Sept.

WARNEFORD HOSPITAL, Leamington—House-Surgeon (£100 per annum, with board, lodging, and washing).

WEST NORFOLK AND LYNN HOSPITAL—Physician.

WHITBY UNION, Yorkshire—Medical Officer for the Fylingdales District.

WORKSOP DISPENSARY—House-Surgeon to dispense, visit out-patients, and act as Honorary Secretary (£100 per annum, with coal, gas, attendance, and furnished apartments): applications, 31st instant; duties, 1st November.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*CLAY, Robert H., M.D., appointed Physician to the South Devon and East Cornwall Hospital.

HOPE, Wm., M.B., appointed Physician-Accoucheur to the Out-patients of Queen Charlotte's Lying-in Hospital, Marylebone Road, vice Dr. Parson, resigned.

BIRTHS.

GROVES.—On August 14th, at Newland West, Lincoln, the wife of E. Groves, Esq., Surgeon, of a son.

HARRISON.—On August 17th, at Walsall, the wife of *A. J. Harrison, M.B., of a daughter.

MURRAY.—On August 19th, at Green Street, Grosvenor Square, the wife of Gustavus C. P. Murray, M.D., of a son.

MURRAY.—On August 17th, at the Curragh Camp, the wife of W. S. Murray, M.B., Surgeon 66th Regiment, of a son.

PATERSON.—On August 21st, at Plumstead, the wife of H. F. Paterson, M.D., Royal Artillery, of a son.

WOTTON.—On August 13th, at Bedford Gardens, Kensington, the wife of Henry Wotton, Esq., Surgeon, of a son.

MARRIAGES.

ABBOTT, Henry H., Esq., Bombay Staff Corps, to Susan Georgina, youngest daughter of James SANDERSON, Esq., Deputy Inspector-General, Madras Army, at Edinburgh, on August 15th.

BUSH, Charles Arthur, Esq., Surgeon, of Marshfield, Gloucestershire, to Anna, daughter of E. GALE, Esq., of Alton Priors, near Marlborough, on August 6th.

CROSS, T. H. Eustace, Esq., Surgeon 53rd Regiment, to Mary Laura, third daughter of R. MARRIOTT, Esq., of Abbot's Hall, Braintree, Essex, at St. James's, Piccadilly, on August 17th.

OWEN, Alfred Lloyd, M.B., of York, to Sylvia Caroline, third daughter of W. GIBNEY, M.D., of Torquay, on August 19th.

WILMOT, Alfred E., Esq., Surgeon, of Escrick, York, to Mary Macrae, youngest daughter of Charles M. ELDERTON, Esq., barrister-at-law, at St. Gabriel's, Pimlico, on August 17th.

WOOD, William P., M.D., Rochdale, to Helena, daughter of John GODFREY, Esq., London, at Paris, on August 16th.

WRIGHT, Robert Temple, M.D., Bengal Medical Staff, to Emily, daughter of the Rev. J. THOMPSON, vicar of Easby, on August 12th.

DEATHS.

ARCHER, E., M.D., of King's Lynn, at Hildrop Crescent, London, on Aug. 12th.

ATKINSON.—On August 21st, at Bampton, Oxfordshire, aged 28, Julia, wife of John F. Atkinson, M.D.

*BRADFORD, William J., M.B., of Tyndale Place, Islington, at Killowen Point, County of Down, on August 14th.

BURKE.—On August 21st, at Richmond, Surrey, Juliana, wife of Joseph Burke, Esq., Deputy Inspector-General of Hospitals.

GUTHRIE, Alexander, Esq., Surgeon, at Brechin, Forfarshire, on August 22nd.

JULIUS.—On August 21st, at Richmond, Ellen Hannah, wife of F. G. Julius, M.D.

MONTGOMERY, Howard B., M.D., Surgeon Madras Army, at Madras, aged 43, on July 11th.

ROBERTSON.—On August 6th, at South Kensington, Mary, widow of James Robertson, M.D.

STOCKER.—On August 21st, at Bampton, Oxfordshire, aged 8 months, Richard Southey, son of John Sherwood Stocker, M.D., of Montagu Square, London.

TIDMARSH, Richard, M.D., late of Adelaide, South Australia, at Greenwich, aged 64, on August 16th.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.

WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—As an act of justice to those gentlemen who, for various reasons, declined to avail themselves of the privileges offered by this College in 1859, a correspondent proposes the adoption by the College of a bye-law to the following effect; viz.: "Any Licentiate of this College who prior to 1858 held a degree in Medicine from an University in the United Kingdom, and is not engaged in the practice of pharmacy, may be admitted a Member, on signing the bye-laws, and paying the additional fee to that required for the licence."

THE GALIGNANI HOSPITAL, PARIS.

SIR,—I have just read the interesting and valuable letter of Dr. Cormack, in your last issue. He has given a faithful account of what has befallen our poor little hospital. It is scarcely credible that such an exquisite little establishment should have been so wilfully sacrificed, when apparently everything had been accomplished to make it as perfect as possible, and to secure it in perpetuity to the English poor in Paris. I have great hopes that Dr. Cormack's letter may be the means of calling attention to the present unaccountable state of affairs, and that our hospital may be revived. There is, however, only one remedy—to obtain another site, and erect another building. I am, etc.,

CHARLES SHRIMPTON, Physician in Charge of the Galignani Hospital.

17, Rue d'Anjou St. Honoré, Paris, August 23rd, 1869.

VACCINATION.

SIR,—Regarding the increasing spirit of dissatisfaction attached to compulsory vaccination, I think it only right to mention that I have lately had under my care four cases of secondary abscess or ulceration resulting from this operation. There is no doubt in my mind that hereditary syphilis is the true explanation of symptoms attributed to vaccination in the majority of instances; but, on the other hand, impure vaccine, and want of skill on the part of the operator, have much to do with the untoward results. I would recommend a return to the original source of vaccine, and prolong the optional term from three to twelve months.

London, August 1869.

I am, etc., N. HECKFORD.

MR. ALFRED GODFRAY (St. Helier's) should apply to the Registrar-General, Somerset House.

NOISES IN THE HEAD.

SIR,—Some months ago, you kindly inserted a letter from me in your JOURNAL, relative to the above affection, but which failed in attracting notice. May I again ask the favour of your inserting the enclosed, with the view of obtaining an opinion from some of your correspondents, upon the subject of these "very obscure" and hitherto little considered affections, under which I have suffered for nearly two years, commencing with intense neuralgia of a branch of the seventh nerve supplying the hyo-glossus muscle, and culminating seven months afterwards in vomiting quantities of bile of a highly vitiated character, with alarming prostration. I am now in fair health. The neuralgia, I am thankful to say, has not since returned; but the noises in the head are most persistent, and resemble scissor-grinding, with the occasional chirping of the cricket. They are *absent at dinner*, and for *an hour or so afterwards*. My age is 62. I have suffered from fever, ague, and dysentery, in China, etc.; also from gout.

Trusting you will excuse my again troubling you, I am, etc.,

A MEMBER OF THE BRITISH MEDICAL ASSOCIATION AND RETIRED ARMY MEDICAL OFFICER.

August 1869.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, August 18th; The New York Medical Gazette, August 7th; The Parochial Critic, August 18th; The New York Medical Record, August 7th; The Boston Medical and Surgical Journal, August 5th; The Aberdeen Free Press, August 17th; The Yorkshire Post, August 21st; The Allahabad Pioneer, June 18th; The Manchester Guardian, August 12th; The Delhi Gazette, May 8th; The Belfast News-Letter, August 19th.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. Richards, not later than *Thursday*, twelve o'clock.

THE CONSTITUTION OF THE MEDICAL COUNCIL.

SIR,—Nearly two years ago, you were good enough to give insertion to a letter of mine concerning the proposed alteration in the constitution of the Medical Council. In that letter, I endeavoured to show that the Council, as at present constituted, is not (properly speaking) a representative body at all, and that it was never designed by the Legislature to be a representative body. At the same time, whilst guarding myself from admitting that the constitution of the Council is incapable of amendment, I ventured to hint that, in seeking for improvement, we should, as a matter of policy, shun the imputation of self-interest; or, in other words, that we should not lead the Government and Legislature to imagine that merely in the interests of our profession we seek to alter the constitution of a body which was instituted for the benefit of the public.

Since the publication of my letter, I have, "through the loopholes of retreat", sedulously watched the progress of the movement in favour of the "direct representation of the profession" in the Medical Council; and, at the risk of being stigmatised as pig-headed, I confess that my opinions on the subject remain unchanged. I still believe that any alteration of the Council which would convert it into a representative body (in the sense contemplated by the Association), would be absolutely injurious to the profession.

Admitting that the Council has not been so successful as we could desire in the promotion of the objects for which it was created, I nevertheless believe that its shortcomings are more fairly to be attributed to the want of power than to the want of will and ability, or to the want of "direct representation". In the absence of increased powers conferred by the Legislature, no amount of direct representation of the profession—no increase in the number of its members—can render the Council more capable of achieving its objects than it is at present. In the interest of the public, it is my firm conviction that the Council should not only be endowed with additional power, but that the number of its members should be considerably diminished. A reform in this direction is that which, in my opinion, ought to be strenuously demanded by the nation at large.

I am by no means indifferent to the necessity which exists for the efficient conduct of the internal government of our profession, and the due promotion of its material interests. But it strikes me that we already possess a body which, with the requisite modifications, might safely be entrusted with these important duties. The British Medical Association is daily becoming more and more a power in the State; and if it could be incorporated by Royal Charter or Act of Parliament, and endowed by the Legislature with adequate authority, its Council, impartially elected, would be more aptly suited to deal with the varied questions which concern the personal welfare of the profession than the "General Council of Medical Education and Registration", which has its own specific duties to perform. This is merely designed as a crude suggestion, which may or may not be deemed worthy of consideration by the leading members of the Association.

Possibly, the above suggestion comes too late; for it would appear that the Association is firmly resolved on the conversion of the Medical Council into a representative body, with manifold additional duties and burdens. If such be the case, I am glad that the motion of my distinguished countryman, Professor Haughton, "that the graduates and licentiates of the Universities and Medical Corporations should have the power of electing their own representatives on the Medical Council", was adopted at the late meeting of the Association at Leeds. As a choice of evils, I say I am glad that this resolution was adopted, because I believe that this mode of election must in a great degree tend to neutralise the antagonism which would otherwise assuredly exist between the members of the Medical Council chosen by the profession at large and those nominated by the Universities and Corporations—an antagonism which, for obvious reasons, cannot be too strongly deprecated. The objections to Dr. Haughton's proposal, which were advanced by some influential members of the Association, do not appear to me to carry any weight. I only regret that Dr. Haughton seemed inclined to give way with regard to the admissibility of "licentiates" to vote at the election of the contemplated representatives. Why not? I have a word or two to say on this head; but, in mercy to your valuable space, I shall refrain for the present, trusting that you will kindly permit me to return to the subject.

I am, etc.,

EDWARD BEWLEY, L.K.Q.C.P., etc.

Edington, Clara, King's County, August 1869.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. B. Kelly, Dublin; Dr. W. Ogle, Derby; Dr. Bateman, Norwich; Mr. T. R. Jessop, Leeds; Dr. Robertson, Brixton; Mr. A. Godfray, Jersey; Dr. W. V. Bird, Liverpool; Dr. H. Paterson, Plumstead; The Secretary of the University of Edinburgh; Mr. J. B. Holloway; Mr. J. V. Solomon, Birmingham; Mr. N. Heckford, London; Mr. H. Moody, London; Mr. H. Bewley, London; and Mr. W. Hope, London.

LETTERS, ETC. (with enclosures) from:—

Mr. F. Le Gros Clark, London; Dr. J. Hughes Bennett, Edinburgh; Dr. Septimus Gibbon, London; Dr. Lockhart Clarke, London; Mr. C. G. Wheelhouse, Leeds; Dr. Macleod, Glasgow; Mr. Hulke, London; Dr. Bäumlér, London; Dr. Leared, London; Mr. B. Blower, Liverpool; W. S. R.; Capt. E. Hopton, 88th Regiment, Murree, India; Mr. W. Curran, Murree, India; Dr. G. H. Philipson, Newcastle-upon-Tyne; Mr. H. Denne, Birmingham; Dr. J. Sawyer, Birmingham; Mr. J. Hutchins, London; Mr. D. Davies, Bristol; Dr. A. J. Harrison, Walsall; Mr. H. C. Hopkins, Totnes; Mr. J. E. Owen, Totnes; Dr. A. Wiltshire, London; Mr. G. T. Sandiford, Folkestone; Mr. R. Harrison, Liverpool; Dr. G. F. Burder, Bristol; The Secretary of Apothecaries' Hall, Ireland; Dr. Wm. Farr, London; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Lomas, London; Dr. Treutler, Kew; Mr. T. Pope, Cleobury Mortimer; Mr. T. H. Bartleet, Birmingham; Dr. W. Fergus, Marlborough; Mr. J. Martin, Portlaw; Mr. D. H. Dyte, London; Mr. J. Birchenall, Macclesfield; Dr. C. H. Leet, Dublin; Dr. B. W. Foster, Birmingham; Dr. T. P. Heslop, Birmingham; Mr. T. P. Teale, Leeds; Dr. J. Lister, Glasgow; Mr. D. Stone, Manchester; Our Birmingham Correspondent; and Dr. J. Tucker, Sligo.

LECTURES

ON THE

PRINCIPLES OF SURGICAL DIAGNOSIS:

ESPECIALLY IN RELATION TO SHOCK AND
VISCERAL LESIONS.*Delivered at the Royal College of Surgeons of England.*

By F. LE GROS CLARK, F.R.C.S.,

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LECTURE IV.—LESIONS OF THE ABDOMEN.

*The Construction and Functions of its Walls.—Lesions of the Diaphragm.
—Contusion of the Abdominal Walls.—Concussion and Contusion of
the Abdominal Viscera.—Shock and other Symptoms.—Vomiting.—
Hæmorrhage.—Tympantitis.—Peritonitis.—Muscular Lesions.—
Wounds of Parietes, lacerated and penetrating.—Conclusions.—Com-
parison with similar Injuries to the Head and Chest.—Results of Pene-
trating Wounds.—Contrast in the Pathological Consequences of Trau-
matic Inflammation in the different Serous Membranes.*

MR. PRESIDENT AND GENTLEMEN,—The special adaptation to their several functions which is observed in the skull and the chest, likewise characterises the walls of the abdomen in their relation to the contained viscera, and also indirectly to those of the thorax. The capacity of adjustment to varying degrees of distension of these organs, and the faculty to exercise active compression, are the most important of their functions; and these attributes are not only compatible with, but assist importantly in, free movement of the spine, in the various inflexions of the body. Yet these conditions, and others of secondary importance, entail a certain amount of exposure to injury, which is due to the intrinsic properties of the abdominal parietes, and to the accommodation of their structures to the passage of various textures into and out of the cavity; the walls are weakened at such points; and this circumstance is instrumental in permitting a class of lesions, for the relief of which the surgeon's interference is frequently claimed.

The complicated apparatus employed in the assimilation of food resides principally within the abdomen; the vascular supply of the organs thus employed is abundant; and their innervation is derived chiefly and specially from the cyclo-ganglionic system. The muscular parietes of the containing cavity are under the guidance of volition; but the motor power of the viscera themselves, with the exception of the urinary bladder, is derived from the scattered nerve-centres which abound in this region. The solid and part of the membranous organs are, comparatively, though not absolutely, fixed in their several positions; but the greater length of the bowel is loose and moveable, varying, to a certain extent, its relations according to its exigencies. Yet, even the relatively fixed viscera accommodate themselves to encroachment, dependent on temporary distension or permanent enlargement of neighbouring organs; and it is remarkable to what an extent this may take place without serious disturbance of function, as demonstrated in ovarian and other tumours.

Forming the roof of the abdomen and the floor of the chest is the musculo-membranous septum, the diaphragm. Each surface of the muscle is covered nearly throughout by a serous expansion; and the central aponeurosis has closely adhering to its upper surface the fibrous layer of the pericardium. These relations and connexions are most important in the diagnosis of lesions in this region; for a penetrating wound, of even very moderate depth and of but slight obliquity, may involve the liver and lung, and possibly also the pericardium and heart, in its progress. From such wounds the anterior wall of the abdomen offers but little protection; but they are infrequent, happily, in our country, as they very rarely occur except as the act of the assassin, or, occasionally, of the suicide. The same lack of protection is apparent in abdominal contusions; yet the gravity of these is often mitigated by the yielding nature of both parietes and viscera. It should be remembered, however, that those membranous organs which are most liable to periodical states of distension are most protected, such as the stomach in the hypochondrium, and the bladder in the pelvis.

Injury of the diaphragm, by rupture or wound, is not of frequent occurrence. From time to time, after severe and speedily fatal mischief by compression of the abdomen, we meet with such lesions in our

hospital *post mortem* rooms. The passage of a heavy wheel over the waist, crushes the ribs and forces part of the abdominal contents into the chest; but we rarely have an opportunity of witnessing, during life, a condition which can be diagnosed as rupture of the diaphragm.

In my second lecture I narrated a case in which there appeared to be conclusive evidence that a knife had been thrust through the diaphragm, and both the liver and lung seemed to be implicated in the injury; but the position was such as to prevent the intrusion of the contents of the abdomen into the chest, and to render the muscular lesion a feature of minor importance. In rupture of the diaphragm on the right side, no hernial intrusion into the chest could occur, unless the rent be large, as the liver would be an effectual barrier against such result.

In rupture on the left side, hernia is a very probable consequence; and the physical constitution and relations of the thoracic and abdominal viscera necessitate the intrusion of the latter into the cavity of the former; for the arched tension of the diaphragm is a necessary condition in respiration: when this is spoiled, the lung is no longer distended; but the space is occupied, when the chest is expanded, by the viscera nearest to the rent; and the lung, therefore, cannot descend into the abdomen.

The diagnostic signs of such an injury would be obscure, and would vary according to circumstances. Pain and dyspnoea would be present; and the physical signs, by auscultation and percussion, must depend upon the nature and extent of the hernia. If the stomach be thrust upwards into the thoracic region, as occurred in a case of large abdominal cyst resulting from injury, which I shall relate in a future lecture, there would be even abnormal resonance at times in this region; or there would be dulness, if the stomach (or colon) were distended with solid contents. The preparation I have on the table, which is from the museum of St. Thomas's Hospital, exemplifies this class of cases.

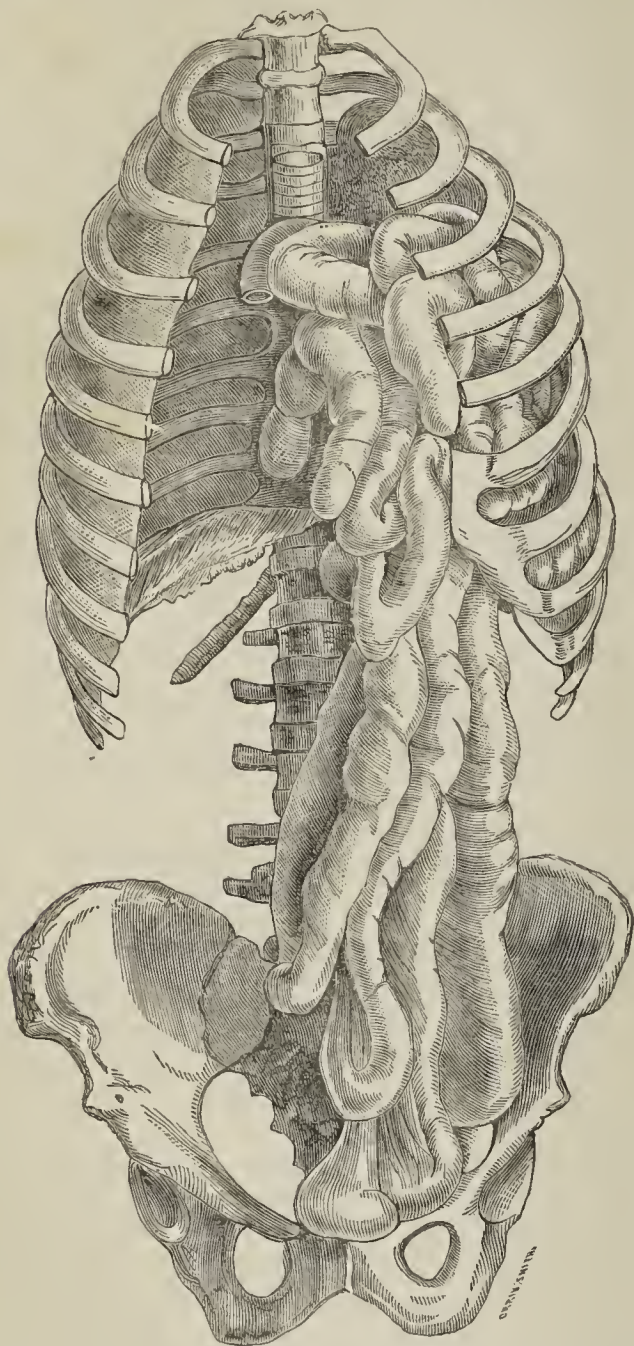
A patient, about fifty years of age, who had formerly been a railway porter, was admitted into the hospital in May 1862, with fever, and died, with pulmonary complication, in three or four days. It was noted, during his treatment, that there was entire dulness on percussion in the left dorsal and lateral regions, with bronchial respiration. The *post mortem* examination showed the results of broncho-pneumonia on the right side, and revealed the following remarkable condition on the left. The lung was very much collapsed, reduced to a small size, and displaced to the upper and posterior part of the pleural cavity, and attached by firm adhesions to the parietes. The transverse and descending colon, and a very considerably enlarged and softened spleen, were also lying in the left pleural cavity, with a large proportion of the small intestines, which had escaped from the abdominal cavity through an aperture in the tendinous portion of the left side of the diaphragm, sufficiently large to allow the hand to pass through. The abdominal cavity contained only the lower portion of the ileum, the cæcum, with portions of the ascending and descending colon and its sigmoid flexure, in addition to the glandular viscera. The stomach was entirely above the diaphragm, and occupied the posterior and lower part of the left thoracic cavity. The kidneys and liver were not disturbed from their natural position. (See wood-cut, next page.)

The antecedents of this patient did not allow of a very reliable history of his previous life being obtained: but a woman, with whom he had been recently living, stated he told her that, about two years and a half since, whilst employed on a railway, he had been squeezed between the buffers of two carriages. He suffered acute pain and great difficulty of breathing for some time afterwards, but had no medical advice; and—I do not say *propter hoc*—soon recovered from the immediate effects of the injury. But he appears to have been the victim of physical depression, to relieve which he had recourse to drink, and became a confirmed drunkard. His general health appeared, from the account given, to be deteriorated; and he became dyspeptic, and suffered from continual thirst, which induced him to drink a large quantity of water, in addition to the strong liquors which he imbibed.

In some of the recorded cases which I have met with, where the patients have survived sufficiently long, the symptoms were not of a character to enable the medical attendant to diagnose the nature of the lesion: and some of the patients have died suddenly—probably from spasm or paralysis of the injured muscle. The following doubtful case, under the care of my friend Mr. Solly, exemplifies the difficulties attending the diagnosis of this injury, where recovery takes place.

A. C., aged 29, had two ribs on the left side fractured by direct violence. The injury was immediately succeeded by great dyspnoea and almost fatal syncope. He rallied after some hours; but on the evening following the day on which the accident happened, there was secondary collapse, which suggested to his attendants that there had been internal hæmorrhage. The other early symptoms were, a burning sensation in the epigastrium, general distress, and abdominal respiration. On examining the chest, it was found that the breath-sounds were absent on

the left side at its lower part; whereas, on percussion, this part proved to be very resonant. The heart was thrown over to the right side. The inference drawn, by the medical attendants, from these physical signs was, that the diaphragm had been ruptured, and that the stomach had entered the chest. In two months the heart had resumed its normal position, and the lung its healthy function. It was contended, on the other hand, and I think with much show of reason, that entire recovery from so serious a lesion, and in so short a time, is inconsistent with our acquired knowledge on the subject; and that this case must have been one of pneumothorax, limited by adhesions of the pleura.



The recent condition of the parts involved was well illustrated in a case of which I have a record—the patient dying soon after his admission into the hospital. A large quantity of blood was found in the left pleura; and the diaphragm was torn on the same side, to an extent sufficient to admit through the aperture the entire stomach and the left lobe of the liver, which occupied part of the left pleural space. The lung was correspondingly compressed, and the heart was so displaced as to be thrown to the median line above its normal position.

A similar condition prevailed in another recent case, the injury resulting from the passage of a waggon-wheel over the chest, and the patient surviving only two hours. The left pleura contained a quantity of fluid-blood, and a large rent in the left muscular portion of the diaphragm extended into the pericardium. In this instance the stomach, spleen, a considerable portion of the transverse and descending colon, with some omentum, were in the left pleural cavity. Hæmorrhage, in these cases, combined with obstructed respiration, was apparently the immediate cause of death. Of the instances which I have on record, the left side of the diaphragm was usually the seat of laceration.

I am tempted here to narrate a singular and interesting case of injury specially affecting the muscles of respiration, and dependent on contu-

sion of the nerves directly associated with this act. It did not occur under my own observation, but the notes were kindly supplied to me by my friend and former pupil Mr. Wagstaffe, who attributes the symptoms to contusion of the phrenic nerve.

T. F., aged 23, received a kick on the right side of the neck over the anterior edge of the sterno-mastoid in its lower third, about an hour and a half before he was visited. When seen, he was suffering from urgent spasmodic dyspnoea, could not speak, had constantly recurring spasms, with temporary cessation in breathing, the diaphragm being visibly contracted spasmodically during each attack of apnoea. In the intervals between the attacks he was quiet; and, after taking some hot stimulant, could speak between the paroxysms, which were not diminished in frequency. The attacks were ushered in by a dreamy state of expression, gradually merging into complete cessation of respiration. The injury had been directly over the right phrenic nerve, but there was no bruising here of the surface, and there was no evidence of injury to the large vessels, the circulation being normal in the arteries beyond. The heart's sounds were healthy; pulse fair, at 96; there was some difficulty in swallowing, and tenderness on pressure over the seat of injury.

Early on the following morning, the convulsions were renewed with increased severity, threatening to cause death by asphyxia. Pulse weaker; surface colder; pupils sluggish. He was relieved by morphia and chloric ether, with mustard to the nape and feet. Later in the day, he had numbness in the right hand and arm, succeeded by a sensation of "pins and needles." This soon passed away; and from that time he rapidly mended, without further relapse, and was well in a few days. The last attack of dyspnoea was on the fourth day; and dysphagia remained as the latest evidence of the injury.

Such a case as the above is, of course, open to much speculation. Probably the nerve-injury was complicated, and both the pneumogastric and sympathetic may have been involved in the production of the symptoms, as there seemed to be a lack of intelligence between the lungs and the excito-motor centre, centripetally, as well as a convulsive action of the muscles of inspiration, and of those commanding the aperture of the air-tube.

In consequence of their readily yielding to pressure, contusion of the abdominal walls is not accompanied often by circumscribed extravasation of blood; a condition which is so frequent in the gluteal region as a consequence of falls or blows. Over the pubes we occasionally meet with such blood tumours, but rarely higher up in the abdominal wall. Extravasation not infrequently presents this character in the labia of the female; but in the male, when the scrotum is contused, the effusion assumes usually the character of diffuse ecchymosis.

Contusions of the abdomen, although unattended by any organic lesion, are often characterised by an amount of shock, which can be accounted for only by the impression made on the contained viscera. In many instances, so profound is the attendant collapse, as to suggest a mortal injury; and in some cases I venture to affirm that it is impossible to determine, at an early period, whether the patient be the subject of visceral lesion or not; in some few cases this doubt may not be solved until after the lapse of two or three days; and occasionally the uncertainty is indefinite. The shock of which I speak must not be confounded with the faintness and depression which result from internal hæmorrhage. In the latter class of cases, the patient usually refers his suffering to some isolated spot, where fulness, or dulness on percussion, or both, may be detected. Shock, from simple contusion, may, as I have remarked, remain masked; *i.e.*, retain the characteristics of the same condition resulting from organic lesions for forty-eight hours or longer; for the reaction following these injuries is sometimes deferred, and rarely proportioned to the previous amount of depression. Moreover, the belly not infrequently becomes tympanitic and tender, without the development of peritonitis. The impression made on the great cyclo-ganglionic nerve-centres explains the profoundness of the collapse in abdominal injuries, as compared with similar lesions of organs in other regions; the appeal is specially and directly made to the system of nerves which controls the functions of organic life, which are, therefore, primarily affected. In the earlier stages of these lesions, I am unacquainted with any diagnostic sign by which we may predicate whether shock exists primarily, apart from, or as expressive of, actual breach of texture. The absence of any special indication of local mischief, such as pain, tenderness, swelling, or bloody urine, may be accepted as negative proof, so far as it goes, that the case is one of simple shock; and this perplexity is sometimes enhanced by the early absence of collapse, as I shall have occasion to point out, where the lesion is organic and of a character even to prove speedily fatal. Time alone, in such instances, can develop the true nature of the case, either by renewal of vigour, with restored circulation, or by the development of fresh symptoms, if

the patient survive to the stage of reaction. Happily the diagnosis, in these circumstances, does not influence our early treatment. Caution in the use of stimulants, entire repose, both muscular and visceral, together with warmth to the surface, and evacuation of the bladder with a catheter, is the safe expectant treatment whilst doubt still hangs over the nature and extent of the injury; the subsequent management of each case must be guided by symptoms as they arise. I will now briefly exemplify the above remarks.

A child, seven years of age, was admitted under my care, having been run over by a cart, both wheels of which passed over the chest and abdomen. He was pulseless, and in profound collapse. On the following day, the abdomen became tympanitic but not tender. Moderate reaction was succeeded by convalescence; and the child left the hospital well, after six days.

A navvy was wheeling a barrow down a steep plank, when he fell, striking his abdomen against the handle of the barrow. He was admitted in a state of collapse, but there was no positive sign of ruptured viscus, although there was an ecchymosis where the blow was received. He soon recovered, and had scarcely any abdominal tenderness at any time.

A boy, ten years of age, was admitted after the wheel of an omnibus had passed over his abdomen. The shock was considerable, but not attended with insensibility. There were no marks of contusion. He had dyspnoea, and complained of great pain and tenderness in the iliac region, where there was dulness on percussion, extending half way to the iliac crest. His intelligence was impaired, suggesting the probability that his head had been injured. He rallied slowly, but was able to leave the hospital at the end of the third week.

In the former two of these cases, the condition was one of simple shock from abdominal contusion, from which the patients quickly rallied; in the latter there was, apparently, extravasation of blood and the further complication of some injury to the head; but there were no indications of serious visceral lesion in the abdomen.

The occurrence of vomiting in these cases of simple abdominal contusion is not constant; and its presence, when persistent, is suggestive of some organic lesion. Yet, in some instances, I have known repeated vomiting and a protracted state of semi-consciousness followed by slow recovery. Occasionally, in abdominal contusion, a relapsing state of collapse will occur, which naturally excites alarm, as it may usher in more serious symptoms indicative of lacerated viscus; but this cause of anxiety may also pass away, and a healthy reaction may be established. In some instances the convalescence is deferred and more protracted; and a doubt may still remain as to whether any visceral lesion actually existed. As I have already remarked, I know of no diagnostic sign by which this suspicion may be supported or verified, except the presence of local pain, dulness on percussion, bloody urine, or some disturbed function; but even these can scarcely be regarded as conclusive, when the patient recovers, as I shall endeavour to exemplify presently. On the other hand, more or less general peritonitis may follow contusion without lesion; but this complication is, I think, rare; and the recovery of the patient is no proof that such lesion was not present, for the acuteness of the symptoms is not necessarily a measure of the severity of the organic injury. The following cases briefly illustrate the foregoing remarks.

A middle-aged man was struck on the abdomen by the handle of a crane. He immediately became sick and faint, and, when admitted into the hospital, was in a state of extreme collapse, and complained of acute tenderness over the abdomen. His water was drawn off untinged with blood. On the following day he vomited whatever he took, and complained of great tenderness over the abdomen, not localised at any particular spot. On the third day he was somewhat improved, but solid food was still vomited, however light its character. This patient rallied very slowly, and continued to suffer much pain and tenderness in the belly. He had fits of vomiting at intervals, and was much prostrated; but the pulse always remained quiet. He left the hospital after six weeks' perfect repose, still much enfeebled. In this instance the local signs of peritonitis were present, but the circulation was never excited; and I felt it impossible to affirm that there was no organic lesion inflicted. The succeeding case exemplifies other features, but belonging to the same category.

A young man of twenty, was knocked down by a horse on to a railway, in front of some carriages which were in motion down an incline; he was thus squeezed before the wheels for some five or six yards, and had the right side of his chest and abdomen severely contused. On admission, he was in a state of extreme collapse, and vomited. I examined him carefully, but detected no fracture either of the chest or pelvis. He rallied during the night, but became again extremely prostrated on the following day. His breathing was chiefly thoracic and short, but he referred his suffering to the abdomen, and especially to the hypogastric region. He was able to micturate naturally, and his water was clear.

On the third day he was sick; tongue coated; skin hot; pulse quick and hard; respiration rapid. On the fifth day, the report states that the pulse rises and falls without apparent cause; complexion sallow; conjunctiva tinged yellow; abdomen distended. Shortly after this he began to rally, the yellow tinge of the complexion abating, and the abdominal distension subsiding. The right hypochondrium continued tender for some time, and his tongue was foul. The treatment was confined to gentle aperients after the first few days; he left the hospital at the end of three weeks. Some of the symptoms in this case suggest hepatic lesion, but the patient's early recovery seems scarcely consistent with that belief; though I may remark that it has come within the sphere of my observation to know that superficial lesions of the liver heal very quickly.

The immediate consequences of abdominal contusion vary from transient shock to profound and fatal collapse. Cases of the latter class are recorded, but I have never examined one *post mortem* which was uncomplicated by organic lesion. It is difficult to assign this fatality to its true cause, further than by surmising that, as in similar injuries in the cervical region, the functions of the organic nerves are irrecoverably suspended; and there is nothing unreasonable in the supposition that such is the case, when we consider how profound and protracted such collapse sometimes is, accompanied by pulseless unconsciousness, and every evidence of the low ebb to which vitality is reduced in both organic and animal functions. For an obvious reason, these instances of sudden death are not often brought under the notice of the hospital surgeon; and when they occur, they are probably due to some complicating cause, such as feeble health, strong mental emotion, or, possibly, some pre-existing organic deterioration or disease. Indeed, I may refer to the remarks which I made in my former course of lectures, when speaking of the possibility of death resulting from cerebral concussion, without organic lesion. In such cases, if they occur, doubtless shock, communicated from the cerebro-spinal to the ganglionic nerve-centres, is the cause of death. So, in the more direct appeal to the latter in abdominal contusion, the brain is secondarily affected; and in either the result is, perhaps, determined by some accidental coincident, or antecedently existing condition, by which vitality is depressed below its normal standard.

In cases of severe abdominal contusion with shock, I have generally noticed the occurrence of *tympanitis*, accompanied by constipation of the bowels, as a sequence. To what is this due, assuming that there is no visceral lesion? My conviction is that it is referable to the injury inflicted on the ganglionic nerves. The shock sustained by the nerve-centres of this system produces temporary suspension of their active function; and paralysis of the peristaltic movement of the intestines is the consequence.

The concurrence of *hemorrhage* with shock, as a consequence of abdominal contusion, is usually indicative of more or less serious visceral lesion; I mean that hemorrhage rarely occurs except from some lacerated or ruptured viscus. Yet such injury is by no means necessarily fatal. The complication in question is one which it is impossible to distinguish with certainty from simple shock in its early stage; for even protracted semi-consciousness and acute local pain may be present without either hemorrhage or organic lesion.

Local peritonitis, as a sequence of abdominal bruise, is not very uncommon; i.e., if we may accept the evidence afforded by topical pain and tenderness, with febrile excitement, as a proof of such effect, in the absence of more positive signs of visceral injury. But *general peritonitis* consequent on contusion is, in my experience, rare; its presence, therefore, may be regarded, in most instances, as highly suggestive, though not positively conclusive, of organic lesion.

I have a record of one case in which a middle-aged man was knocked down in a crowd and trampled on. He survived three days, with a distended and tender abdomen, and constant vomiting. His breathing was thoracic, and he never rallied from the shock caused by the abdominal contusion. The peritoneum contained three pints of turbid fluid, and some traces of lymph; but there was no visceral lesion. These cases are rare; and the injury, in this instance, was peculiar.

Retention of Urine usually accompanies this class of cases, but the bladder generally recovers its tone as the symptoms of shock subside. In fact, this condition, as well as sleeplessness and indifference, or restlessness, are to be regarded rather as indicative of shock, *per se*, than of shock specially associated with abdominal contusion.

Muscular Laceration from abdominal contusion, but without cutaneous lesion, is occasionally met with. Such instances are, however, infrequent and exceptional. Rupture of the rectus may, at any early period, puzzle the surgeon; but afterwards becomes apparent from the depression bounded, above and below, by the retracted fibres of the severed muscle. The history of the accident will also assist in the diagnosis of these cases. In an instance which recently came under my notice, this injury occurred in a female in whom the recti muscles were previously separated, allowing of partial protrusion of the central viscera.

Lesion of texture in the abdominal walls may present all the varieties of such injuries in other parts; they may be either incised, contused, lacerated, or punctured wounds. The special interest of such cases is dependent entirely on the doubt which must, in most instances, exist as to the probability of the contained viscera being involved in the injury. Yet, without such implication, these injuries, if severe, are serious, and sometimes fatal. In one case of attempted suicide under my care, an incised wound of the abdominal wall placed the patient in a very critical condition for some time, though it was doubtful whether even the peritoneum was injured. The wound, which was between the ensiform cartilage and the umbilicus, and to the left of the median line, was inflicted with a razor, and the patient suffered from all the symptoms of collapse, followed by abdominal tenderness and fever. He had been induced to commit this act in consequence of acute epigastric pain which had long tormented him. He recovered slowly; and informed me before he left the hospital that he was almost entirely relieved of his pain; this operation had effected a cure.

A singular gun-shot wound of the abdominal wall occurred in a patient of mine some years since. He was climbing a bank and drawing his gun after him, with the muzzle towards his body, when it exploded, and the entire charge of shot was lodged in the epigastric region. I concluded that the patient's condition was hopeless, as he was in a state of profound collapse, and it was impossible to ascertain the extent of the injury inflicted, as there were no special symptoms to guide me. This patient recovered; and I was enabled, at various times, to extract the shot and several fragments of clothing from the large suppurating cavity which remained open for many weeks. The oblique direction which the charge took saved the man's life; for neither of the three serous cavities in the neighbourhood could have been implicated, if I may judge by the negative evidence afforded by the absence of symptoms which would indicate such injury. He was compelled afterwards to wear an artificial support, to compensate for the entire loss of all sustaining textures in the epigastric region, except the skin.

Laceration of the abdominal wall, if severe, is a serious complication in abdominal shock. This occurs occasionally in buffer-accidents, and I have known them to prove fatal, without penetration of the serous cavity.

The abdomen affords no exception to the general rule, that *punctured* wounds are the most serious in their remote, and often in their immediate, consequences. It is scarcely necessary to observe that a penetrating wound in this position must be either very shallow, or its direction very oblique in relation to the plane of the surface injured, for the cavity of the abdomen not to be entered: but the lesion of some one of the contained viscera is not a necessary consequence of such a complication. The obscurity attending the diagnosis of these cases is great, owing to the amount of shock which often accompanies them, and the impolicy of making exploratory examinations for the purpose of settling this doubt. I have already pointed out that the severity of the shock is no measure of the gravity of the lesion, where no wound exists; and, I may add, that its persistence sometimes misleads the surgeon. These remarks apply with at least equal force to penetrating wounds of the abdomen, especially when accompanied with much violence—such as a fall from a high window, and the consequent impaling of the body on the spikes of area railings. These injuries are brought under our notice from time to time in our hospital practice; and I have had some instances under my care in St. Thomas's. One such I have already had occasion to refer to, in illustration of another subject. The following case exemplifies the form of injury I am speaking of, and also demonstrates the obscurity which envelopes the diagnosis of these lesions.

A middle-aged man was repairing a house, when the ladder on which he stood broke, and he was precipitated from a considerable height on to some area railings: two of the spikes, which were conical at the point but not sharp, penetrated the abdomen, and were broken off. One of them was picked up by a looker-on. He had bled freely before he was admitted into the hospital: on admission, he was cold, blanched, and nearly pulseless; and, although restless, appeared almost unconscious of what was going on around him. One spike had entered the abdomen close to the left anterior superior spine of the ilium, grazing the bone to some depth; the other had penetrated about an inch above the umbilicus: venous blood was oozing from each wound. He complained of no pain in the abdomen. On the following day there was sickness, thirst, and tenderness, with some reaction. He survived about sixty hours. The autopsy betrayed scarcely any signs of peritonitis. The spike which penetrated close to the ilium pierced the iliocostalis muscle, and splintered the subjacent bone. The fragment of the missing spike, four inches in length, was found lying across the rectum: it had pierced the tissues perpendicularly, and indented the third lumbar vertebra, by collision with which it had evidently been broken off. The right iliac vein was torn, from which a large quantity of blood

had been poured into the pelvis; but there was no laceration of any viscus.

In this case the symptoms of loss of blood as well as of shock were present; and the two combined proved fatal. Yet, in contrasting the results of such an accident with others of severe abdominal injury produced in a different way, we are led to the conclusion that accidental concomitant circumstances, and particularly the accompanying general violence, have often an important influence in determining the intensity of the shock. I remember the case of a railway-guard who was admitted into the hospital, having been squeezed between the platform and a luggage-train in motion. The result was extensive separation of skin from the subjacent textures, with limited external laceration below Poupart's ligament, yet allowing access to the interior of the abdomen. But the patient was neither collapsed nor sick when he was admitted. He died on the third day of peritonitis.

In reviewing the observations which I have made on abdominal contusions and parietal wounds, they appear to me to justify the following conclusions.

1. Shock of the most profound character is often the consequence of simple contusion of the abdomen; and the intensity of the symptoms of collapse is no standard by which the nature of the injury can be determined.

2. The continuance of this state of collapse for two or three days is not necessarily conclusive as to the existence or otherwise of organic lesion.

3. Severe localised pain, and even general and continued abdominal tenderness, are not to be accepted as proof of organic injury, and are quite consistent with ultimate, and even with early, recovery.

4. Tympanitis and constipation, from temporary paralysis of the muscular coat of the bowel, are the consequence of shock or concussion of the cyclo-ganglionic nerve-centres.

5. Vomiting generally follows the severer forms of contusion of the abdomen, without reference to the part struck: it is sometimes persistent, but it is not a constant symptom.

6. Retention of urine is a common accompaniment of these injuries; and is usually attended by more or less insensibility to the presence of urine in the bladder.

7. Internal hæmorrhage, as a complicating circumstance, may occur in these injuries, without its presence being ascertained from the early symptoms: but a state of syncope as distinguished from shock, especially if accompanied with local pain and swelling, and dulness on percussion, may be regarded as highly probable evidence that internal hæmorrhage has occurred.

8. Penetrating wounds, especially with blunt implements or missiles, do not necessarily involve textural lesion of any viscus; but they are often fatal, nevertheless; primarily from shock or hæmorrhage, or the two combined, or secondarily from peritonitis.

The concussion, and consequent paralysis, to which the membranous abdominal viscera are obnoxious, is similar to that of which I spoke in a previous lecture as characterising the effects of violence, without organic lesion, inflicted on the lung. In fact, severe commotion (if I may borrow the French expression) of either cerebro-spinal, thoracic, or abdominal viscera, seems to be followed by the same result of disturbed or suspended function. In the head, the centre of volition and sensation is directly appealed to, and the cyclo-ganglionic system is sympathetically affected: in the spine, the excito-motor functions are disturbed in common with those of which the cord is the intermediate conductor to distant parts: in the chest, probably the vaso-motor nerves and centres are directly acted upon: in the abdomen, the larger cyclo-ganglionic centres of this region are implicated. And these results are independent of, or rather superadded to, another disturbance of function which is due to the same cause: defective oxidation of the blood, and consequently suppressed or scanty secretion—especially of the excretory organs, as the bile and urine—under the influence of shock, manifests the interruption to which the functional integrity of this important division of the nervous system is thereby subjected.

In an earlier part of this lecture I alluded to and exemplified some of the difficulties attending the diagnosis of contusions and penetrating wounds of the abdomen, as distinguished from those more serious injuries which implicate the viscera themselves in organic or structural lesion. Indeed, in many instances, this obscurity is enhanced by the absence, for a time, of the symptoms of profound shock which accompany simple contusion or concussion—an apparent anomaly which admits of explanation, as I shall presently point out.

Many circumstances combine to determine the consequences of injuries which lay open the peritoneal cavity without visceral lesion. Some of these are apparent, others inscrutable, probably because de-

pendent on occult predisposing causes, which may be natural and inherent in the individual, or purely accidental. As an exemplification of the apparent caprice which governs the results of incised wounds of the abdomen, I will quote two cases which, no doubt, have their parallel in the experience of most hospital surgeons. I was requested, some years since, by the late Dr. Waller, to assist him in a case of ovarian disease. The period I allude to was that during which tentative operations were performed, in the hope of discovering some means, less fatal than extirpation, for the cure of ovarian tumours. The experiment which Dr. Waller proposed to try was that of inducing inflammation of the adjoining surfaces of a limited portion of the peritoneum, hoping thus to procure adhesion, as a preliminary step to tapping and draining the cyst. I exposed the serous surface of the cyst in the median line to the extent of about an inch, and placed a pledget of lint between the edges of the wound. The patient, a young woman in tolerable health, survived this, in one sense, trifling operation little more than forty-eight hours. She sank speedily in a state of collapse, and without symptoms of any acute peritonitis.

The other instance to which I refer is a case of ovarian tumour, on which I operated about twelve months since. I give an abstract of a narrative of this case, as it was sent by our Registrar to one of the medical journals. The patient was a married woman, thirty-three years of age, in tolerable health: the measurement of the abdomen, at the level of the umbilicus, was forty-eight inches; and the wave, transmitted, on percussion, from side to side, was very distinct. An incision from near the umbilicus to the pubes exposed the tumour, the contents of which were found to be gelatiniform matter of a remarkably tenacious character. One hand alone was almost useless in the prolonged task of emptying the large cyst; it was requisite to introduce both hands simultaneously from opposite sides, and then lock them together, in order to remove, little by little, the firm and glutinous colloid contents, which amounted to upwards of three gallons. Numerous smaller cysts were treated in the same way, and the universal adhesions were broken through all around. The omentum in front, the mesentery behind, the stomach, liver, and intestines, had severally to be cautiously separated. The aorta and iliac arteries were felt pulsating behind the fingers, as they were carried downwards from the abdomen into the pelvis. Ultimately the pedicle was included in a clamp; and, after some bleeding vessels were tied, the ligatures being cut off close, and the pelvis cleansed with a sponge of the fluid which had gravitated into it, the edges of the wound were approximated and fixed with an uninterrupted suture. The patient was under chloroform an hour and a half, vomited at an early period, and respiration ceased on one occasion for a few seconds. The subsequent history of this difficult and therefore tedious case may be included in the simple statement that she had not a single untoward symptom: even sickness did not recur after she was placed in bed, although she had been frequently subject to bilious vomiting previously. She was sufficiently recovered to return to her home twenty-four days after the operation was performed.

So remarkable a contrast in the results of two such different operations, as regards their relative magnitude, suggests many interesting and important considerations, which have a more or less direct bearing on the diagnosis of these injuries. The subject is one to which my attention has been often directed, and to which I shall revert when speaking of the causes of mortality in other operations in the abdominal region.

The frequency of mischief resulting from the exposure of a healthy serous or synovial surface, seems to indicate the remarkable susceptibility of these membranes in their normal condition; but I venture to affirm that the converse is likewise true. Nor is it necessary that morbid action should have altered the organic structure of these textures to produce this effect: it may be noticed even where only inflammation with changed secretion is present, or in congestion consequent on mechanical interference with the circulation; but more especially is the susceptibility of these membranes modified by chronic inflammatory changes in their physical condition and relations, as in the latter of the two cases just narrated. Indeed, this contrasted organic sensitiveness, in the different conditions alluded to, is exemplified generally, so far as I have been able to observe, in the very class of cases to which reference has been made.

I believe, if other accidental and complicating circumstances could be eliminated, that these operations which involve the protracted exposure of the peritoneum are successful in proportion to the changed condition of the serous membrane—its permanent degradation, if I may so term it, below its healthy standard. No doubt the delay, coupled with necessary violence in separating firm adhesions, counterbalance, in a measure, these advantages, especially if any visceral lesion be superadded. But the progressive plastic change, during which, under these circumstances, adjoining surfaces of a serous membrane lose their normal cha-

racter and properties, and by which they become agglutinated together, must not be viewed in the light of a morbid process tending to a mischievous result; and, if gradual, such change is unattended by the symptoms and signs which characterise peritonitis, and does, in fact, often take place without satisfactory evidence of its occurrence, as proved by the difficulty attending the diagnosis, in such cases, of the presence or absence of adhesions. On the other hand, in the healthy membrane it is not possible that its altered secretion—the presence or an excess of the saline ingredients in the outpoured serum, which is induced by exposure to the air or by traumatic irritation—may account for the often sudden and rapid diffusion of inflammation under these circumstances? A somewhat analogous consequence of what may be termed anticipated vascular derangement is witnessed in the temporary action of nitrate of silver on the skin. Erythema may often be circumscribed and arrested by the caustic application, as a spreading combustion may be checked by burning the parched grass of the prairies, although I have never seen any good result from the use of the escharotic in cellulitis: the cutaneous vessels are occupied, if I may so express myself, in the action induced by the caustic, and therefore refuse to take part in propagating the spreading inflammation. But I shall have the opportunity of further exemplifying this interesting subject in my next Lecture.

We are apt to regard organic lesions of the abdomen as almost necessarily fatal; and such, indeed, is very near the truth, with certain conditional reservation, in as far as the membranous viscera are concerned. But probably breach of texture in the solid or glandular viscera is more frequently recovered from than our opportunities enable us to demonstrate. I infer that such is the case, from a comparison of symptoms attending instances of undoubted structural lesion, as proved by *post mortem* examination, with those which I have witnessed in patients who have recovered; and also from the not infrequent evidence which I have observed, when engaged in making autopsies and in dissecting, of antecedent lesion in the liver, as indicated by linear or puckered cicatrices. In other instances, in which the patients have recovered, I have entertained but little doubt, from the attendant symptoms, that the kidney has been the seat of similar laceration or partial rupture.

That laceration of the membranous viscera should be so commonly fatal, is scarcely to be wondered at, when we consider the varied and irritating qualities of their contents, and the great susceptibility to acute inflammation of the serous sac into which they are poured. Rents of the glandular viscera, although dangerous to a more limited extent from the same cause, are often fatal from abundant hæmorrhage—a risk which does not usually attend the former class of lesions. Yet, in many instances, fatal breach of texture in the membranous viscera does not induce sufficient inflammation to be, by itself, mortal: the vascular reaction is not adequate to produce this effect; and we are compelled to view the lesion as, in these cases, operating through the ganglionic nerves. The early prostration is succeeded by an abortive effort at reaction; extravasation of the visceral contents produces renewed collapse; and the patient sinks under the secondary shock thus communicated to the visceral nerves and ganglia, in which, indirectly or by sympathy, the functions presided over by the cerebro-spinal centres are involved. Nature, as I have heard that Mr. Abernethy used quaintly to remark, stands by and shakes her head, and then leaves the patient to his hopeless fate.

That shock to the ganglionic nerve-centres is the explanation of the frequent fatality of peritonitis, would seem to be confirmed by many considerations: for this result is not peculiar to the traumatic, as distinguished from what is usually termed the idiopathic form of the disease. They run very much the same course, and a state of collapse precedes dissolution. The fatality of inflammation in other serous membranes is due either to the entailed consequences, which operate, chiefly mechanically, on the organs they envelope. Thus, the effusion of serum or the deposit of pus within the arachnoid is speedily destructive of life: and in fatal pleurisy, this result, though often deferred, is chiefly due to obstructed function from pressure. The pericardium is no exception to these remarks: for here, likewise, death may speedily ensue from the mechanical compression of copious serous effusion, as manifested by the embarrassment of the heart's action, and all the signs of impeded circulation: or, if the patient survive, the probable occurrence of adhesions induces organic change in the structure and cavities of the heart, which become atrophied and dilated, and are thus rendered incompetent to perform their functions as in health. In the peritoneum, on the contrary, as indeed is partially the case in the pleura, extensive adhesions are not inconsistent with functional integrity; although they sometimes entail, accidentally, serious and even fatal consequences.

LECTURES ON THE HISTOLOGY OF THE EYE:

(BEING THE ARRIS AND GALE ANATOMICAL LECTURES.)

Delivered at the Royal College of Surgeons of England, June 1869.

BY

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LECTURE III. (Concluded.)

It is a remarkable circumstance, that the retina in the greatest number of vertebrate animals does not contain any *blood-vessels*. A retinal vascular system is confined, I believe, to mammalia; and amongst these there are great differences in the distribution of the vessels. In man, the whole extent of the retina, from the optic nerve entrance to the ora serrata, is vascularised; and the same obtains, I believe, in the ox, sheep, deer, and antelope; while in the hare, the vessels are restricted to the area of the opaque nerve-fibres; and in the horse, they form a narrow zone around the optic nerve entrance.



In the human retina, no capillaries penetrate farther outwards than the intergranule layer on the inner surface of the outer granule layer. In consequence of this arrangement, the rods and cones are nearer to the chorio-capillaris than to the retinal capillaries. This alone would make it probable that they derive their nourishment from the capillaries; and morbid anatomy abundantly confirms this, for it is an established fact, that atrophy of the chorio-capillaris, entailing atrophy of the hexagonal pigment epithelium, is also followed by atrophy of the rods and cones.

In the common hedgehog, I have observed a peculiar disposition of the vessels, which is intermediate between the typical distribution in man and most other mammals I have examined, and that which obtains in the lower vertebrates; viz., the larger vessels, arteries, and veins, channel the capsula hyaloidea, while capillaries only pierce the retina.

In fish, batrachia, and reptiles, the vascular net which pervades the capsula hyaloidea represents the retinal vascular system of mammals, but in birds, this hyaloid net is wanting; and the great development of the pecten was thought by Müller to be a compensatory provision for both its absence and that of retinal vessels.

The description of the retina which I have just given was a general one, applicable (with the exception of what I have anticipated regarding the blood-vessels) to any retina. I will now pass on to notice—and I can only do so very briefly—the characteristic modifications which the retinal elements undergo in the five vertebrate orders.

In *Fish*, the retina is distinguished by the occurrence of cones of a

peculiar kind—double or twin-cones, as they are commonly called, by the large quantity of connective tissue it contains, and by the presence of very large branched connective tissue corpuscles in the intergranule layer.

The twin cones have distinct outer segments or shafts. Their symmetrical appendages are joined together down one side, and at their inner end they sometimes appear to be actually continuous. Each twin has, I think, its own outer granule, and detaches a separate fibre inwards.

The *Batrachian* retina is distinguished by the large size of its elementary tissues: the rods are very large. The cones, which are smaller, contain a pale yellow or colourless bead—the cone bead—which always lies in the outer end of the appendage. Twin-cones have been discovered in it by Schultze.

Amongst *Reptiles*, lizards possess cones only; these contain a pale yellow bead (in all I have examined). They are single and twin; but the twin-cones differ in many respects from those of fish. They are unsymmetrical in form, and one is beaded while the other is beardless. Their union is much less intimate than that of the fish's twin-cones. A little violence frequently dissociates them.

The chameleon, iguana, gecko, and many other lizards, have a fovea centralis, from which the primitive bacillary fibres radiate towards the periphery of the retina, and pursue an oblique course from the outer towards the inner surface of the retina, crossing the vertical radial connective tissue fibres, which enables us easily to distinguish the nervous and connective tissue fibres in this region.

In many lizards, a well developed, conical, or sword-like pecten, stands foremost from the optic-nerve in the vitreous humour towards the lens. In the common alligator, and in the Nile crocodile, there is no projecting pecten, but the optic disc is marked with a brown pigment.

The blind worm's retina closely resembles that of typical lizards, especially in the presence of a pale cone-bead.

A cone-bead is wanting in snakes. In other respects, their retina resembles that of lizards.

The common English snake has no pecten; the viper has a rudiment of one; and the boa's optic nerve has a minute globular one.

The *Chelonian* retina agrees very closely with that of birds. Both are distinguished by bright cone-beads, and by twin-cones, the structure of which, particularly in chelonia, resembles that of lizards, and differs in the same way that this does from that of the fish's twin-cone. Each twin has certainly its own outer granule, and its separate primitive cone-fibre, which, as in lizards, takes an obliquely radial direction from the posterior pole of the globe. The cone-beads are of three colours—ruby, which are the largest, and orange, passing through pale yellow into pale green: the orange and green beads are the most numerous. The intergranule layer contains large branched connective tissue corpuscles, resembling those occurring in the same layer in the fish's retina.

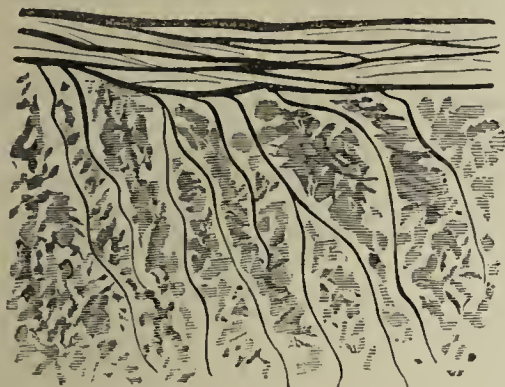
The *Bird's* retina, as I have just said, agrees in several particulars with that of the chelonia. It has cones with beads of three colours, except in the case of nocturnal birds, e.g., owls, in which, as Schultze first showed, all the beads are pale, almost colourless, a light yellow. It has also twin-cones, like those of reptiles; and in many birds there exists a very distinct fovea, and in some H. Müller discovered two, one at the posterior pole, and the other near the ora retinæ, the former being affected by the incident pencils in monocular vision, the latter coming into use in vision with both eyes. The primitive bacillary fibres radiate obliquely from the fovea, as in man and reptiles.

The *Mammalian* retina is marked by the absence of twin-cones and of cone-beads. Its elements are smaller than those of the lower vertebrates. That of man has a macula lutea, in which is a distinct fovea centralis. The macula lutea occurs also in certain apes. The bat, mouse, hedgehog, and certain other animals, chiefly of nocturnal habits, have rods only, in most others, cones and rods are both present, as in man. The retina is vascular; the distribution of the vessels, however, varies in different families.

There are two situations where the structure of the retina in man and some other vertebrates which I have particularised is peculiar; these are the macula lutea and the ova retinæ. The macula lutea is an oval spot, at the posterior pole, of a yellow colour: the coloration is not produced by granular pigment, as in that of the choroid, but it is a diffuse stain of the elementary tissues. In the centre of the macula is the minute pit—not a perforation—the fovea centralis. This pit is produced by the radial divergence of the primitive cone-fibres from a central point, and by the thinning and outward curving of all the retinal layers (except the bacillary) as they approach this point. In the fovea and the macula, except at its periphery, cones only occur, and they are more slender and longer than in other parts of the retina. The greater length is chiefly due to the elongation of the cone appendage. The slenderness of the cones does not allow their appendages to include the outer granules, so

that these latter lie, all of them, at the inner side of the membrana limitans externa. Owing to the radial direction of the primitive cone-fibres, the outer granules belonging to the central cones lie peripherally, so that the outer granular layer is absent from the foveal centre.

At the inner surface of this layer the cone-fibres combine in a plexus, the bundles of which, near the centre of the macula, are directed obliquely towards the inner surface of the retina; between the centre and the circumference of the macula they assume a direction nearly parallel to the retinal layers, and at the circumference of the macula they run nearly vertically.



At its inner surface, the cone-fibre-plexus breaks up into primitive fibres, which pass through a thin connective tissue stratum, the intergranule layer, and enter the inner granule layer. This latter, at its beginning in the centre of the fovea, is not separate from the ganglionic layer. The nerve-fibres pursue in it the same direction as in the outer granule layer.

The ganglionic layer, at the periphery of the fovea, contains three or four tiers of cells; these become fewer towards the foveal centre, but even here they lie in a double or treble series, bedded in a granular tissue.

The ora retinae is the other situation to which I referred as having a peculiar arrangement of its tissues. Being less important than the fovea, I can notice it only very briefly. Towards the ora the nervous elements gradually become fewer, the layers thin out, the beads and cones shorten, and become stouter. With this decrease of the nervous tissues, the connective tissues predominate, and they are prolonged beyond the ora as the pars ciliaris retinae, the radial fibres becoming, according to Kölliker's observations, the columnal, epithelial-like bodies, which line the pars striata.

In conclusion, Mr. President and gentlemen, let me thank you for the attention you have kindly bestowed on me during these lectures. If they shall have succeeded in putting the minute anatomy of the eyeball in a clearer light, and still more, if they shall induce any to take up the subject and work it out, I may hope that the honour the Council conferred on me in electing me the successor, in this anatomical chair, to Clopton Havers, may not prove without useful results.

AN OBSTACLE TO LONGEVITY.—At the recent meeting of the British Association for the Advancement of Science, Sir Duncan Gibb read a paper on "An Obstacle to Human Longevity beyond Seventy Years." He drew attention to the position of the epiglottis, and said that in 5,000 healthy people of all ages, and in 11 per cent., it was found to be drooping or pendent, in place of being vertical. He had discovered, he said, that in all persons over 70, its position was vertical, without a single exception—a circumstance of the highest importance bearing upon the attainment of old age amongst Europeans. In a number of instances where the age varied from 70 to 95, in all was this cartilage vertical. Many of these he cited as examples, such as the well-known statesmen Lord Palmerston, Lord Lyndhurst, Lord Campbell, and Lord Brougham. He also gave instances among old ladies still alive at ages from 76 to 92, whose epiglottis was vertical. But the most remarkable was that of a gentleman still alive 102 years old, in whom it occupied the same position. He summed up his views in the following conclusions:—1. As a rule, persons with a pendent epiglottis do not attain a longevity beyond 70. Possibly a few may overstep it, but such examples are exceptional. 2. With pendency of the epiglottis life verges to a close at or about 70, and the limit of old age is reached. 3. A vertical epiglottis, on the other hand, allows the attainment of four score years and upwards, all other things being equal, and affords the best chance of reaching the extremest limit of longevity. 4. Lastly, pendency of the epiglottis is an obstacle to longevity—certainly beyond the age of 70 years—and it is a peculiarity that occurs in 11 per cent. of all ages amongst Europeans.

AN ADDRESS

DELIVERED IN

THE SECTION OF STATE MEDICINE,

*At the Annual Meeting of the British Medical Association,
in Leeds, July 1869.*

BY WILLIAM FARR, M.D., D.C.L., F.R.S., ETC.

GENTLEMEN,—In opening this Section, I have in some respects an easy task to perform. Our course was buoyed out for us last year by my eloquent predecessor, Mr. Simon. We are prosecuting a work which engaged the earnest attention of the founders of the Association; and the interest of the subject is admitted on all hands.

Public Medicine comprehends something more than Public Hygiene—a word which comes to us from Greece through France. Medicine is, in a certain sense, one and indivisible; it has to do with the whole nature and forces of man. And yet, in great cities, divided fields of practice exist: there is the surgeon, and there is the physician; one man practises midwifery; another is an oculist; another is an aurist; another ministers to minds diseased. As each organ leads its own life, each organ—each disease—has its special student. Yet the parts forming a whole are united; there is a concert in their suffering; and all the members are directed by central volition. So one physician—one *general* practitioner—takes charge of the community of confederated organs. Now, men in the same town form one body; they have a life in common; they have common interests and common wants. The families coalesce under a Council, by whom they are governed. Each member has his own special adviser in sickness; and is it not, by analogy, natural that the incorporated community—the town—should have its town physician? Otherwise, in the absorbing interest of the parts, might not the interests of the whole be overlooked?

A new department of science is open to the town physician. For of some things the laws are most easily discerned in large masses; it is so with the stars, and it is the case here. The mortality of two town populations is easily determined; their mean lifetime can be calculated. It is possible to forecast the health of a city, and to determine the effects of any great changes in the condition of its population; whereas no man can calculate how much an individual dies daily—how long he will live—what the precise effect of any condition on his health will be. Hence the difficulty of judging the effect of therapeutic agents on a patient. Communities can only supply certain wants by common work. If they desire roads, the roads must be made and repaired at the common cost. Then light, and water, and sewerage, can only be provided adequately by that company—the town—of which every ratepayer is a shareholder. Public Medicine is in this category. Our towns, counties, and districts, are parts of that still grander community, the State; and the State, whatever may be its constitution, whether monarchical, aristocratic, or republican, has public duties to perform in watching over the public life. This is an office of high police, and was recognised in the early forms of civil society. The chief open dangers in woods and savage wildernesses were wild beasts; and the heroes of the age, like Hercules and Theseus, killed lions, wild boars, and serpents. Against fierce men and hostile tribes, in the struggle for existence, the warrior-king defended his people. These were visible enemies. But for protection against the pestilence that walketh in darkness, the people also looked to the king; they held him responsible; of him they sought remedy; and they often ascribed their afflictions to his crimes. The deaths by plague of the Greeks before Troy were ascribed to the wrath of the Sun-God, and to the misdeeds of Agamemnon.* In that more modern time of which Thucydides writes, the plague of Athens rendered Pericles unpopular. Under another form of civilisation, in Egypt, the plagues were charged against the reigning Pharaoh; and, in the wilderness, Moses undertook to stay the plague; his brother stood between the dead and the living. When their mysterious desolations were referred to the ire of the immortal gods by the Romans, the oracles were consulted by the great officers of the city and the empire.

Hippocrates inaugurated the true philosophy of disease by announcing that all its phenomena are alike divine. Plagues are traced no longer to accidental antecedents; and a complete revolution in modern thought is the consequence of the development of this doctrine. Diseases as disastrous as ever assailed the Greeks before Troy befel the British army in the Crimea; but who would now accept the explanation, that the gods thus slew the British soldier to avenge the insults offered by a

* This Greek sentiment is well wrought out in the *Œdipus* of Sophocles.

prince to the daughter of a Greek patriarch? Yet precisely such a theory satisfied the exigencies of Homer and the minds of the Greeks. The true cause nevertheless was traced here to the incapacity of a minister, who was cast out of office; and quite recently the plague among cattle gave us an opportunity of observing how easily a pestilence may become a ministerial question. The Public Health Acts recognised the responsibility of Government, and took a practical form when the Board of Health was ably administered by the Earl of Shaftesbury, Mr. Edwin Chadwick, and Dr. Southwood Smith. Lord Llanover, on its extinction, called into existence a great Council of Health, which inaugurated a system of scientific inquiry, prosecuted still further, under the direction of Mr. Simon, with the happiest results.

Public Health, Social Government, Nuisance and other Acts, abound in the statute-book; they evince good-will on the part of the legislature, but no mastery of legislation. The country wants a sanitary code; and one responsible man alone can produce such a code, to be accepted and sanctioned by Parliament. Law (1) declares what is to be done, what is not to be done; (2) it ensures the execution of its enactments by rewards or by penal clauses; and (3) it creates an adequate staff of officers to carry the law into effect. Without organs, we see no life; without administrators, no administration. Sanitary law without sanitary officers is a dead letter. Now, it is precisely at this point that our laws break down. With the failures full in view, this Association, with another great Association, called for an inquiry by Royal Commission, which was conceded by the past, accepted by the present Government, and is now sitting in Westminster, under the presidency of Sir C. Ad-derley, who has evinced much interest in these subjects. It is gratifying to us to find on its roll the names of our late esteemed President, Dr. Acland, Sir Thomas Watson, Mr. Paget, Dr. Stokes, and Dr. Christison. It is just to mention, too, that we have to thank, besides, Mr. Bruce, his predecessor Mr. Gathorne Hardy, Dr. Rumsey, Dr. Stewart, and others, for great services in promoting this important inquiry. Excluded London, Scotland, and Ireland cannot, however, be overlooked, without incurring the risk of leaving our sanitary legislation incomplete. In this, as in everything else, let us be an United Kingdom.

Sanitary administration can never be perfect without one supreme head. A Minister of Health must in the end be called into existence; but, in the meantime, his duties naturally devolve on the Home Minister. The work divides itself into four main branches—administrative law, medicine, engineering, statistics; and these branches should be organised so as to work in harmony with a Council of Health and executive heads. Under the Local Government Act, you have now on each Local Board the clerk, the health-officer, and the surveyor.

There is a disposition in England to create, for all sorts of purposes, new territorial divisions. No minister looks at local administration as a whole; and every measure appears to be isolated. The end is anarchy, waste of officers, conflict of powers. One body has charge of the highways, another of the poor, another of the public health, another of the police, another of the militia. It would be as sensible to create several Houses of Commons, for several purposes, as several councils in a single city or in a single district.

For all large towns, the organisation under the Municipal Act, with some improvements, will answer every purpose; but the Town Council should nominate a Public Health Committee, with a permanent chairman presiding over the sanitary staff, and representing it as a minister represents a department in Parliament. Take out the boroughs, as was done of old, because they have special wants, and sentiments with which the country around does not always sympathise; and then you fall back upon grouped parishes and townships in Districts or Unions, as they are called, corresponding to the historical Hundred. The boundaries and the grouping of districts, with careful revision, give you the best basis of sanitary administration. The identity of the administrative with the registration subdivisions of the country will enable us, in the causes of death and in sickness returns, to follow, step by step, the consequences of sanitary operations. Solid progress will become as apparent as the sun at noonday; errors, blunders, failures, will be revealed; and illusions will be dispelled. The appointment of health-officers was prescribed under the Metropolitan Act; and the names of Dundas Thomson, Druitt, Ballard, Buchanan, Barnes, and others, prove that among them you have distinguished men. Liverpool, Birkenhead, Manchester, Salford, Bristol, Leeds, Swansea, Merthyr Tydfil, Glasgow, Edinburgh, Dublin, recall the names of Trench, Baylis, Leigh, Davies, Robinson, Dyke, Gairdner, Littlejohn, Mapother. That the institution is so far a success, is unquestionable. All the large towns of the kingdom will ere long have their town physicians. The harvest is ripening. What can be done to aid and to increase the efficiency of the labourers? That we hope to discuss on Thursday. Among other questions, these are important: Should the public physician in large towns engage in private practice? Should he undertake the office of

coroner in all small boroughs? Should he supervise the registration of the causes of death, and inquire into every death uncertified by a qualified medical attendant? Should the county magistrates appoint a county physician?

Public Medicine is now on its trial; it is scarcely out of the martyr stage. But, as it becomes appreciated, it will open a great career to young physicians. They will, treading in the steps of Mead, of Pringle, of Lind, and of Blane, always place their profession in the front ranks. But the public health is so wide a field, and so difficult to cultivate, that it requires the aid of all classes. We want help; and we ask for it from the chemist, the engineer, the naturalist, the highest statesman, and the humblest town councillor.

What are the aims of Public Medicine? Primarily, to prevent disease; and, although it does not heal the sick, it surrounds them with all the conditions most favourable to recovery. It gives the physician chances in his favour; it diminishes the death-toll of the people. It prolongs earthly existence; and it carries numbers of souls through childhood, youth, manhood, to a ripe old age. Health gives rich and poor the full use of their faculties; it lessens sorrow; it gives fortitude in the vicissitudes of life. These are great objects; and their attainment is difficult, but it is not impossible. To accomplish them is to bestow on mankind riches more precious than gold. To endeavour to accomplish them is a noble enterprise.

Human lifetime can be exactly measured. Its complete circuit is *a hundred years*. This has been long known. The Etruscans, measuring it by the longest life of a generation, made it their *saculum*. It is our extreme lifetime. The mean lifetime in the healthiest parts of England is *fifty years*. This is not a high standard; but, on applying it to city populations, we find how much work Public Medicine has before it. The mean lifetime will often be found, in whole towns and in entire classes, to be only twenty-five or thirty years; in the United Kingdom, it does not exceed forty-one years.

Where life is of fifty years' duration, the annual mortality in a stationary population is at the rate of 20 in 1,000; there are 20 births and 20 deaths annually to 1,000 of the population. Actually, it was found that, in our healthiest districts, the rate of mortality was 17 in 1,000; because the births exceeded the deaths, and thus produced an excess of young people. Constituted, as the London population largely is, of immigrants, the mortality with a mean lifetime of fifty years should not exceed 15 in 1,000; it is 24; and the difference $(24-15)=9$, is the true excess. The same correction is required in every town.

Now, applying this measure, it is found invariably that a high rate of mortality is reduced by elementary sanitary measures. Certain things are conditions of existence. Withhold these conditions, and the people perish. Pure air to breathe is one of these conditions: you see the effects of pure air and the effects of smoke and sewage-vapour alike on the faces of the people. Pure water is equally indispensable. Sewage is carried out of the dwellings in many towns; but it is delivered into the rivers, whence the water-supply is frequently derived. The dangers of once contaminated water are known to everybody—except to a well-known class of scientific writers, who have led a certain Royal Commission into calling such water a "wholesome beverage". As population increases, impurities increase; and the rivers drain the land. What is to be done? Here our great hydraulic engineers come to our help. As Mr. Glaisher and Mr. Symons so admirably show us, the waters of the sky in these islands fall in torrents on the hills, whence they can be brought pure, by gravitation, to nearly all our great cities. Locomotion and transport of goods are useful; they have been facilitated by canals and railways, which have, perhaps, cost the country five hundred millions sterling. All our cities may be supplied for ever, for a fraction of this sum, with living waters. Then an aqueduct-sewer may follow, and dry earth may be employed. Arrangements may also be made to prevent the diffusion of zymotic diseases; but the efficacy of the existing quarantine is questionable, while its evils are evident. Small-pox is replaced by other diseases in unfavourable sanitary conditions. Here are Gordian knots to cut. But suppose all these conditions to be supplied; suppose sufficient dwellings to be provided; suppose the diet of children and adults to be adequate, and to be so regulated as never to fail by society for this purpose in friendly cooperation; and even then some of the greatest problems of Public Medicine will remain unsolved.

In a neighbouring city the Royal Agricultural Society has recently met, under the presidency of the Prince of Wales. That Society supplies proofs of the power which breeders have of producing races of sheep, cattle, and horses, infinitely superior to the races formerly in England; and holds out encouragements to further improvements. The results have been produced by placing the races in the conditions most favourable to their life, and by artificial selection. Now, we do not know what the people were in the prehistoric period of Sir John Lubbock;

but we do know, in some respects, what the people were in Queen Elizabeth's reign. They were not a perfect race, but they had many great qualities. At that date seven millions, at the last census nearly thirty millions, of the race existed in these islands; besides the swarming millions in the New World and in Australasia. Is there any correlative improvement in the fine qualities of this race? There is, in many qualities. Yet it is impossible to pass the population in review at a census without observing in many grave defects; in many, shortcomings; in many, organic degeneracies; in many, criminal depravities. In large portions of the world, only low and barbarous races roam. How, out of the existing seed, to raise races of men to a divine perfection, is the final problem of Public Medicine.

ON THE USE OF ANTISEPTIC CERE-CLOTH FOR COVERING WOUNDS.*

By EDWARD LUND, F.R.C.S.,

Lecturer on Anatomy, and one of the Surgeons to the Manchester Royal Infirmary.

I AM anxious to bring before the notice of the Surgical Section of the British Medical Association a material which I have lately used with great advantage for covering wounds, and which I have called *antiseptic cere-cloth*. It is, as the name implies, cloth or thin calico saturated with waxy matter in the form of solid paraffin, to which are added a little oil and wax, with carbolic acid in certain proportions. It possesses this double property, that, when placed over a wound, ulcer, or the opening of an abscess, it not only serves to exclude the air as an impervious dressing to the part, but it constantly emits from its surface the vapour of carbolic acid, as it is disengaged by the heat of the body, and so forms an antiseptic atmosphere around the wound.

It will be found an economical and ready substitute for the antiseptic lac plaster of Professor Lister, by which he has obtained wonderful results in the management of severe lacerated wounds, abscesses, and the like; and, in the particular method of applying the cere-cloth, I have endeavoured as far as possible to carry out those minute and careful directions which Professor Lister has given, as the only means by which to secure for the "antiseptic method" a fair chance of success. I will not occupy the time of the Section by entering upon the disputed question, how it is that the antiseptic method really acts—whether *chemically*, upon the tissues and fluids of the part; or *physiologically*, if I may so say, by arresting the development of those "septic germs" and "living organisms" which by their presence, under certain conditions, seem to determine the existence of suppurative inflammation on the surface of wounds, and thus interfere, more or less, with the healing processes; for, quite independently of this, it is very desirable, especially in hospital practice, where surgical cases are crowded together, to prevent the putrescence of the secretions from wounds, and the foetid tainted atmosphere which they engender; so that, merely on the score of cleanliness and neatness, it must be admitted that the antiseptic method has much to recommend it.

In the preparation of the cere-cloth, solid paraffin is used as the basis of the composition with which the cloth is saturated. It has these advantages: that paraffin in itself is not at all irritating to the skin; and, when made into cere-cloth, it adapts itself easily to the surface to which it is applied, moulding itself to any peculiarities of form by the warmth and gentle pressure of the hand, at the same time that it is in no way adhesive, as ordinary ointments or cerates would be; and, therefore, when it is required to be removed, it can be raised or slid off from the surface with the least possible disturbance, and a fresh piece placed in its stead. This mixture of solid paraffin, oil, wax, and carbolic acid, in the proportions which I am about to mention, does not liquefy much below 190° Fahr.; so that it retains its solid form at the ordinary temperature of the body, the vapour only of the carbolic acid being slowly dissipated. It is likewise an inexpensive material—a matter of no small importance in public practice. I am not prepared to state its exact cost; but I am sure, if made in large quantities, it will be found to be a very cheap form of surgical dressing. It can be kept in the solid state, protected from the air, for a great length of time; it can then be

warmed and liquefied as required. The calico saturated with it, by simply drawing a portion through it while in a fluid state, congeals immediately, and is ready for use; or it may be made, in pieces of any length and width, by rolling the calico over cylinders containing cold water as fast as it has taken up the cerate, as I have shown by a machine in the museum collection of new instruments at our present meeting.

To illustrate how effectually the vapour of carbolic acid, thrown off from this cere-cloth at ordinary temperatures, will prevent putrefaction, I placed some piece of fresh meat in several wire cages of a cubical form, covering each with the cere-cloth, and fixing it loosely round by an India-rubber band. This was done on the 12th of June last, and again on the 23rd of the same month; and, on opening one of the packets to-day, it will be seen that the piece of meat has remained unchanged, as far as putrefaction is concerned; although, from the time it has been kept in a warm room, it is quite dry and hard. To prove that this was due to the carbolic acid vapour, and not to mere exclusion of the air, on June 12th I also placed a piece of fresh meat in a cage, and covered it over in the same way with calico steeped in exactly the same composition as far as the paraffin, oil, and wax were concerned, but *without* carbolic acid; and in less than nine days the meat was quite putrid and moist from decomposition, and I was compelled to throw it away. This has suggested to me that possibly this cere-cloth might be found very useful for the purpose of wrapping up pathological specimens to preserve their colour and freshness for future microscopical examination; for, if it be the vapour of the acid which produces the result, this alone could not occasion any serious change in the structure or chemical composition of the tissues.

In using this cere-cloth for dressing wounds, although it is important to bear in mind that the exact size and quantity to be employed must vary with the extent and depth of the wound to be covered, and the time which is to elapse before its re-application, yet it is always prudent not to use carbolic acid at a greater strength or for a longer period than is really needed to prevent or check putrefactive changes. As soon as these have ceased, or, after a reasonable time, have not manifested themselves by the presence of foetor, the weaker the carbolic preparation the better; for there can be no doubt that carbolic acid is an irritant, and in some constitutions a very powerful irritant: hence it becomes a cause of protracted suppuration by over-stimulation. How to adjust the exact strength of the application in any given case is a matter of great difficulty; and it is doubtless one reason why many surgeons, who have given carbolic acid a trial with the object of averting putrefaction, have ceased to use it, thinking that at times it seemed to do more harm than good.

To obviate these difficulties, I make the cere-cloth of three degrees of strength, as it contains one-fourth, one-sixth, or one-eighth of carbolic acid. The strongest quality is needed in the management of the early stages of a wound; the others are more useful while cicatrisation is going on.

The exact formulæ for the cerates with which the calico is saturated are as follows; the form in each case being intended for twelve fluidounces of the cerate in the liquid state—enough to spread about one square yard and a half of the cere-cloth. The quantities which I give are to be measured by bulk, and not by weight—that is, for the carbolic acid and the oil, as well as the paraffin and the wax which have been previously liquefied; for I find that in this way I get a greater uniformity in the composition.

No. 4, or the strongest form of the cerate, is composed of pure carbolic acid, Calvert's, *liquefied*, f. $\frac{3}{4}$; olive oil (coloured red with alkanet-root, to distinguish the cerate), f. $\frac{3}{4}$; yellow wax, *liquefied*, f. $\frac{3}{4}$; paraffin, *liquefied*, f. $\frac{3}{4}$. Mix.

No. 6, the next in strength, and of a yellow colour, is composed of pure carbolic acid, f. $\frac{3}{16}$; olive oil, f. $\frac{3}{16}$; yellow wax, f. $\frac{3}{16}$; paraffin, f. $\frac{3}{16}$. Mix.

No. 8, the weakest, which should be nearly white, is composed of pure carbolic acid, f. $\frac{3}{32}$; olive oil, f. $\frac{3}{32}$, f. $\frac{3}{16}$; white wax, f. $\frac{3}{32}$, f. $\frac{3}{16}$; paraffin, f. $\frac{3}{32}$. Mix.

I trust that these few remarks will induce some of the members of the Association to make trial of this material; and that its use may serve to advance the general adoption of those principles in the antiseptic method of treating wounds which have been so ably and perseveringly advocated by Professor Lister.

I shall be happy to give samples of the cere-cloth to any interested in the subject, who are likely to have an opportunity of testing its value as a covering for wounds.

THE LIBRARY OF THE OBSTETRICAL SOCIETY will be closed from Monday, September 6th, to Saturday, September 18th, both days inclusive.

* Read in the Surgical Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

REVIEWS AND NOTICES.

STATISTIQUE MEDICO-CHIRURGICALE DE LA CAMPAGNE D'ITALIE EN 1859 ET 1860. Par le Dr. J. C. CHENU, Médecin Principal d'Armée, etc. 2 vols, 4to, pp. 1756, with Atlas. Paris: 1869.

MANY combatant officers, regarding armies from the one point of view of fighting only, refuse to believe that any special science is required for the preservation of the men composing them, or for lessening the miseries resulting from the battles in which they may be engaged. Speak to such men on the subject of military hygiene, and the effects of good or bad sanitary administration in maintaining or reducing the efficiency of bodies of troops, and the reply is, that any one of common sense knows what is good or bad for health. Refer to the necessity for an organised system of ambulance transport, for properly trained bearers and suitable conveyances for the wounded on the occasion of battle, in order to mitigate suffering, and to afford a chance of success for conservative surgery; to the need for an educated and sufficient surgical staff, that hospitals may not become charnel-houses, instead of means of restoring to their country and families the soldiers who have risked their lives in their country's service; and some hackneyed phrase, implying that war is made for killing and wounding, not for saving lives and limbs, is uttered as a sufficient reply. These are persons who regard war and its circumstances as they were half a century ago. They ignore the results of the changes which have taken place, and are still taking place, around them—the means, such as never existed until recent years, of massing bodies of troops together, and the inevitable consequence of a more imperative need for nipping in the bud those pernicious influences which, once in the ascendant, may spread like wildfire through their numbers; the perfection that has been reached in the instruments for inflicting wounds, and the consequent necessity for surgical resources to be multiplied and perfected in proportion; the rapid means, no longer restricted to the exclusive use of the few, of conveying information on passing events. Above all, they ignore the widely spread and determined feeling by which a large proportion of the people of civilised nations is animated—that, if war itself is unavoidable, its evils shall be reduced to a minimum; and that those who devote themselves to their country's service shall receive, in return, whatever the advanced medical and surgical science of the day determines to be essential for their proper treatment and protection.

To those who think that fighting, and the perfection of all that directly appertains to this object, constitute the sole thing needful in modern warfare, we earnestly recommend a study of the great work of Dr. CHENU, whose title is placed at the head of these remarks. The very publication of these volumes is a proof of the irresistible power of public opinion in regard to some of the matters to which we have already alluded. Such a work could not possibly have been published in France a few years ago; for it lays bare, without the slightest attempt at concealment, the existence of defects in the medical and surgical arrangements of the French military service to an extent that startles the reader. It demonstrates, by an immense and terrible array of lives sacrificed, and of surgical efforts rendered fruitless, the lamentable results of neglecting sanitary precautions, the adoption of which had been vehemently urged by French medical officers of the highest ranks in official correspondence, a great part of which is printed in its pages, but which was unfortunately, according to regulation, addressed to "intendants", who, from absence of the necessary training, failed to appreciate its vital importance; and it proves, beyond all question, that similar calamities must recur in case of war, so long as the medical department, to whose care the health and physical welfare of the troops are nominally entrusted, is kept destitute of the means and authority for exercising its functions in a degree adequate to its responsibility. A careful perusal of the chapters bearing upon these important subjects can alone convince the reader how incontrovertibly, and by what bitter experience, the truth of these statements is demonstrated. No one, on closing this part of the book, can any longer wonder at the painful sensations which its publication is said to have caused among all classes of people in France.

The general considerations on the topics above mentioned are discussed in the opening chapters of the first volume. They are succeeded by a journal of the principal facts and occurrences of the campaign of 1859, from the date of the first collection of the forces destined to act in Italy down to the return of the troops to France. The movements of the different *corps d'armée* are followed; and the losses on the line of march, and in the contests in which they are successively engaged, are not only numerically accounted for, but are illustrated by extracts from the reports of the medical officers with the troops, and from all other sources that appear capable of throwing light on the events under re-

view. The arrangements made for the organisation of the temporary hospitals in the field, for the more permanent hospitals established in the towns, for the removal of the sick and wounded, for their care and treatment, for the disposal of the medical staff, are explained; and a great part of the correspondence is printed, to which the management of these vast and complicated concerns gave rise. Dr. Chenu mentions that the materials were furnished to him by Baron Larrey, the *médecin-en-chef* of the army, who placed at his disposal the whole of the official correspondence, periodical returns, and clinical observations, accumulated during the campaign. Not only is no fact of importance, that occurred during the great struggle with Austria in this eventful war, omitted, but even minute details of the operations of the army medical service are furnished. These records abound with instructive lessons for the future.

The second volume, which contains nearly a thousand pages, is devoted to an elucidation of the particular wounds and diseases which occurred during the campaign. This history is divided into four parts. The first consists of returns and reports furnished by the medical officers on duty in the fixed hospitals; the second, of general remarks upon the wounds inflicted during the campaign, and their consequences; the third, of statistical tables and special surgical considerations of the wounds, arranged according to their regional distribution; while the fourth part treats on the diseases which prevailed among the troops. We can only glance in a cursory manner at the mass of materials which is here presented to the reader.

The records show that the fixed hospitals (these being altogether independent of the ambulances or hospitals moving with the troops in the field) which were established for the reception of the sick and wounded of the French army in Italy, were 303 in number. They are arranged by Dr. Chenu in alphabetical order; and under each is shown the date on which the hospital was opened and closed, a return of the number of patients admitted, of the number of days of treatment, the deaths, and the names of the medical officers on duty. Observations are added on any special features of interest connected with the locality of each hospital, or with the cases treated in it. It appears, from these returns, that the total number of French patients admitted into these 303 hospitals was 167,853, of whom 4,677 died; while 163,176 were discharged, either cured, or to be transferred to other hospitals elsewhere. In addition to these numbers, there were 25,333 entries into the ambulances or field-hospitals, and out of these 325 deaths. The total number of admissions into hospital, therefore, among the French troops in Italy, was 193,186; and the deaths of patients under treatment in them, 5,002. This number does not include those who were killed in battle, and is also irrespective of those who died afterwards in hospitals in France from the effects of wounds or diseases contracted in Italy. There was a certain number of Italian soldiers and Austrian prisoners admitted into the French hospitals; these are separately accounted for in another part of Dr. Chenu's work.

The general remarks upon the injuries during the campaign are contained in separate chapters on the wounds, according to the kinds of projectiles or weapons by which they were inflicted; on the infrequency in particular situations; on the surgical appliances required in field surgery; on particular surgical operations practised; on purulent infection; on hospital gangrene; on tetanus; and on other important subjects of practical interest in military surgery, drawn from the experience of the campaign.

The tables of wounds in particular regions show the numbers of each description and their results. Each table is accompanied with brief abstract reports of special cases. The recapitulation of these several tables shows that the number of patients treated in the hospitals for wounds, or amputations for wounds, was 19,672. Of this number, 2,962 died, or 15.11 per cent.; 2,124 were invalided out of the army, or 10.79 per cent.; 1,536 were discharged with temporary pensions, or 7.80 per cent.; while 13,050 were healed, or 66.30 per cent. Add to the 2,962 deaths in hospital, 196 officers and 2,340 men killed in action, and the total number of recorded deaths in the French army from wounds and injuries during the war becomes 5,498. Besides these, 1,128 men appear under the heading of "disparus", no records of what became of this number having been available; and, considering the time that has elapsed, these may fairly be added to the number of deaths. This raises the loss to 6,626 men. This number, again, does not include 2,040 French soldiers, who died from various diseases in Italy during the comparatively short war of 1859. These being added, the total number of deaths becomes 8,666.

The last seventy pages of the second volume are devoted to considerations upon recruiting in the French army and its effects upon the population of the country. The atlas which accompanies the work includes upwards of a hundred maps and plans, showing the movements of the three armies before, during, and after the principal battles. They

are intended to illustrate the text, particularly in reference to the development of diseases during the campaign, to the proportions of wounds in particular corps, and to the positions of the field hospitals during the several actions. The projectiles used by different armies, and the alterations in their forms after inflicting wounds, are also shown in six plates in the atlas.

In concluding the above hasty notice of the contents of this voluminous medical and surgical history of the Italian war of 1859, we feel it incumbent on us to express our admiration of the professional knowledge, talent for methodical arrangement, and the devotion displayed by Dr. Chenu in accomplishing so vast a task. It is a matter of notoriety that Dr. Chenu not only gave years of labour to his former work—*The Medical and Surgical History of the French Army in the Crimea*—but that he also expended a considerable sum out of his private fortune in its publication. Comparatively few persons can be expected to purchase a work of the kind now before us, as well from its special nature as from its necessarily high cost—£4; and it is to be presumed that a similar pecuniary loss cannot but happen to Dr. Chenu in the present instance. In considering such great, and, at the same time, gratuitous services, we are tempted to ask if some tribute of gratitude should not be offered to their author by those whom his labours are so calculated to benefit. No one has written so much in the interest of the military medical corps of all nations, or striven so earnestly to do them justice, as Dr. Chenu. The general tenor of the work before us is to demand for officers of the public medical services the rank and authority to which they are properly entitled; to demonstrate the importance of their functions in armies especially under the circumstances of campaigning; and to show that, if the value of preserving the health of the soldier who spares not his life in the day of battle is once comprehended, the position of the military surgeon to whom this charge is entrusted must become proportionally one of consideration also. We trust that before long the relatively obscure part which has hitherto been allotted to the medical officers in the French army will be changed for one in which their professional knowledge can be employed with more advantage. The necessity for the change has never before been so plainly demonstrated as it is in these volumes by Dr. Chenu.

A HANDBOOK OF THERAPEUTICS. By SYDNEY RINGER, M.D., Professor of Therapeutics in University College, Physician to University College Hospital. London: H. K. Lewis. 1869.

EVERY one who comes forward with a treatise bearing on therapeutics should receive, in the present state of our knowledge, at least a fair hearing, if not a hearty welcome; and the more especially when the author has previously made his voice heard with acceptance on such subjects. Dr. RINGER is one who, we think, may be classed in that category. He has paid especial attention to therapeutics for some years, both as professor of this branch of medicine in University College, and as an earnest worker in the wards and out-patient room. He now presents a *Handbook of Therapeutics*, containing nearly five hundred pages, designed, as he modestly puts it, for students and young practitioners, and containing much of what is practically known of the application of remedies in disease.

The arrangement adopted in the volume is, with some alterations, after Buchheim—one in many respects suited for a practical treatise on therapeutics. Dr. Ringer devotes the first chapter to the therapeutical value of Oxygen; and this is followed by some useful hints on the internal use of Water, the value of Cold and Warm Baths, and Ice. Short chapters are then given to the consideration of Peroxide of Hydrogen, Carbon, Carbonic Acid Gas, and Nitrous Oxide Gas, in which last an admirable account of the physiological action and use of the gas, by Mr. Clover, is appended. The author then proceeds to discuss the value of Sulphur, Chlorine, Iodine, Bromine, and their Salts. The Acids and Alkaline Salts are next considered, and the Metals and their Preparations. Here follow chapters on Collodion, the Oils, Glycerine, Tannic and Gallic Acids, Tar, Carbolic Acid, Musk and Castoreum, Alcohol, and Chloroform (including some excellent observations on its administration), Ether, Iodoform, Camphor, and Turpentine. The latter half of the volume is mostly devoted to the remedies derived from the vegetable kingdom—the Ethereal Oils, Digitalis, Opium, Aconite, Ipecacuanha, Actæa Racemosa, Calabar Bean, Conium, Aloes, etc. Some excellent and extremely useful chapters on Cantharides, Blisters and Counterirritation, and Enemata, are given. A Posological Table, a Dietary for Invalids, and an Index, complete the volume.

The author, as we have said, designed the book simply as an introduction to therapeutics for the use of students and young practitioners. That it will be found most useful to such, there can be no doubt; but we are also sure that, from the mass of valuable, readable, and well arranged information it contains, and the numberless minor practical hints scat-

tered throughout its pages, the work will be almost equally useful to the busy practitioner; and that it will receive from the profession generally the warm welcome which it deserves.

BRITISH MEDICAL JOURNAL.

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CARBOLIC ACID TREATMENT OF WOUNDS.

WE earnestly trust that, in any further investigations of the success or non-success of the so-called "antiseptic treatment" at Leeds, the personal element will be as far as possible avoided. The subject is so important, that all honest investigators need to have their faculties clear, and unprejudiced by the clouds which personal discussions are so apt to raise. The discovery of the best means of preventing contagion to wounds has for long been an aim to which the ingenuity of surgeons has been directed. Whether carbolic acid be the precise agent most suited to the purpose, and whether the details adopted at Glasgow be those precisely best for its application, are questions upon which we can well afford to suspend our judgment. We wait the result of accumulated experience. The rare combination of enthusiasm in prosecuting the inquiry, and of caution in deducing the results, which Professor Lister has himself shown, is a quality which we must all admire, and which, as far as we individually can, we should seek to imitate. It is, we believe, chiefly from disciples, and not from himself, that strong statements have emanated. Let us do all we can to master the principles involved, and be in no hurry at all to take sides in its discussion.

Numerous Antiseptic Methods.—As an important preliminary to the correct appreciation of the question, we would ask that the term "antiseptic treatment of wounds" be allowed to keep its wide meaning, and not narrowed down to the special details of the one which has of late mostly occupied our attention. Although there are some objections to the use of the names of inventors when the invention is fully established, these are but slightly felt whilst the discussion is going on. Many conveniences will result, if the plan recently carried out at Glasgow, and which includes much detail and several original proposals, be still spoken of as "Lister's method". Of antiseptic plans and suggestions we have had many. Plans for exclusion of air, use of lotions supposed to disinfect wounds, alcohol, solutions of chloride of zinc, immersion treatment, charcoal poultices, and, at a later period, dry charcoal bags, and many others, have from time to time claimed attention, and received it. The surgeons to the Middlesex Hospital, for instance, some years ago tried chloride of zinc largely, and spoke very highly of its success. It is nearly thirty years since Sir James Simpson urged the danger of contagion from surgeons' instruments (saws, etc.) to wounds made by them, and suggested precautions. All these and many others are "antiseptic methods"; and that this epithet should be applied to one only, will be both unfair and very inconvenient.

What is Lister's method? We almost feel to owe an apology to the introducer of this method for not trying to explain his method in his own words. We shall prefer, however, to put his opinions as concisely as possible, as they appear to lookers on—of course, not rendering him in any way responsible for our exposition.

We believe, then, that Lister's method is founded on the belief—

That the chief cause of the suppurative inflammation of wounds, abscess-cavities, etc., is the contact of air; and that the deleterious influence of air is not that of air as an inorganic compound, but as the solvent and vehicle of certain living elements (germs, if you like; if not, some other name must designate the same thing), which cause the decomposition of animal fluids, and render them poisonous.

That these air-inhabiting elements may be killed and rendered innocuous by treatment with various chemical agents.

That carbolic acid is one of the most convenient and efficient of the contagion-destroyers which we possess.

Based upon these articles of belief, Lister's method comprises attention to the following matters:—That air shall on no account be allowed access to wounds or abscess-cavities, when it is possible to exclude it; that, when air cannot be excluded, it should be disinfected by carbolic acid; that in many cases it is wise to take double precautions both for the exclusion and disinfection of the air; and, lastly, that the surgeon's instruments, fingers, ligatures, sutures, etc., ought all of them to be carefully disinfected with carbolic acid.

Now, it is quite possible that the germ-theory may be true only to a small extent, and in reference to specific animal poisons; and it is quite possible that air may be an excitant of suppuration, wholly independently of any germs that it may contain, and yet the line of practice may be excellent. At any rate, it may be asserted of Lister's detailed precautions, that there is not a single one, which, however useless, can possibly be injurious. All surgeons have long been agreed as to the desirability of excluding air; and few can doubt the efficiency of creasote, carbolic acid, and other preparations of tar, in preventing cell-growth. It may easily come to pass, that some of Lister's detailed recommendations may be thought superfluous; and the value of the acid as an application to wounds may yet come to be more and more highly recognised. We can scarcely imagine that, unless it is superseded by something better, it will lose its reputation. Whether that reputation will depend chiefly on its powers in preventing cell-proliferation (inflammation), or in destroying "germs", may be open to doubt; and, in pursuing the inquiry, it is very desirable that we should keep all possibilities in mind.

THE ORIGIN OF LIFE.

v.

WE have thus far been able to come to the conclusion (1) that, so long as the statements of the heterogenists concerning the mode of evolution of the higher ciliated infusoria were true, their arguments could not be sensibly affected, even if the panspermatists did succeed in finding germs in the air; they would have established the fact that a so-called "spontaneous generation", or rather, as we would say, a new evolution of life, could take place out of dead organic matter. And this being once admitted as a fact, their adversaries would probably not care so much whether it should be shown to be one of rare or of frequent occurrence. It would then be open to them to inquire, in an unbiassed spirit, whether the vast multitudes of these animals which quickly appear in organic solutions were likely to have arisen, for the most part, in this manner, judging from actual observations as to the rapidity of their evolution; or whether they had rather entirely proceeded from a few ova or dried infusoria, such as the panspermatists may have imagined to have dropped into the solutions—notwithstanding all that has been said as to the extreme rarity with which a process of fission or of budding can be seen to take place in these animals, and, in spite of the acknowledged fact that the occurrence of reproduction after the sexual method takes place only under exceptional conditions. We may, therefore, fairly dismiss from our consideration the question as to whether the air does, or does not, contain the germs of *ciliated infusoria*—it is altogether a non-essential so far as this argument is concerned. We come then to the monads, bacteria, and vibrios, which have been acknowledged on all sides to be the first forms of Life that appear in organic fluids; and the real question to be resolved is, how do these get into the solutions? or the question may be even narrowed still further, as we have previously shown, so that it really comes to be simply this, how do monads appear in organic solutions? Now, we

have also endeavoured to point out (2) that it would be hopeless to seek for the germs of monads in the air, since the monads themselves are often not more than 1-50,000th of an inch in diameter; therefore (3) it might fairly be said that nine-tenths of the discussion and experimentation which has taken place as to the existence or not of germs in the air has been totally irrelevant to the question whether the doctrines of the heterogenists are correct or not. Then, we have also pointed out (4) that *à priori* arguments and analogical reasoning cannot be ignored in the consideration of a question like this; and that, if we compared what is now well known to take place in the evolution of a ciliated infusorium, with that which the heterogenists presume to take place in the evolution of a monad, we could only arrive at the conclusion, that the series of phenomena were in every way parallel—that in each case there was an aggregation of altered organic particles, taking place in the midst of dead organic matter, and that in the one case we could actually watch every step in that evolution of Life which terminated in the production of a comparatively highly organised Infusorium, whilst, in the other, because our optical instruments were so far defective, we could not watch that primordial and simpler collocation of atoms which results in the evolution of a Monad. We then (5) called attention to the fact that no one knew anything about the mode of propagation of monads, bacteria, and vibrios—that no one had seen them undergoing a process of fission, and that all the evidence from observation went directly the other way, to the effect that the simpler forms were continually tending to grow and segment, or else to cohere together, and thus to give rise to the more complex forms. And, lastly (6), we have shown that, so far as actual observation went, the examination of organic solutions in closed tubes showed that these, though at first clear and free from visible organic particles, in the course of a few hours became more or less clouded from the presence of countless multitudes of rapidly moving organic units—the monads and bacteria.

Now the latter observations clearly point to the probability that monads do not increase and multiply by a process of fission—and, indeed, if they did, we should still have to inquire as to the mode of origin of these primary monads—so that we are driven to presume that they must either proceed from monad germs, which are themselves of a perfectly inappreciable size, and of an utterly unknown mode of origin; or else we must presume that they are directly and newly evolved out of the organic matter in solution, just as we may see that ciliated infusoria are evolved out of dead or motionless organic granules. We are thus reduced to two alternatives, neither of which seems capable of proof. Either we must assume the existence of monad germs too minute to be capable of appreciation teeming everywhere—metaphysical germs we may almost call them, as difficult of recognition as those of Bonnet—or we must believe in the possibility of this new evolution of monads out of organic matter in solution.

But, as it would not be well for us too lightly to assume the possibility of the truth of this latter supposition, let us at first suppose it to be conceivable that the monads which do so soon teem in solutions that have been exposed, however slightly, to the influence of the atmosphere, may have been produced from pre-existing monads, or from their invisible germs, which have originated through some unknown method of propagation. And then let us inquire under what pressure of adverse conditions it is still possible for us to obtain evidence of the appearance of such bodies in organic solutions, so that we may judge whether it would seem possible that these could have proceeded from monads or germs which had escaped destruction.

This compels us to make a few brief statements, first, as to some of the principal results derivable from a very large number of experiments which have been carried on in France during the last ten or fifteen years, in order to determine to what extent living organisms and their germs or spores are capable of resisting, without destruction, successive

elevations of temperature. Now, in the first place, MM. Claude Bernard and Milne-Edwards have both demonstrated that a moist temperature of 212 deg. Fahr. kills every organism which is submitted to it. Spores of *Penicillium*, *Aspergillus*, and other microscopic fungi were found to have been completely destroyed by exposure for a single minute to the influence of boiling water, as M. Pouchet and others have shown. It has been ascertained also, by M. Pouchet, that no infusorial animalcule or vibrio can resist the influence of water at a temperature of 130 deg. Fahr. This temperature, moreover, destroys the vitality of the eggs in the proligerous membrane, though the ordinary sexually produced eggs of individuals of the genera *Paramecium* and *Vorticella* were often found to resist a temperature of 160 deg. Fahr., though they were always killed by a moist heat of 169 deg. Fahr. Then, M. Victor Meunier (*Comptes Rendus*, tome lxi) undertook a series of experiments, in answer to a query of M. Milne-Edwards, to ascertain what was the degree of resistance possessed by the ciliated infusoria when they were in that 'encysted' condition which they so frequently assume. He found that, after a number of these had been submitted to a boiling temperature for ten minutes, they had been completely destroyed, and not a trace, even of the cysts, was to be met with on subsequent microscopic examination of the solution. The same destruction was afterwards found to be brought about when the temperature of the solution was raised to 142 deg. Fahr., and yet when in this 'encysted' condition it is admitted by all authorities that the ciliated infusorium is least amenable to the influence of adverse conditions. M. Meunier also found, during these experiments, that when solutions contained, as they generally did, monads and bacteria, as well as ciliated infusoria, that all these forms alike had perished after the solution had been raised for a time to the above-named temperature of 142 deg. Fahr. Thus it seems almost certain that, even granting the supposed germs of monads have any real existence, these also would perish in a solution that was raised to even many degrees short of the boiling point; and that monads and their germs would cease to exist altogether as organic forms after exposure for a single minute to the influence of a boiling solution, just as we have seen that, under these conditions, the germs of the microscopic fungi and of the ciliated infusoria have ceased to exist.

With regard to the power that animal and vegetable organisms possess of resisting the influence of a dry heat, there is not quite so much unanimity of opinion amongst savants as to details, though almost all are agreed that even those animals which are the most tenacious of life—the rotifers, the sloths, and the anguillules of Spallanzani—are completely killed by an exposure of thirty minutes, or less, to a dry heat of 212 deg. Fahr.; whilst every one would admit that a similar exposure to a temperature of 260-266 deg. Fahr. would completely destroy all forms of animal life, just as it does every form of vegetable life—including the long resisting seeds of the *Mucedinæ*, which even M. Pasteur admits do thereby completely lose their vitality and power of germinating. Thus vanishes the doctrine of Spallanzani, that the seeds of certain fungi could resist "à la chaleur d'un brasier ardent," and of M. Gaston d'Auvray, who actually announced his belief in the incom-bustibility of ova and spores!

Having now stated what is admitted to be proved as to the power that animal and vegetable organisms and their germs possess of resisting the destructive tendencies of heat, we will cite two or three of the simplest and most conclusive out of the almost innumerable experiments which have been performed by the advocates and opponents of heterogeny. These experiments will, we think, tend to convince very many persons that the living organisms which are afterwards found in the solutions must have been newly evolved, since it would seem quite impossible that any of them, or of their germs, could have braved and survived the conditions to which the different media had been submitted.

1. The first experiment we shall describe is one of M. Pouchet's, bearing upon the development of the microscopic fungus known as the yeast plant. He says:

"We plunged a flask to the bottom of a vessel containing a decoction of malt which had been boiled for six hours; there it was completely filled with this decoction, and it was carefully closed before it was brought to the surface. Afterwards, with excessive precaution, the circumference of its mouth was luted with a compound of copal varnish and vermilion, and thus we were certain that the flask was hermetically sealed. At the end of six days, the external temperature having an average of 18 deg. C. (66 deg. Fahr.), we saw a slight deposit of yeast at the bottom of the flask. On the seventh day, the temperature of the laboratory being suddenly raised to 27 deg. C. (82 deg. Fahr.), the flask burst with a loud report, and its upper half was blown to some inches' distance. Then we saw with the naked eye that a notable quantity of yeast had formed in the liquid under experiment, and the microscope demonstrated the fact beyond question."

Now, seeing it to be freely admitted by all parties that the mere contact with a boiling solution is sufficient to destroy the germs of the lower fungi, these experiments, faithfully and carefully performed with such results, would seem to make it almost absolutely conclusive that such organisms may be newly evolved out of organic solutions. In one of his experiments, M. Pouchet allowed the flask to remain in the boiling liquid for ten minutes, without affecting the result in the least. Although nothing is said about the presence of monads and bacteria in these solutions, we may almost certainly assume that they did exist, since their presence is invariably found to precede the appearance of all other and higher organisms.

2. M. Pouchet has also repeated the celebrated experiments made with calcined air by Dr. Schwan in 1837, in such a way as to leave less room for doubt. He has, moreover, invariably obtained the same results from all his experiments, though Schwan freely acknowledged that he was sorely puzzled by his own trials—since he sometimes got one result, and sometimes another of an opposite kind. M. Pouchet employed an apparatus which, as he describes it,

"Consists of a glass flask of about a litre in capacity, containing 150 cubic centimètres of water, having an elongated neck, placed horizontally, and provided with a stop-cock. This neck, communicating with a porcelain tube, filled with fragments of the same substance, traverses a heated brazier, and is provided, at its termination, with a set of Liebig's bulbs, filled with sulphuric acid. The putrescible substance, contained in a glass tube with a lid, after having been heated for a space of two hours to a temperature varying from 150-200 deg. C. (302-392 deg. Fahr.), is placed within the horizontal neck of the globe; the water contained in this is then boiled for a quarter of an hour by the aid of a spirit lamp, in order to make it perfectly certain that the whole of the surface of the globe has been raised to the same temperature. Thus the vapour traverses the tube, which has been previously raised to a white heat, and issues from the Liebig's bulbs which have been adapted to it. When this has been abundantly expelled, the lamp is separated slightly from the globe in order that the air may be slowly sucked in. This then enters the apparatus by traversing at first the sulphuric acid in the Liebig bulbs, then the labyrinth of fragments of porcelain and filaments of earth flax contained in the tube, all of which are raised to the most intense red heat. At last, when the temperature of the globe has sunk to that of the surrounding air, by inclining its neck the tube containing the putrescible substance is precipitated into the cooled water. The globe is then inverted, and, to ensure greater certainty, after having closed the stop-cock, this is plunged into a bath of oil previously heated to 150 deg. C."

M. Pouchet has employed this apparatus several times, using as his putrescible substance, sugar, gelatine, filaments of cotton, or branches or roots of different plants, and always, at the end of a longer or shorter period, he has found the liquid assume a more or less cloudy appearance owing to the development of monads, bacteria, and vibrios, either alone or in combination with fungi. Had these same solutions been exposed to the influence of ordinary air, there would have been found in them, in the course of a few days, in addition to these lowest and neutral forms of life—the monads, bacteria, and vibrios—some of the highly organised ciliated infusoria belonging to the genera *Para-*

mecium, *Kolpoda*, *Vorticella*, etc. But when all the precautions above-named are taken, only the lowest organic forms and fungi develop themselves, and even these make their appearance sometimes only after the expiration of several months—so much does the excessive heat and the increase of tension within the closed vessel modify the phenomena which take place in solutions of organic matter.

Similar results have been arrived at by MM. Mantegazza, Joly, and Musset; and, more recently, both Ingenhousz and Professor Wyman, of Cambridge, U.S., have obtained organisms in their solutions, after the air has been twice calcined. Yet, in these experiments, the putrescible substance was heated to a temperature of from 302 deg. to 392 deg. Fahr., for a space of two hours (whilst it is admitted by M. Pasteur himself, that even the spores of the *Mucedineæ*, which have the greatest known powers of resistance, are utterly unable to withstand the influence of dry air raised to a temperature of from 260 deg. to 392 deg. Fahr. for half an hour); the water of the solution had been boiled for quarter of an hour; and the air which was allowed access to it had first to pass through sulphuric acid, and was then subsequently calcined. The influence of the sulphuric acid alone would have been deemed adequate to have thoroughly purified the air that was drawn through it from every living germ, so that, in these experiments, M. Pouchet may be said to have combined the celebrated experiments of Schultze and of Schwan. Schultze's experiments had an enormous influence in their time; but M. Pouchet and others have found that the results in their performance of this experiment have been the very reverse of those which Schultze described. He could never find any of the lowest organisms in his solutions (and this really is not to be wondered at, seeing the very rough way in which he examined them); whilst the heterogenists maintain that they always find organisms in the solutions which have been used in this experiment.

3. As the way in which M. Pouchet repeats Schultze's experiment is very simple, and is seemingly free from all obvious objection, we will briefly describe his method. He introduces into a flask either a decoction of hay or of gall-nuts, or some other organic solution. This he boils continuously for four or five hours, and when he has thus become absolutely certain that the whole of the flask is raised to the temperature of 212 deg. Fahr., he closes it with a glass stopper traversed by a tube with a set of Liebig's bulbs containing sulphuric acid (the place where the tube is luted into the hole of the stopper being silitated). He allows the water to continue boiling for nearly half an hour, permits the apparatus to cool slowly, and then either places it in the shade at an uniform temperature, or else exposes it to the sun in order that the air within may be renewed from time to time by the daily alternations of temperature. In this way, in a comparatively short time, monads, bacteria, vibrios, and minute fungi, are developed in the solutions. Here again, however, the organic solutions have been boiled for a prolonged period, and all air that gets access to them must have previously passed through strong sulphuric acid—a fluid which is so eminently destructive to everything like life and organisation, that, as MM. Joly and Musset have ascertained, a single drop of it diluted with about two-thirds of an ounce of water is instantaneously destructive to infusoria.

DR. PETER ALLEN has been appointed Aural Surgeon to St. Mary's Hospital.

THE Library and Museum of the Royal College of Surgeons were closed on Wednesday last, for one month.

THE *Gazette Médicale de Paris* of Saturday last announces that it intends to devote a special article to an account of the proceedings of the recent meeting of the British Medical Association at Leeds.

DR. B. W. RICHARDSON was, on August 19th, unanimously elected an honorary member of the Physical, Medical, and Statistical Academy of Milan.

The Second Congress of Russian Naturalists has just been held in Moscow. The nine sections into which it is divided embrace, apparently, all sciences, in contradistinction to literature—not natural science merely.

VERY EARLY VACCINATION.

IN reference to the suggested extension of the time allowed for vaccination, it may be worth while to suggest that the period now selected by many practitioners is really later than that most convenient. If it were a more universal custom to vaccinate within a few weeks of birth, we suspect that many of the popular objections to the practice would diminish. Young infants suffer less than older ones, give far less trouble to their nurses, and are less liable to skin eruptions. Many of the cases of long delay are on account of circumstances—failure of health, or the appearance of skin-diseases, etc., which did not exist during the first few weeks. Probably in healthy infants the earlier it is done the better.

THE BICHLORIDE OF METHYLENE.

WE are informed that two cases have occurred during the last fortnight at the Moorfields Ophthalmic Hospital, in which the inhalation of the bichloride of methylene caused alarming symptoms. In each the symptoms consisted in sudden syncope, and in each they passed wholly and quickly off under appropriate treatment. In each the patient was a young child (in one an infant), and it is suggested that perhaps this agent may be less safe in very young subjects than in adults. The bichloride has of late been extensively used at Moorfields Hospital, its peculiarities of rapid effect and rapidity in passing off, and the seldomness with which it causes sickness, having great value in operations on the eye. The patients are rarely more than a minute before the operation may be commenced; and after its completion they usually wake up at once, and are able to walk away as soon as the bandages are adjusted. In these respects the contrast between it and chloroform is very great. It is less adapted for prolonged operations.

RETIREMENT REGULATIONS AT HOSPITALS.

MOST of our large hospitals now have rules regulating the retirement of their medical officers, and fixing the period at which it shall take place. In some the age of the incumbent is the standard adopted, and in others the length of time during which he has been in office. At St. Bartholomew's, St. Thomas's, the Moorfields Ophthalmic, etc., we believe, the attainment of the age of sixty renders resignation compulsory. This in some instances occasions personal hardship; as, for instance, when a surgeon has been kept long waiting in a junior post, and has only enjoyed the senior office, with its fruits, for a short period. In the cases of Mr. Wormald and Mr. Skey, at St. Bartholomew's, this kind of injustice occurred, and was generally acknowledged. In Mr. Solly's case, at St. Thomas's, the action of the rule was even suspended, so strongly was it felt that to compel his resignation would be at once to inflict hardship on him, and be a loss to the institution. At the London Hospital, and at some others, a physician or surgeon is allowed, irrespectively of age, to retain office for twenty years. In most cases, this rule acts well, and is probably about the same thing as the other. Now and then, when office has been gained in early life, the retirement may be enforced of an officer still in the prime of energy, and considerably short of sixty years. When this happens, it is a loss to the school and the patients. At the London Hospital, just now, the resignation of Mr. Curling is an instance in point. We very highly approve of laws for the attainment of the object in view; but, whether either of those mentioned are exactly the best, is open to question. In the present day, appointments are gained at most of our hospitals earlier in life than was formerly the case, and advancement is correspondingly rapid, so that it is not probable that a law fixing a definite age for retirement will in future often press hardly. In some respects, it is clearly better than one assigning a definite period of tenure of office; or the two might be combined.

MR. LITTLE'S RESIGNATION AT THE LONDON HOSPITAL.

Mr. LOUIS S. LITTLE has, we hear, resigned his appointment as assistant-surgeon to the London Hospital. He was elected in 1861, and had distinguished himself by his zeal and skill in operative surgery. During that short period he had, we believe, performed all the great operations in surgery, and most of them repeatedly. One of his last achievements (possibly unique) was to fish up a large tooth-plate, swallowed during sleep, which was free in the stomach. This was accomplished with safety to the patient. He had also quite lately imitated (probably for the first time in England) the American procedure of subcutaneous section of ankylosis of the knee-joint. This case also was most successful. Mr. Little's reason for resigning a valuable appointment, and a career of much promise, is, we understand, that he has an unusually good opening in one of the colonies, which seemed more attractive than the hopes delayed of London practice. We hear that at least three candidates, all London Hospital men, will come forward for the vacancy caused by Mr. Little's resignation.

POISON-SATURATION OF OLD HOSPITALS.

BEFORE we hastily accept the opinion that old hospitals are necessarily saturated with the sources of contagion, and that it is requisite to pull them down, or to adopt expedients of the ingenious kind suggested by Dr. Giles in our current JOURNAL, it may be well to inquire a little further as to the truth of the assertion. How long does a specific source of contagion retain its vigour? Surely not indefinitely. In many cases in which the hospital walls or floors are suspected, is it not more probable that the contagion occurs by means of bed-clothing, of attendants, of sponges, or the like, and might easily be remedied? In some notes on his experience of the Schleswig-Holstein war, Mr. Little recorded the fact that he never found pyæmia more prevalent in London hospitals than it was in certain school-rooms which were then occupied as hospitals for the first time, and from which all windows had been removed in order to be secure against a poisoned atmosphere. Another important question is, whether the temporary disuse of wards and their thorough disinfection is not likely to be quite as effectual as their rebuilding. We do not pull down a private house because typhus-fever has occurred in it. We have been informed that, during the epidemic of cholera at the East-end three summers ago, the surgical wards of the London Hospital were, to a large extent, emptied, and the entire building for several months saturated with carbolic acid vapour; and further, that during the succeeding two years there was a comparative immunity from erysipelas and pyæmia, the statistics of amputations showing a marked improvement. This, of course, may have been a coincidence, but it is worth recollecting.

CROYDON GENERAL HOSPITAL.

THE second annual meeting of the committee of this hospital was held on August 26th. The report gave a very satisfactory account of the financial condition of the hospital, showing that there was, after paying all expenses, a balance in hand amounting to £152. The hospital is partially self-supporting; in-patients paying three shillings per week, and out-patients contributing sixpence per week while under treatment. The committee, however, believing that there might be those of the industrial classes whose position would preclude them from paying the sum required by the regulations for in-patients, but whose cases were deserving of attention, submitted to the governors, at the last annual meeting, a rule that four free beds be provided, and that a limited number of deserving cases be admitted thereto from time to time, at the discretion of the medical officers. This rule was unanimously received, and has been acted upon. The cost of the beds and furniture, amounting to £27 : 18 : 3, has been defrayed by the liberality of four governors. The meeting approved the step which had been taken. The present hospital being held only under a brief lease, it is contemplated to build a new hospital in Croydon. There are, it is said, two pieces of ground eligible for the purpose.

SCOTLAND.

DR. ANDREW ANDERSON, Dr. Coats, and Dr. Fleming, have been re-appointed Medical Examiners in the University of Glasgow for the current year.

THE foundation-stone of the new Infirmary at Dumfries is to be laid, with masonic honours, on the 16th instant; and arrangements are being made for a grand public procession of local trades, guilds, clubs, etc., upon the occasion.

As many as 243 cases of typhus fever were reported by Dr. McGill as having occurred in Glasgow during the fortnight ending Saturday last, against 199 during the preceding two weeks. This is, with one exception, the highest number of fever cases reported during the year.

DEATH OF DR. BEGBIE OF EDINBURGH.

It is seldom our painful lot to record the death of a member of the profession so esteemed, so beloved, as was the late Dr. Begbie of Edinburgh, who died on Thursday of last week, at his residence in Charlotte Square. During a professional career of nearly half a century, he had won for himself the reputation of an acute practitioner and careful observer, and the respect and affection of the whole profession in and around Edinburgh, and of every patient whom he attended. We must postpone an obituary notice of Dr. Begbie to an early number.

EDINBURGH ROYAL INFIRMARY: RESIGNATION OF MR. SYME.

MR. SYME has resigned his office as one of the acting surgeons to the Infirmary. The managers of the hospital, accepting his resignation, unanimously adopted the following resolutions; viz.:

"That the managers of the Royal Infirmary receive with much regret Mr. Syme's resignation of his office as one of the acting surgeons of the hospital, the duties of which office he, during his long and brilliant career, has performed with so much benefit to the patients, and with so much honour to the Medical School of Edinburgh: That the managers, being anxious that Mr. Syme should still remain connected with the hospital, request that he will accept of the appointment of one of the consulting surgeons: That an excerpt from the minutes, embodying these resolutions, be transmitted by the clerk to Mr. Syme."

IRELAND.

UNIVERSITY OF DUBLIN.

THE Board have determined that all candidates for the Mastership in Surgery must attend an ophthalmic hospital for three months.

RETIREMENT OF DR. D. HEWITT.

DR. HEWITT, Physician to the City of Dublin Hospital, has given up the profession, having become a partner in a great manufacturing firm at Salford. Within a few years he had gained very high repute as a zealous physician and most successful teacher of materia medica in connection with the School of the College of Surgeons. In the latter position, he will be succeeded by his brother, Dr. S. Hewitt.

IRISH POOR-LAW AND MEDICAL CHARITIES.

THE Report of the Poor-law Commissioners just issued is satisfactory, as it shows a decrease of 3,263 from those receiving workhouse relief last year, and a diminution of 810 in the deaths. Small-pox, which destroyed 145 in 1865, the first year of registration, proved fatal in only three cases this year. The forms which the dispensary officers use have been much simplified and abbreviated. The Commissioners urge that the inspectors, whose duties have been much increased, should obtain a higher rate of payment; and, as the appeal in favour of the Superannuation Act by one of these gentlemen was effectual, there is good reason to suppose their statement will be successful.

THIRTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in LEEDS, July 27th, 28th, 29th, and 30th, 1869.

SECTION A.—MEDICINE. President, W. T. GAIRDNER, M.D.

Wednesday, July 28th, 1869.

On the Practical and Pathological Bearings of Recent Researches as to the Artificial Production of Tubercle. By J. BURDON SANDERSON, M.D., F.R.S.—The purpose of the paper was to bring the facts relating to artificial tuberculosis in animals into harmony with the results of clinical experience and pathological observation in man. In the guinea-pig, tuberculosis may be produced either traumatically or (with much greater certainty) by the insertion of an infective material into the living body. Dr. Sanderson had found that, whereas the traumatic method is very uncertain, the disease can be communicated with absolute certainty by the introduction even of infinitesimal quantities of diseased material, taken directly from the living animal into the pleura or peritoneum by means of a syringe for hypodermic injection. When this mode of inoculation is adopted, the local results are so slight, that the operation leaves no trace whatever behind it. It is not until three weeks or a month later that the morbid effects begin to manifest themselves in the form of crops of miliary nodules disseminated in various parts of the serous surface. From the anatomical study of these nodules, Dr. Sanderson had ascertained that, in many parts of the peritoneum and pleura, they do not originate as new growths, but by the hypertrophy of previously existing microscopical masses, which masses, although for the most part so small as to be indistinguishable by the naked eye, consist of the same structural elements, and have the same relation to the serous membrane and to the blood-vessels, as the "tubercles" into which they are metamorphosed as a result of the irritating effect of the infective material introduced into the serous cavity. For a time these granulations constitute the only results of inoculation. Eventually, the mesenteric or bronchial glands become the seat of hyperplastic enlargement; and from them, as from foci of infection, the circulation becomes, as Dr. Sanderson believed, impregnated with the morbid material. This generalisation of the disease manifests itself in all the organs contained in the thoracic and abdominal cavities—*e. g.*, in the lungs, in the form of nodules of catarrhal pneumonia, with deposits round the smallest bronchial tubes; in the liver, as deposits around the smallest bile-ducts; in the spleen, as hyperplasia of the Malpighian follicles, etc. In the serous membranes, and in the choroid, the diseased product consists entirely of miliary granulations. In the liver and lungs, it consists partly of catarrhal accumulations of cells occupying alveoli or bile-ducts, but principally of the tissue to which Dr. Sanderson was in the habit of applying the adjective adenoid. By the term adenoid, the striking resemblance of the morbid structure to that of the follicles or ampullæ of the lymphatic glands is intended to be denoted. The importance of this analogy lies in the fact already mentioned, that, as regards the serous membranes, the miliary nodules are nothing more than overgrown masses of adenoid tissue, which are to be found in every guinea-pig underneath the serous epithelium. With reference to the interesting question of the relation of miliary tubercle to the lymphatic system, Dr. Sanderson denied that the epithelium of the lymphatic capillaries becomes transformed into tubercle, as is stated by Professor Klebs and Dr. Aufrecht. He has observed that, in the subperitoneal tissue covering the tendinous centre of the diaphragm, in which the structural relations of miliary tubercle of the peritoneum can often be studied with great advantage, in consequence of the transparency of the membrane, the lymphatic capillaries can be seen to be in a perfectly natural state in the immediate neighbourhood of granulations. On the other hand, the veins in this situation are always surrounded with sheaths of adenoid tissue, from which sheaths (whether lymphatic or not, is not as yet decided) the granulations spring. It is suggested that the authors above quoted, in describing the growth of miliary granulations around lymphatic vessels, had really veins under examination. Dr. Sanderson then proceeded to discuss the bearing of the facts on the various doctrines which have been advanced as to the origin and nature of tubercle during the last twenty or thirty years. Our modern ideas of tubercle date from Laennec, who was enabled, by the weight of his great reputation as a great clinical observer, to enforce his own pathological ideas on this and other subjects independently of evidence. It was Laennec that first taught that phthisis and other analogous diseases

are dependent on the growth of a specific product—*viz.*, *tuberculous material* or tubercle—in the affected tissues; maintaining, in contradiction to Broussais, the impossibility of any connexion between it and any form of inflammation. As soon as the microscope began to be used, a basis was sought for the dogma of specificity in the structure of the so-called tuberculous material. Lebert, the most distinguished of the early pathological microscopists, was soon able to discover that its specificity was due to a particular sort of corpuscle, called a *tubercle-corpuscle*. Since that time, tubercle-corpuscles have constantly been spoken of as characteristic of the material in question. The labours of Virchow and his pupils have now dissipated much of the confusion which this imagination of Lebert's introduced into the subject. Virchow has shown that the morbid growths which occur in the organs of persons affected with tuberculous diseases are not characterised by the form or size of the corpuscles, so much as by the interstitial reticulum by which they are held together, and by the relation of the morbid growth to the connective tissue and blood-vessels of the affected part; and, further, that there is nothing in the anatomical structure of a tuberculous growth which is exclusively peculiar to itself; for tubercle, considered anatomically, is but one member of a numerous class of morbid products (called by him lymphomas), in all of which the same corpuscles and the same stroma are met with. In short, there are no peculiarities by which any given specimen of tuberculous material can be determined to be tuberculous. Its character depends, not on what it is either chemically or structurally, but on the changes it undergoes, and its relation to existing structures. Phthisis cannot at present be better defined anatomically than by saying that it consists in lobular consolidation of one or both lungs, followed by gradual disintegration of the consolidated parts. The most important question in the pathological anatomy of the disease is that of the nature of the consolidation. On this point, the author held that it is not possible to distinguish the induration of phthisis from that of chronic lobular pneumonia, so far as relates to the anatomical characters of the indurative process. Again, the same characters are met with in the lobular pneumonia which results from inoculation, as in phthisis. In either case, the induration is due partly to the thickening of the framework of the organ by the interstitial growth of adenoid tissue, partly to the choking up of the alveoli with catarrhal products. With reference to the etiology of phthisis, the author considered that the origin of tuberculous disease may generally be traced to one of two agencies; *viz.*, to a constitutional liability or predisposition, of the nature of which we are at present entirely ignorant; or to the influence of prolonged local irritation. With reference to pulmonary consumption, he held that chronic bronchitis, chronic catarrhal pneumonia, and phthisis, cannot be separated from each other by definite lines; and that many cases of phthisis originate from bronchial catarrh. In accounting for the development and widely spread distribution of tuberculous disease in the body, great stress is laid on infection—*i. e.*, the fact that any chronic induration of an organ, if it last long enough unresolved, has a tendency to produce similar indurations elsewhere, not only in adjacent, but in distant organs. The way in which this happens we learn by the study of artificial tuberculosis. Its reality is exemplified in almost every case of phthisis. In conclusion, Dr. Sanderson expressed the opinion that the doctrine of specificity had exercised a sinister influence on the treatment of phthisis and the management of phthisical patients; for it had led men to forget that consumption is influenced by the ordinary causes of inflammation, not only in its origin, but in each step of its progress; and that one most important aim in treatment ought to be to counteract this influence. For this reason, he considered that the treatment of consumptive persons in hospitals for long periods was a great misapplication of the resources of philanthropy. These resources can only be rendered fully available for the purposes for which they are intended by a complete reversal of the present plan of administration. In the first place, no patient should be kept in hospital on the mere ground of his being consumptive, irrespectively of his constitutional state; and, secondly, much greater facilities ought to be given to the poor than exist at present for their immediate admission into hospital whenever suffering from acute pulmonary disease, whether primary, or supervening in the course of chronic phthisis.

Dr. RADCLYFFE HALL (Torquay) remarked that the gist of the question was—were the deposits found in these experiments identical with those in typical chronic tuberculation? Dogs were not prone to tubercle. He had put a seton into the neck of a healthy dog through the subcutaneous cellular tissue, and kept the dog chained up for twelve months, without allowing it greater exercise than a short chain permitted. When the dog had been poisoned, on examination by himself and Dr. Powell of the Torquay Infirmary, hyperæmia and enlargement of the cervical and bronchial glands, and isolated firm deposits in both lungs, were found. The lungs displayed great increase of lymphoid cells, and much congestion, giving them a deep purple colour. The

pulmonary deposits presented themselves as firm separated nodules here and there, some of a damask colour, some brick-red, and others grey, and a few buff. On examination, all alike consisted of simple exudation-cells, round, even in outline, granular, and nucleated. In the grey and buff nodules, these cells were in various stages of fatty degeneration. In none of the nodules were to be found any of the small, angular, misshapen, non-nucleated corpuscles, which in some proportion or other are found mixed up with common exudation-matter in cases of constitutional tuberculation in man. The pleural membrane in this dog was quite polished and healthy, not presenting any effusion, and not even opaque over the nodules which lay just subjacent. The general nutrition of the animal seemed very good. He therefore inferred that there was a distinction between these nodules and true tubercle. If every deposit secondary to ordinary absorption was to be considered tuberculous, why not consider pyæmic deposits as such? [A drawing of the microscopic appearances of the various cells was sent round.]

Dr. GRAINGER STEWART (Edinburgh) said that there were one or two points to which he should like to refer. First, as to his own experience with regard to the relationship of the tubercular material found as an ordinary production of disease to that produced by inoculation; he had not made experiments, but he had had ample opportunities of considering immediately the results of the experiments of others, and he had had an opportunity of studying the disease as it occurs in the human subject, so as completely to satisfy himself of the identity of the processes. The situations in which they were were the same as Dr. Sanderson had described them; and the nature of the products was essentially, at all events, the same. The development in connection with the sheaths of the vessels, with which pathologists had been long familiar, was repeated constantly in the course of the tubercularising experiments. That with which Dr. Charlton Bastian had made them familiar as occurring in the vessels of the pia mater, he had long been accustomed to observe as an example of the mode in which there was an exact consistency between the process in natural disease and in artificial disease. He believed that inflammatory products and tubercular products had a very close relationship; and that, in the course of the ordinary inflammatory exudations, there was constantly found such an increase of the lymph-element as was found after inoculation.

Dr. CHARLTON BASTIAN (London) thought that Dr. Sanderson's observations not only threw light upon the nature and real pathogenesis of tubercle, but what Dr. Sanderson had said had also an important bearing on the distribution of the new growth. First, the local growth was produced, and from that local seat the growth gradually proceeded and extended over the body. But what he (Dr. Bastian) wished specially to call attention to was the question, to what form of tubercle occurring in man was this artificial tubercle produced in the rodent animal most allied? There were two forms of tubercle occurring in man which were quite distinct from one another, but not yet considered so by the profession generally. There was the disease known as the tubercle of the rodent animals; but there was also a peculiar affection of the liver, which was very analogous to that affection of the liver met with in that disease of the rodent animals, which differed altogether from the affection of the liver met with in tuberculosis. He had examined cases of acute tubercular disease scattered over the body, and in which there might be tubercle of the brain; but, in all the cases which he had examined, he had found nearly the same affection of the liver, which was extremely enlarged, there having been, as it were, a new formation of tissue throughout the organ. There had been a diffuse proliferation and fatty change—a change very like that met with in inoculation experiments. He believed that Dr. Sanderson had found in many of his experiments the liver most notably large; sometimes two or three times as large as it was usually met with; and the new tissue met with in the liver affected the liver in the diffuse form of which he had told them. Although they might come to the conclusion that the disease set up in the rodent animals might be called tubercular, it should be remembered that there were two tubercular affections—the acute tuberculosis on the one hand, breaking out with tubercle in all the organs of the body, and the local manifestation of tubercle in one cavity, which gradually extended to the other. Another fact should be borne in mind: so far as he had understood, in all the experiments made by Dr. Sanderson, Dr. Wilson Fox, or by any of the German observers, there had not been found associated with the secondary deposits any tubercle in the brain or its membranes. Seeing the frequency with which it was met with in acute tuberculosis in the human subject, he thought this was another point to separate acute tuberculosis in the human subject from the same produced in the rodent, and also that it was more akin to what they still might call tubercle. He should like to call attention to the question whether there was really any evidence that this tubercle proper—the tubercle met with in acute tuberculosis—was really an hereditary affection. He had looked over a great deal of evidence on that point,

and he thought there was very little ground for believing that acute tuberculosis was itself hereditary.

The PRESIDENT said that at least twenty years ago he was engaged in very constant researches on this subject. He then examined all sorts of tubercular specimens wherever he could find them; and he had examined them strongly under a bias derived from Lebert's teaching, or from the writings of his scholars. He never was satisfied at any time as to the correctness of Lebert's anatomical doctrines. His observations were plain and accurate, but the deductions which he drew from the existence of tubercular corpuscles always seemed to him (Dr. Gairdner) to be founded on imperfect evidence. He might go along with Dr. Sanderson and the more modern teachers; but, after the surprising results derived from the experiments of the last two or three years, he must confess that he had been so completely bewildered by them, that he should still refrain from avowing any decided opinion.

Dr. SANDERSON, in reply, said, with reference to Dr. Radclyffe Hall's remarks, that they seemed to be slightly in contradiction of his (Dr. Sanderson's) views as to anatomical non-specificity. He said that, after operating upon a dog and injecting a material which could not be called tuberculous, there appeared nodules precisely of the character produced by artificial tuberculosis. His (Dr. Sanderson's) point was that the nodules were of a mixed character. He did not see the bearing of Dr. R. Hall's argument against his views as to the identity of nodules of this kind produced in one way or the other. He was glad to hear Dr. Grainger Stewart's observations, which were entirely in the same direction as his own, and which he interpreted in the same way. He was particularly glad to hear him declare the anatomical identity of the processes in the inflammatory organs he considered tuberculosis. As regarded Dr. Bastian's observations on there being two kinds of tuberculosis, he entirely agreed with him that acute generalised tuberculosis was a disease by itself, and had very little relation with ordinary tuberculosis, and very little relation with what was produced by inoculation.

SECTION E.—STATE MEDICINE. *President, W. FARR, M.D., D.C.L., F.R.S.*

Wednesday, July 28th, 1869.

President's Address.—In opening the Section, the President delivered an address, which will be found at page 265.

Vaccination direct from the Heifer, or Animal Vaccination. By H. BLANC, M.D., London.—Dr. Blanc included his remarks on animal vaccination in five propositions. 1. The healthy heifer, inoculated with fine spontaneous cow-pox, supplies a vaccine lymph free from all morbid and diathetic principles. The most distinguished veterinary surgeons had years ago stated that calves were not liable to any diathetic disease, nor to the spontaneous development of any infectious disease. On the other hand, though vaccination in the ordinary mode, if performed with proper care, was harmless, the transmission of disease by it, under certain circumstances, was an acknowledged fact. 2. Spontaneous cow-pox transmitted through the bovine race is more active, more lasting in its effects, and more likely than humanised lymph to create a perfect immunity. In support of this proposition, Dr. Blanc adduced evidence from the writings of Jenner, Dr. E. Ballard, Mr. Marson, Dr. Seaton, etc., to show the increasing susceptibility to small-pox, and the increasing fatality from the disease: and he drew the following inferences. *a.* Direct inoculation from the cow is, according to the testimony of Jenner and others, a most perfect and lasting protection against small-pox. *b.* A few cases of post-vaccinal small-pox were noticed as soon as natural animal vaccination was superseded by the use of humanised lymph; but they were still rare for the following reasons:—greater activity of the lymph, not having as yet undergone many transmissions; and the short time since vaccination was performed. *c.* From perfect immunity in those inoculated with spontaneous cow-pox, we arrive from a few rare occurrences to a small percentage, gradually but steadily increasing, until in 1864 it reached the very high average of 84 per cent. *d.* Among those protected by spontaneous cow-pox, there is no fatality. 3. Spontaneous cow-pox, by being transmitted only through the bovine race, retains all its essential qualities. Cow-pox is a disease of the bovine race, as small-pox is of the human race. Each of them, transmitted through the race to which it belongs, retains its own properties. 4. Vaccination direct from the heifer offers all the characteristics of the cow-pox-vesicle as described by Jenner, Ceely, Bousquet, etc., with such modifications only as are due to the passage of the lymph through young and healthy animals. The characters of vaccination with heifer's lymph were—rare activity, later development, a lengthened duration, and a well marked cicatrix. 5. By animal vaccination, we have always on hand an unlimited supply of good vaccine lymph. With one heifer 500 persons can be vaccinated; with one heifer ten heifers can be inoculated; and, as it requires only five days for the vesicle to be ready

for use, by animal vaccination, at six days' notice 5,000 persons can be vaccinated; at twelve days' notice 50,000, and so on.

On Animal Vaccination. By P. M. BRAIDWOOD, M.D., Birkenhead.—The intention of the author's remarks was to present a comparison of the present method of arm-to-arm vaccination with the proposed method of animal vaccination.—1. The advantages of the mode of vaccinating children with lymph which had passed through a series of human generations, were its facility, the convenience of removing lymph at such an easily remembered date as the eighth day, or the "day week", after vaccination, and the cheapness with which this plan could be prosecuted. The facility connected with the employment of humanised lymph consisted in the large amount of lymph derivable from human vesicles, and in its fluidity, which allowed more of it to be used, and enabled it to be readily received into capillary tubes for the purposes of preservation and transportation. The eighth day after vaccination was a very easily remembered date; and the present plan had now been so long in general usage that parents would usually of their own accord bring the child back for inspection at that date. This method was the cheaper of the two, as it cost only the time occupied in performing the operation.—2. The disadvantages of the present method consisted in an imperfect protection against small-pox, and in the possibility of the transmission of human diseases by humanised lymph. In favour of the opinion that the exclusive use of vaccine lymph, which had passed through numberless human generations, afforded an imperfect protection against small-pox, the following arguments were brought forward. The vesicles were not so large and well formed; the lymph derived from them was not so beautifully clear and transparent; and the concomitant irritative process was not so well marked as in the true Jennerian vesicles. Moreover, the period of protection against variola did not extend over so many years now as it used to do. Statistics showed an increased death-rate from variola in later years as compared with the earlier part of this century. The chief objection, however, to the present mode of vaccinating, was the possible transmission of human diseases by humanised lymph. It had never yet been proved that any disease, excepting syphilis, could be introduced into the human body by inoculation or injection; and syphilis, as far as our present knowledge extended, was inoculable either through the blood or through its special virus. There was as yet no proof that vaccine lymph, pure and unmixed with blood, could be the means of conveying syphilis or any other disease from one human being to another; though the supposition that the serum of the blood was the agent in hereditary cases might serve to favour this view. It was probable, however, that vaccine lymph became changed by being engrafted on another animal species, and lost its primitive qualities by being continuously transmitted from one member of the new species to another without recourse to its original source. It was impossible to say through what an endless variety of human constitutions the vaccine lymph had passed in use in this country since Jenner's time, and to what manifold evil influences it had been exposed. If this were so, and if it were to be believed that the vaccine virus, on its introduction into the human economy, was absorbed and exercised an influence which resulted not only in a local effect, but which affected the whole system, was it not probable that the lymph employed in our day for arm-to-arm vaccination was not really the same as that used by Jenner, was not so efficacious, was possibly diseased; therefore, that it should be renewed?—3. The advantages ascribed to animal vaccination were, a greater protection against small-pox, the obtaining of an endless supply of reliable lymph, and the impossibility of transmitting disease. The vesicles obtained by vaccinating from the heifer were finer; the lymph was more crystalline in appearance, though smaller in quantity; the areola was less indurated, and indicated a more healthy inflammatory process; the progress of the disease was slower, and its result, the cicatrices, were better marked than in the case of vaccinations from arm to arm: hence it was probable that a greater protection against small-pox was afforded by animal vaccination. This new method had not yet been sufficiently long in use to allow of proving by statistics whether or not it afforded a longer protection against variola. By means of animal vaccination, however, an endless supply of reliable lymph could be procured; not through the size of the vesicles, but from their number; e.g., on one heifer, from 150 to 200 punctures could be made; and from each vesicle three children could be vaccinated in six places (three on each arm): hence from one heifer, from 450 to 600 children could be vaccinated, and from 2,700 to 3,600 vesicles could be produced. Moreover, during an epidemic, by vaccinating a heifer with three or four tubes of heifer lymph, in four days thereafter a hundred children might be vaccinated; whereas several children would require to be vaccinated in order to obtain an equivalent supply of humanised lymph, and there would be a delay of eight days. Lastly, by employing animal vaccination alone, it was impossible to transmit disease, because a healthy heifer should always be chosen for the purpose, because

the cows from which the heifer was vaccinated were healthy milking cows, and because heifers at the age at which they were used for this purpose (six to eight weeks old) are liable only to diseases which were not communicable, and which were readily recognised.—4. The disadvantages of animal vaccination were said to consist in its not taking, and in the outlay of money required for its prosecution. This new method, had, however, been now so perfected that failure with the employment of heifer lymph was a rare occurrence. In St. Petersburg, when children were vaccinated directly from the heifer on the fifth day of the disease, only two per cent. of failures were met with; when they were vaccinated on the fourth or sixth days of the disease, four per cent. of failures occurred; and if they were vaccinated on the seventh day of the disease in the heifer, the failures increased to ten per cent. The pecuniary expense of prosecuting animal vaccination was, however, considerable. The objection to the exclusive employment of humanised lymph which weighed most with Dr. Braidwood was, that it was probable that the original cow-lymph, by long and uninterrupted transmission through human beings, had undergone a retrograde metamorphosis, had lost certain essential qualities necessary to render it a thorough protection against variola. The prosecution of animal vaccination was too costly to permit its general adoption by practitioners; but he felt sure that it would be most advantageous to have institutions established in some of the largest towns for carrying on the method of vaccinating from the heifer. To these establishments those could repair who wished to have their children vaccinated directly from the heifer, and through them pure, reliable vaccine lymph (lymph which had never been in contact with human blood) might be procured by medical men desirous of employing it.

On the Comparative Protective Powers of Animal and Human Vaccine Lymph. By A. B. STEELE, L.K.Q.C.P.I.—Mr. Steele argued that animal vaccination—that is, the vaccination of the human subject direct from the heifer, as a substitute for or auxiliary to infantile arm-to-arm vaccination—is not necessary; and he adduced the following reasons. 1. Humanised vaccine lymph, when carefully selected and properly employed by arm-to-arm infantile vaccination, is as certain and complete a protection against small-pox as it is possible to confer—equal, in fact, to the protection afforded by small-pox itself. 2. Human vaccine lymph, when properly managed, does not degenerate nor lose any of its prophylactic power by a continued transit through successive subjects. 3. It is no proof that the vaccine lymph now in use has lost any of its original infective or protective power, to adduce the well known fact that small-pox still appears among the population from time to time, and that much of the vaccination in this country—as much as fifty per cent., according to Her Majesty's Inspectors—has been found to be ineffective and of inferior quality. 4. The supply of human lymph afforded by the stations of the National Vaccine Establishment is abundant, continuous, and sufficient to meet the requirements of the public. 5. Human vaccine lymph is safer, more certain in its effects, and is in every respect more suitable for the purpose than animal lymph. The question of the transmission of syphilis by vaccination, although maintained by many authorities, has been thoroughly and satisfactorily disposed of by Dr. Seaton.

Dr. E. BALLARD (Islington) said he could agree with a great deal that was contained in the paper read by Dr. Blanc. The question was one in which he took some interest—in fact, two years ago he took considerable trouble to bring this subject of animal vaccination under the notice of the profession of this country. He had been very well satisfied with what he had seen as to animal vaccination at Paris, and subsequently in this country. There were three points in which he thought animal vaccination had a great advantage over arm-to-arm vaccination. One thing was the purity of it; the next was the large quantity that was available; and the third was its effect in the production of very fine vesicles. But, whilst he admitted all this, and whilst he thought that it would be a very great advantage that animal vaccination should be pursued to a certain extent in this country, he was not one of those who went the length of decrying the present practice of arm-to-arm vaccination. He thought that arm-to-arm vaccination had a great many advantages; although, if Dr. Blanc's views were pushed to the extreme, he thought they would terminate in this—that arm-to-arm vaccination ought to be altogether abolished, and that they should proceed to vaccinate alone from the heifer. He must admit the degeneration of the present vaccine virus, as it had been propagated from arm to arm since Jenner's time; but he thought it was unfortunate that Dr. Blanc should have taken the method of proving its deterioration that he had done. He thought it would have been quite sufficient to say that the characters of the vesicle had altered—that the vesicle produced now from the common vaccine, as a general rule, was not so fine nor so certain in its production—certainly not so certain when used for re-vaccination—as it was many years ago, and as it was when lymph of recent propagation

from the animal was employed. One of Dr. Blanc's arguments was, that in the Small-pox Hospital the vaccinated patients had, year by year, or period by period, become more numerous; that was to say, that the number of post-vaccine small-pox patients appeared to be increasing in the country. He took the numbers in the Small-pox Hospital, and he said the numbers of patients there who had been vaccinated were increasing regularly, and that they were out of proportion in their increase to the increase of vaccination amongst the people. Then he took for comparison the observations of Drs. Buchanan and Seaton, as made in the public schools; but, as it happened, this was not a fair comparison, because in the Small-pox Hospital the patients were nearly all adults, whereas the observations of Drs. Buchanan and Seaton referred to children from twelve to fourteen years of age. The two things, therefore, could not be fairly compared. Then, as regarded the fatality of post-vaccination small-pox, Dr. Blanc contended that the fatality had increased amongst vaccinated people, because at one time there was no fatality at all. They could well understand that. It was only after a number of years that post-vaccine small-pox was met with at all. It was not until people arrived at the age of fifteen that they were liable, as a rule, to small-pox; so that they could well understand how, in the early years of vaccination, post-vaccine small-pox was of rare occurrence. But taking the cases in the Small-pox Hospital, from 1836 to 1851, the fatality was 6.7 per cent.; then Dr. Blanc said that in 1863-64, the fatality was much higher, being 9.9 per cent. in 1863, and 7.7 per cent. in 1864. As it happened, 1863 was a year in which small-pox was not only exceedingly prevalent, but there was a heavy epidemic amongst vaccinated and unvaccinated alike. It was remarkable with what virulence small-pox broke out in that year, so that it was unfair to compare that year: and not only was it unfair, but if they came to look at the tables they would find that, from 1836 to 1851, the increase of fatality had not been so great after all. He found the numbers to be thus: In the first four years, from 1836 to 1839, the percentage of fatality was 8.1 per cent.; in the next four years, it was 5.4 per cent.; in the next, 8.7 per cent.; and in the next, 10.1 per cent., showing, no doubt, that it was increasing; but when they came to 1856, the numbers were 6.7 per cent., while during 1840, 1841, 1842, and 1843, there was a decrease rather than an increase. Some lymph, which Dr. Blanc was kind enough to send him, he had preserved: he had also kept lymph which had been sent to him from Paris. It had been said that such lymph would not keep: he found that it kept very imperfectly in tubes. Out of twelve patients whom he vaccinated with the tube-lymph, he only got four successes; and out of forty-two spots on which he used it, he only got seven vesicles; whereas, in using points, out of eighteen patients he got thirteen successes; and out of sixty-four spots he got thirty-two vesicles. He found that the mode of vaccination made a great difference. Using tube-lymph, by puncture he got a very small number of successes, but by using it with scratching he got more; but still the tube-lymph was inferior. By using points in the same way, he failed very much with the punctures—that was to say, in seven trials he only got four successes, while with scratching, out of eleven trials he got nine successes. As regarded the keeping of the lymph, with lymph kept for three days, by points, out of four persons vaccinated, he had them all successes, and all the spots inoculated were successful—that was by scratches. On the seventh or eighth day, again, they were all successes. With lymph kept for from twenty to twenty-four days, he vaccinated four patients. In two of the cases he was successful; in two he failed. He failed in the one case because the child was attacked next day with cholera, and in the other on account of the condition of the child, which he found was such as to interfere very much with the success of animal vaccination—that was, that it did not succeed so well in dark children. He was convinced, therefore, that lymph would keep over twenty days; he was going to say over twenty months.

Dr. ROBINSON (Officer of Health of Leeds) thought they were much indebted to Dr. Blanc for the labour which he had bestowed upon the subject, and for the valuable paper he had read. But he must take exception to Dr. Blanc's mode of proving the evil of arm-to-arm vaccination; and in what he had to say he should speak simply from his own practical knowledge. The value of vaccination from the human subject was by no means proved by Dr. Blanc's paper to be lost sight of; and he should say that the cause of the increase of small-pox was attributable to the neglect of vaccination, and perhaps to the neglect of re-vaccination. He found at Birkenhead, five or six years ago, that small-pox was very prevalent; and he entered into a communication with the Chairman of the Board of Guardians, calling upon him to push vaccination, by means of the Board, to a greater extent than had previously been done. The Chairman of the Board questioned the statement which he made, and he asked to be furnished with the names and residences of persons who had neglected to have their children

vaccinated. He furnished the information, and, as a consequence, vaccination was better attended to than previously. The result was that in the first year afterwards the deaths by small-pox were soon reduced by one-third, and in the following year there were no deaths whatever. Then again in Leeds: in 1866, there were fifty-nine deaths by small-pox; in 1867, forty-six; and last year, only seventeen; and this result he, in a great measure, attributed to the persevering efforts of the Board of Guardians in pushing vaccination amongst the people generally, and also re-vaccination. Therefore he thought they should not cry down vaccination from the human subject.

Dr. JAMES MARTIN (Portlaw) said that such laborious experiments as Dr. Blanc had made with reference to vaccination could not be passed over without great respect. At the same time, he must say that he agreed in everything that had been put forward by Mr. Steele. Experience of thirty-four years had taught him that the cow-pox-vesicle was now what it was when his experience commenced—at all events, it was so when the operation was carefully performed. As to the value of vaccination, he might state that he happened to reside in a district where the people were overcrowded in their homes; and he invariably found, before compulsory vaccination was introduced, that when small-pox became epidemic it invariably seized upon the children who had not been vaccinated, whilst those who had been vaccinated, as a rule, escaped; and, when they did not escape, did not suffer so severely from the disease.

Dr. DRUITT (London) said that, with regard to popular prejudice, it was perfectly well known that at present there was a very large section of the community—at least, very large absolutely, whether large relatively or not he would not say—who set their faces against vaccination, and amongst whom were some persons with money—perhaps with more money than intelligence. These people, by taking up a few facts in a mischievous way, and overlooking everything else, managed to excite a popular prejudice against what was acknowledged to be a most admirable health-protecting and life-saving measure. If, however, any other system of vaccination was likely to meet the objections of these people, it should be given a fair hearing. Something had been said about failure in cases of vaccination, and the arguments that had been used put him in mind of a discussion in the House of Lords, in the course of which it was asked “If people went mad by religion?” Answer was made, “True religion never made people mad”; and so they were told true lymph never conveyed disease. But was disease not imparted in the course of the action which conveyed the lymph? They were told that erysipelas and syphilis had been propagated by vaccination; and for himself he could say that he had taken considerable trouble to sift out cases, and had found at least one in which there was no doubt that the child had not syphilis before vaccination, but had it afterwards. Would it be worthy, then, in him, by a kind of technical special pleading, to say that it was not true vaccination? All this kind of pleading was beside the question. The fact remained, that as human beings were, as doctors were, and as patients were, some individuals who were vaccinated from a good child, did from the vaccination get a disease which was found to be syphilis, and this fact alone gave rise to ninety per cent. of the objections that were raised against vaccination. He thought medical men should have the opportunity of practising animal vaccination, even on the ground that it could do no harm; but he no more doubted that a vaccinated arm could convey suitable vaccine matter than he doubted that a syphilised father could get a syphilised child. With regard to the propagation of vaccination, he was of the opinion that a man in large practice, amongst a large population capable of containing the vesicles, who would vaccinate from dry lymph when he could get lymph from arm to arm, failed in the performance of his duty. But it was quite possible, in a scattered population, that the succession of lymph from arm to arm must fail, and that a man would be driven back upon dry lymph against his will. And yet in the case of a sparse population, where people from their avocations sometimes, as well as their small number, were hardly able to keep up a succession of lymph by means of their children, what could be easier than to get them to arrange to bring their children three or four days in the course of a year, when a calf could be obtained, and when the practitioner and the calf, he would say, must travel together, and in one hour vaccinate the children of the whole population? He concluded by saying that it would be a serious injury to medical science if the question of animal vaccination were condemned and dismissed without a much fairer and fuller hearing than some seemed inclined to accord to it.

Dr. BLANC urged that his argument as to the deterioration of human lymph, as based upon the increase in the number of post-vaccinated small-pox patients, was substantially sound. He thought that Mr. Steele was a few years behind time; and he had certainly quoted authorities in proof of his assertions who had themselves changed their minds. Mr. Steele had referred to Mr. Marson, and Mr. Marson was now using his (Dr. Blanc's) lymph instead of the old Jennerian lymph; while Mr.

Ceely, whom he had also mentioned, had written to him (Dr. Blanc) regarding his lymph, and had pronounced it thoroughly satisfactory. Here, then, a gentleman who had done more for vaccination in Europe, after Jenner, than any other man, and Mr. Ceely, gave the greatest proof possible as to the excellence of heifers' lymph. He had tried it, compared it, made experiments himself with spontaneous cowpox, and had arrived at the conclusion that his (Dr. Blanc's) lymph was perfect. Take this fact as to the degeneration of arm-to-arm lymph. It required four marks now to be as effectual as was one ten or twenty years after Jenner, and surely this said something as to the quality of the virus. It did not require four bites from a mad dog to produce hydrophobia; it did not require four bites from a cobra to produce death; and if it required four stings to produce vaccination, he must say that the lymph was not the same that it was in the hands of Jenner, when one sting, as Jenner said, would protect a man for ever.

The PRESIDENT remarked that Dr. Blanc's paper was full of valuable facts, and would, no doubt, give rise to a great deal of healthy reflection.

On the Registration of Diseases. By G. H. PHILIPSON, M.A., M.D., Newcastle-on-Tyne.—Having indicated some of the advantages which are to be gained by studying more closely the diseases which are prevalent, more especially so by the employment of a methodical system of registration, Dr. Philipson drew attention to the manner in which this could be accomplished. It was stated, that in a system of registration it was necessary, first, to collect the facts; second, to classify and compute the facts that have been collected. Also, in the collection of the facts, two elements were needful—the assistance and co-operation of the whole available scientific strength and uniformity in the system of observation, consisting of a simple and easy mode of recording the notes. Further, in the classification and computation of the facts collected, a properly constituted plan was absolutely necessary, which could best be carried out under the direction of a central authority, independently of the observers of the facts. The fundamental step for the statistical registration of diseases was said to be uniformity in the system of registration, and such had been effected by this great and powerful Association. In the year 1865, at the annual meeting held at Leamington, a Committee was appointed “to encourage the registration of diseases,” who agreed upon a form of return for uniform registration, which form was approved in 1867, at the annual meeting held at Chester, and afterwards issued to the members. The form was styled as simple, yet complete, and one which might be nationally adopted. The full plan was simultaneously put into operation at the beginning of the year 1868, at Manchester and Salford, under the direction of the Sanitary Association; Great Marylebone, London, by Dr. Whitmore; Birmingham, by Dr. Alfred Hill; and Newcastle and Gateshead-upon-Tyne, by the Northumberland and Durham Medical Society. The great necessity of the system becoming general was strongly urged, the paper being thus concluded: “There exists a national system of the registration of the causes of death, so there might be a corresponding national system of the registration of the actual causes of disease, which might jointly be called vital statistics,” and which would indicate the resistance of one portion of the community against disease as compared with another.

Dr. WILTSHIRE (London) said the plan recommended in Dr. Philipson's paper had been carried out by Dr. Ballard of Islington, who had taken the trouble to obtain statistics from the various institutions.

The PRESIDENT thought that the most serious difficulty in the way of a national registration of disease was the expense. As to the utility of such a scheme, there could be no doubt. His own opinion was, that it would amply repay the country for the trouble and expense incurred; and he was quite sure that, if the Government would go to the expense, the medical profession would be found quite willing to support them in any effort of the kind. He must thank Dr. Philipson for his very able paper. It was not the only thing he had done to promote this cause. He had worked at it for years.

The Atmosphere of Towns. By G. OLIVER, M.B., Redcar. Special reference was made to street ventilation, and the complete combustion of fuel in all public works. Smoke was shown to act on the public health by virtue of the power it possesses of absorbing in part the chemical rays of light, which are intimately connected with organic life, more especially during the period of development, and of retaining humidity and disease products within the area of towns. The supposed antiseptic power of smoke, and the generation of a larger amount of carbonic acid gas by complete combustion than by imperfect combustion were denied. A system of drainage of the products of combustion from the centre of towns was suggested, in which smoke might in great part deposit itself, and be utilised as manure or otherwise. The small quantity of ozone in town air was shown, not only to favour the occurrence of epidemics, but also to produce or to aggravate various chronic

ailments, and to be a probable cause of the difference in oxidising power between town air and rural and sea air. The energetic power of oxidation which sea air on the magnificent sandy beach of Cleveland, on the north-east coast, possesses was referred to, particularly in the treatment of scrofula and of convalescents.

Dr. STEWART (London) said he used long ago to have considerable experience of this matter in Glasgow—a town which was, perhaps, the rival of Leeds in the amount of smoke that was breathed by its inhabitants. He believed that the quantity of smoke that still escaped into the atmosphere there was very great—he did not think quite so great as in Manchester and in Leeds and some of the other towns of Yorkshire; but he remembered, on the occasion of some *post mortem* examinations that took place during the epidemic of typhus which prevailed at the time, when he was resident in the hospital there, that in a very large proportion of the cases the lungs were full of carbon. He was perfectly sure this state of matters could not be for the health of the population. They knew that, carried to the full extent, it produced miners' phthisis—a disease produced by improper ventilation in the galleries of mines, and by other means whereby large quantities of exceedingly fine carbon are drawn into the lungs. The disease known by this name had happily of late years considerably diminished, owing to the precaution that had been taken in the ventilation of mines; but where there was a large quantity of smoke in the atmosphere of towns he was perfectly persuaded that the result was very prejudicial to the health of the inhabitants. He knew that in various towns in the north the smoke nuisance was a subject of very great interest, and that efforts were being made by medical men and others who were concerned as to the health of the population to get it abated. He had heard some time ago that a number of summonses had been issued against offenders in Leeds. What the result had been, he was not aware. Certainly, although the nuisance was not so bad as he recollected it sixteen and seventeen years ago—when he first visited Leeds—the quantity of smoke still unnecessarily emitted into the atmosphere was very great indeed. He had visited Saltaire with a friend, and after they had seen a number of things and been very much pleased, Mr. Salt pointed to the great chimney and said, “Do you see that?” Thinking it was the beautiful masonry of the magnificent chimney to which his attention was drawn, he expressed his admiration of what he saw; but Mr. Salt said, “Look at the top of it;” and he did look, and found that scarcely any smoke was emitted. He thought it was a result of some elaborate machinery, but Mr. Salt said it was attributable to a careful supply of fuel—to a careful feeding of the furnaces, without which appliances were nearly useless. According to Mr. Salt, the difficulty of getting a human machine, so to speak, to do the work properly was much greater than to get machinery to consume the smoke. It would be a matter of great moment if the powers which corporations obtained as to the consumption of smoke could be properly enforced. He must say that in London during the last fifteen years the improvement in the atmosphere had certainly been very great. There was no reason why, with vigilance and enterprise on the part of the authorities, the emission of smoke should not be greatly diminished in all the manufacturing towns throughout the country.

Dr. ROBINSON (Leeds) said that the Corporation of Leeds had recognised the evil influence of smoke on the human economy by obtaining an Act under which they had great powers for proceeding against the nuisance. But there were some difficulties in their way such as had been put forward in the cases of dye-works and iron-works, which were said to be manufactories that could not be carried on profitably without the production of a certain amount of smoke at times. In regard to the dye-works, it was said that the steam must be got up there suddenly, and the result of this was to produce a great amount of smoke. This, he thought, had been obviated very much by a patent of Juckes's—a self-feeding machine—which had been in operation at Bradford for a period of not yet twelve months; but when it had been used satisfactorily for twelve months, and it could be shown that it could be introduced generally without prejudice to the trade, he believed the corporation of Leeds would press the powers they possessed more strenuously than they had hitherto done. At the same time, he believed the manufacturers of Leeds, as a whole, were very anxious to carry out any measure which could be shown to properly mitigate the evil; and there was a strong argument to induce them to do so, as the adoption of appliances for the consumption of smoke resulted in an immense saving afterwards. This was shown in the fact that many manufacturers had thanked the smoke inspector for enforcing the introduction of better furnaces.

Infant Mortality of Bradford. By W. B. PROCTER, Esq., Bradford. Bradford has a high death-rate amongst infants; it is a large manufacturing town of 138,000 inhabitants and upwards, is one of the ten or eleven large towns mentioned in the weekly mortality list of the Registrar-General, and in its manufactures female labour is largely employed, and it is worth while inquiring whether this high death-rate is influenced

or not by females—that is, mothers being employed in the mills. It is well and widely known that in Lancashire during the cotton famine the death-rate amongst children was largely reduced, in consequence, it was said, of mothers being obliged, from want of employment, to remain at home, and that the children thus obtained that care and attention which they previously did not. The total number of deaths in the borough of Bradford in the two years ending March 1869 was 5,942. Of these, the number of deaths of infants under two years of age was 2,795, or 47.038 per cent. of the total number of deaths. Further, of these 2,795 deaths of infants, 2,076 were deaths in the first year, or 74.275 per cent. Of the 2,795 infants, there died of brain-diseases 182, or 6.511 per cent.; of convulsions—no other cause being assigned—there were 491 deaths, or 17.567 per cent.; of diseases of the respiratory organs there were 556 deaths, or 19.892, nearly twenty per cent.; of diseases of the digestive organs or bowels there were 809 deaths, or 28.228 per cent. Mr. Procter observed that in these latter were included deaths from diarrhoea which occurred in the summer months, but which, if deducted, would not very materially alter the result. Of deaths from premature birth, and debility from premature birth, there were 284, or 10.161 per cent. Of congenital syphilis there were only 22 deaths, or not 1 per cent. Of measles, scarlatina, and typhoid fever, 172 deaths, or 6.150 per cent.; of smallpox 46 deaths, or 1.645 per cent.; of other diseases, 7.370 per cent. The great causes of infant mortality in Bradford were—bowel-diseases, or wasting diseases; diseases of the respiratory organs; convulsions, and premature birth. Dr. Procter believed that many of the deaths from these causes were preventable; and that the mortality would have to be lessened by better nursing, more proper diet, and greater care generally of infants in their earlier months. He called attention also to the prevalent habit of giving opiates (in the form of various popular nostrums) to children.

The PRESIDENT thought that they were much indebted to Mr. Procter for bringing this subject under notice. It was quite true, as Mr. Procter said, that it had attracted attention not only in this country, but in all countries in Europe; and it had attracted attention because, in order to get a strong vigorous race of men and women, we must begin from the beginning and place all classes of children, as far as possible, in conditions favourable to their growth. Some strong effort, he thought, should be made to enlighten mothers upon the subject; and he thought also that some measures should be taken to suppress the sale of poisons for children.

Dr. STEWART (London) said that in the Pharmacy Bill last year it was remarkable that opium was left out of the list of poisons, and the reason was that opium was largely bought for the purpose of drugging children. In Lincolnshire its sale was very large. The fact having been pointed out, opium was ultimately added to the Schedule; but still there remained the circumstance that the administration of opium to children in one form or another was very great, and to this was due much of the heavy infant mortality.

The PRESIDENT: In these cases the opium is sold under the name of white mixture.

Dr. WILTSHIRE (London) said the subject was one in which he had taken a great deal of interest, and it was one of extreme importance. The more he went into it, the more he was impressed with its seriousness. Mr. Procter had said that a certain class of diseases were chiefly due to mal-nutrition. He excepted chest-diseases from the list. He (Dr. Wiltshire) demurred to this, on the ground that bronchitis and all chest-diseases in children were rendered fatal because of imperfect formation of bone. The thorax being soft, these poor unfortunate children, directly they had bronchitis, died of asphyxia as surely as though they were strangled, and this was owing to weak chest-walls. His illustrious teacher Sir William Jenner had pointed out this in one of his lectures on chest-diseases, which had been published in the *Medical Times and Gazette*. He pointed out clearly that mortality in measles was mostly owing to bronchitis, and this because the chest-walls were often so soft. The way in which this had been pointed out by Sir William Jenner was so clear that he would not attempt to do him an injustice by describing it, and he merely mentioned it here because, in referring to diseases caused by mal-nutrition, he thought Mr. Procter had omitted a most important point. If many children who took bronchitis were properly nourished, they would have stronger bones, and would not, therefore, be so liable to a fatal termination of the disease. As to the general question, he believed that the effect of town-life was always to deprave, and this depravity operated especially on the female sex amongst the poor, many of whom grew almost incapable of affection. They became less fond of their children than did mothers in agricultural districts, and by neglect their children died at a frightful per centage.

MR. DAVIES, an Edinburgh medical student, was last week drowned while bathing in the river Ithon, at Llandrindod.

MEMBERS PRESENT AT THE LEEDS MEETING.

THE following names of gentlemen present at the meeting were entered in the visitors' book and published in the daily journals issued by the local committee.

- | | |
|--|---|
| Abraham, J., Esq., Harrogate | Coote, Holmes, Esq., London |
| Ackroyd, George, Esq., Leeds | Copeland, W., Esq., Staindrop |
| Acland, H. W., M.D., F.R.S., Oxford | Corfield, W. H., M.B., London |
| Adams, W. L., M.B., Cork | Cornwall, J., Esq., Bath |
| Alder, A., Esq., Wakefield | Corrie, J. J., Esq., Leeds |
| Alexander, William, M.D., Halifax | Cossar, T., M.D., Darlington |
| Allan, W. W., L.R.C.P., Guiseley | Craister, T. L., Esq., Bramley |
| Allbutt, T. Clifford, M.D., Leeds | Crawford, W. T., M.D., Green Hammerton |
| Anderson, McCall, M.D., Glasgow | Croly, H. G., Esq., Dublin |
| Austie, F. E., M.D., London | Crompton, S., M.D., Manchester |
| Arlidge, J. T., M.D., Newcastle-under-Lyme | Crossby, J. P., Esq., Leeds |
| Armistead, J. W., Esq., Leeds | Cruise, F. R., M.D., Dublin |
| Armitage, S. H., M.D., Scarborough | Cuning, J., M.D., Belfast |
| Armstrong, L., Esq., South Shields | Daly, O., M.D., Hull |
| Askwith, Robert, M.D., Cheltenham | Davey, J. G., M.D., Bristol |
| Atkinson, E., Esq., Leeds | Davies, D., Esq., Bristol |
| Atkinson, G. P., Esq., Pontefract | Davies, E., Esq., Swansea |
| Bagnall, S. F., Esq., Leeds | Davies, J. S., Esq., Oswestry |
| Bain, W. P., M.D., Poplar | Davies, T. C., M.D., Bury |
| Bainbridge, F., Esq., Harrogate | Davies-Colley, T., M.D., Chester |
| Baker, J. W., Esq., Derby | Day, Henry, M.D., Stafford |
| Balding, D. B., Esq., Royston | Day, W. H., Esq., Wakefield |
| Ballard, E., M.D., Islington | Desmond, L. E., M.D., Liverpool |
| Banks, J. T., M.D., Dublin | De Méric, Victor, Esq., London |
| Barclay, J., M.D., Leicester | Deville, T., M.D., Harrogate |
| Barker, J., Esq., Coleshill | Dickson, W., M.D., London |
| Barnes, Henry, M.D., Carlisle | Dix, J., Esq., Hull |
| Barnes, R., M.D., London | Dixon, J., Esq., Keighley |
| Barter, C. S., M.B., Bath | Dobson, Thomas, M.D., Holbeck |
| Bartleet, E., Esq., Birmingham | Dobson, William, Esq., Leeds |
| Bartlett, W., Esq., London | Dodsworth, B., Esq., York |
| Bartrun, J. S., Esq., Bath | Down, L., M.D., London |
| Bastian, H. C., M.D., F.R.S., London | Drnutt, R., M.D., London |
| Bateman, F., M.D., Norwich | Drury, C. D. H., M.D., Sunderland |
| Beales, R., M.D., Congleton | Duncan, J. Matthews, M.D., Edinburgh |
| Bealey, A., M.D., Harrogate | Eagland, W. H., M.D., Leeds |
| Beardshaw, Ralph, Esq., Leeds | Eastwood, J. W., M.D., Darlington |
| Beatty, J. G., L.R.C.P., Dublin | Eddie, W. H., Esq., Barton-on-Humber |
| Beatty, T. E., M.D., Dublin | Eddison, J. E., M.D., Leeds |
| Becroft, S., Esq., Hyde, Manchester | Elliot, R. L., Esq., Harewood |
| Begley, W. C., M.D., Hanwell | Elliot, R., M.D., Carlisle |
| Bell, Rev. D., M.D., Goole | Elliot, G. F., M.D., Hull |
| Bell, J. H., M.D., Bradford | Ellis, J., Esq., Heckmondwike |
| Bennet, J. H., M.D., London | Ellis, J. R., Esq., Miffield |
| Bennett, J. Hughes, M.D., Edinburgh | Ellis, T. S., Esq., Gloucester |
| Bennett, W., M.D., Harrogate | Embleton, D., M.D., Newcastle |
| Berry, S., Esq., Birmingham | Evans, S. H., Esq., Derby |
| Blane, H., M.D., London | Falconer, R. W., M.D., Bath |
| Blythman, C. S., M.B., Swinton | Farr, W., M.D., F.R.S., Bickley |
| Blythman, R. O., Esq., Swinton | Farre, Arthur, M.D., London |
| Bott, T. B., M.D., Bury | Farrer, R., Esq., Brighouse |
| Bowes, R., Esq., Richmond | Fielden, S., Esq., Shildon |
| Bowman, R. M., Esq., Ripon | Fielding, J. R., Esq., Alfreton |
| Braidwood, P. M., M.D., Birkenhead | Fitz Patrick, W. H., M.D., West Derby |
| Braithwaite, James, M.D., Leeds | Fletcher, Bell, M.D., Birmingham |
| Branson, F., M.D., Baslow, Chesterfield | Folker, W. H., Esq., Hanley |
| Branson, H. John, M.D., Doncaster | Foster, John, Esq., Bradford |
| Bridges, J. H., F.R.C.P., Bradford | Fothergill, J. M., M.D., Morland, Penrith |
| Briggs, H. M.D., Burnley | Fothergill, J. R., M.D., Darlington |
| Broadbent, S. W., Esq., South Hetton | Fox, C. B., M.D., Scarborough |
| Broadbent, W. H., M.D., London | Frain, Joseph, M.D., South Shields |
| Bronner, E., M.D., Bradford | Frazer, W., M.D., Montreal |
| Broomhead, G., Esq., Gillington | Fuller, Wm., M.B., Oswestry |
| Brown-Ségnard, C. E., M.D., F.R.S., Paris | Gairdner, W. T., M.D., Glasgow |
| Browne, J. Crichton, M.D., Wakefield | Galton, D., C.B., Captain R.E., London |
| Bryan, E., Esq., Idle | Garlick, William, Esq., Leeds |
| Buchanan, G., M.D., Glasgow | Garstang, Walter, M.D., Blackburn |
| Bull, H. G., M.D., Hereford | Gibb, C. J., M.D., Newcastle-on-Tyne |
| Bywater, T. E. G., Esq., Knottingley | Gibson, S., M.B., London |
| Call, T. J., Esq., Ikley | Gibson, C., M.D., Newcastle-on-Tyne |
| Callender, G. W., Esq., London | Giddings, W. K., Esq., Calverley |
| Callon, W. T., M.D., Liverpool | Goldie, G., Esq., Leeds |
| Carden, H. D., Esq., Worcester | Gowans, William, Esq., South Shields |
| Carter, J. B., Esq., Pottennewton | Goyder, D., M.D., Bradford |
| Chadwick, C., M.D., Leeds | Gray, E. B., M.D., Oxford |
| Chambers, T., Esq., London | Greenhow, T. M., M.D., Chapel-Allerton |
| Chambers, T. K., M.D., London | Greenway, H. Esq., Plymouth |
| Chapman, E., Esq., M.A., Oxford | Greenwood, J. W., Esq., Ossett |
| Charcot, J. N., M.D., Paris | Griffith, T. T., Esq., Wrexham |
| Charlton, E., M.D., Newcastle-upon-Tyne | Haigh, T. A., Esq., Meltham |
| Chorley, Henry, Esq., Leeds | Hall, C. Radclyffe, M.D., Torquay |
| Christie, T. B., M.D., Clifton, York | Hall, F., Esq., Leeds |
| Church, W. J., Esq., Bath | Hall, J. C., M.D., Sheffield |
| Churton, W., Esq., Lightcliffe, Halifax | Hall, W., Esq., Leeds |
| Clapham, E., M.D., Devizes | Hall, W., Esq., Lancaster |
| Clark, H., M.D., Ferry Hill | Halliday, J., Esq., Leeds |
| Clark, J., M.D., Walsall | Handcock, G., Esq., Leeds |
| Clark, J. Lockhart, M.D., F.R.S., London | Hardy, H. G., Esq., Byer's Green |
| Clark, S., Esq., Whitworth, Ferryhill | Hare, C. J., M.D., London |
| Clarke, J. C., Esq., Gildersome | Harrison, R., Esq., Liverpool |
| Clayton, M. H., Esq., Birmingham | Harrison, C. H. Rogers, Esq., London |
| Clouston, T. S., M.D., Garlands, Carlisle | Haughton, Rev. S., M.D., Dublin |
| Cooke, R. T. E. B., Esq., Scarborough | Haviland, H. J., M.D., Harrogate |
| Cooper, Sir H., M.D., Hull | Haxworth, W., Esq., Kirkby Overblow |
| Cooper, R., Esq., Leek | Haynes, S., M.D., Laverstock, Salisbury |
| | Hayward, G., M.D., Leeds |

Heaps, J., Esq., Otley
 Heath, F. A., Esq., Manchester
 Heaton, J. D., M.D., Leeds
 Heffernan, E., Esq., Spennymoor
 Hemingway, H., Esq., Dewsbury
 Henry, A., M.D., London
 Hepworth, W., Esq., Guiseley
 Hepworth, W. B., Esq., Armley
 Heslop, T. P., M.D., Birmingham
 Hey, S., Esq., Leeds
 Hey, William, Esq., Leeds
 Hicks, J. B., M.D., F.R.S., London
 Higginson, A., Esq., Liverpool
 Hinton, James, Esq., London
 Hirst, C., Esq., Morley
 Hirst, S. C., Esq., Bowling
 Holman, C., M.D., Reigate
 Holmes, F., Esq., Burmantofts
 Hornby, T., Esq., Pocklington
 Horsfall, J., Esq., London
 Horton, R. G., Esq., Leeds
 Humphreys, J. R., Esq., Shrewsbury
 Hushand, W. D., Esq., York
 Hutchinson, R. S., M.D., Scarborough
 Hutchinson, J., Esq., London
 Ikin, J. I., Esq., Leeds
 Inglis, Alexander, M.D., Worcester
 Jefferson, R., Esq., Market Weighton
 Jenner, Sir W., Bart, M.D., F.R.S., London
 Jephcott, S. T., M.D., Chester
 Jessop, A., Esq., Castleford
 Jessop, T. R., Esq., Leeds
 Jewison, T. W., Esq., Oulton
 Jobson, J., Esq., Bishop Auckland
 Johnson, Christopher, Esq., Lancaster
 Kelly, P. G., Esq., Leeds
 Kendell, D. B., M.B., Scarborough
 Kennedy, E., M.D., Dublin
 Keyworth, H., Esq., York
 Kidd, G. H., M.D., Dublin
 King, K., M.D., Hull
 Kirby, C., Esq., Halifax
 Lambert, J., Esq., Farsley, near Leeds
 Land, R. T., M.D., Leeds
 Lang, John, M.D., Southport
 Latham, P. W., M.D., Cambridge
 Lawrie, J. D., Esq., Bradford
 Leadman, A., Esq., Leeds
 Leake, J. R., Esq., 8th Regt., Liverpool
 Leared, A., M.D., London
 Lee, Henry, Esq., London
 Lee, M., M.D., Bradford
 Leech, D. John, M.B., Manchester
 Leeming, R. T., Esq., Kendal
 Lees, S. D., M.D., Ashton-under-Lyne
 Leeson, J. F., Esq., Bradford
 Lewis, James, Esq., Maesteg
 Lewis, Waller, M.B., London
 Libbey, H. C., Esq., Leeds
 Lingen, C., M.D., Hereford
 Little, David, M.D., Manchester
 Little, J., M.D., Dublin
 Loe, J. S., Esq., Leeds
 Long, J., Esq., Liverpool
 Lund, Edward, Esq., Manchester
 Lunn, W. J., M.D., Hull
 McCheane, W., Esq., Liverpool
 MacCormac, W., M.D., Belfast
 McIntyre, J., M.D., Odiham
 MacKenzie, W. S., Esq., Normanton
 Mackie, J., Esq., Darlington
 MacLagan, J. M., M.D., Mexborough
 Macleod, G. H. B., M.D., Glasgow
 Macnamara, R., L.K.Q.C.P.L., Dublin
 Manley, J., Esq., West Bromwich
 Mapother, E. D., M.D., Dublin
 Marshall, H., M.D., Clifton
 Martin, James, L.K.Q.C.P., Portlaw
 Martin, Robert, M.D., Warrington
 Martin, W., Esq., London
 Matterson, W., M.D., York
 Meade, R. H., Esq., Bradford
 Medcalf, H. C., Esq., Howden
 Miall, P., Esq., Bradford
 Micklethwaite, B. W., Esq., Gomersal
 Miller, H. M.D., Glasgow
 Moore, C. H., Esq., London
 Morehouse, H. J., Esq., Holmfirth
 Moriarty, T. B., M.D., Army
 Morris, E., M.D., Spalding
 Mould, G. W., Esq., Asylum, Cheadle
 Munroe, H., M.D., Hull
 Murray, Wm., M.D., Burley-in-Wharfedale
 Myrtle, A. S., M.D., Harrogate
 Nankivell, C. B., M.D., Torquay
 Needham, F. M.D., York
 Nelson, E. F., M.D., Downpatrick
 Ness, J., Esq., Helmsley
 Nevins, J. B., M.D., Liverpool
 Nevitt, J. G., Esq., Chapelton
 Newman, W., M.D., Stamford
 Newstead, C. V., Esq., Otley
 Newstead, G., Esq., Eccleshill

Nicholson, R. H. B., Esq., Hull
 Nickols, T., Esq., New Wortley
 Nicolson, D., M.B., Portland
 Norman, J. W., M.B., Harrogate
 Norris, H., Esq., Petherton
 Nowell, James, Esq., Woodlesford
 Nunneley, F. B., M.D., York
 Nunneley, J. A., M.B., Leeds
 Nunneley, T., Esq., Leeds
 Ogle, W., M.D., Derby
 Oglesby, R. P., Esq., Leeds
 Parkinson, William, Esq., Bradford
 Parsons, D. W., Esq., Liverpool
 Pearson, Rev. T. R. W., B.A., Leeds
 Perceval, Thomas, Esq., Riccall, nr. York
 Philipson, G. H., M.D., Newcastle
 Pincoffs, Peter, M.D., Naples
 Pinder, W. M., Esq., Horsforth
 Piper, S. E., Esq., Darlington
 Playfair, W. S., M.D., London
 Pollard, W., Esq., Torquay
 Power, H., M.B., London
 Price, H. W., Esq., Leeds
 Price, W. N., Esq., Leeds
 Prichard, A., Esq., Clifton
 Procter, William, M.D., York
 Procter, W. B., Esq., Bradford
 Pugh, J. L. P., Esq., Brighouse
 Pullan, Richard, Esq., Hunslet
 Ransom, W. H., M.D., Nottingham
 Ransome, A. M.D., Manchester
 Rendle, R., Esq., London
 Reeves, H. A., Esq., London
 Reynolds, J. R., M.D., London
 Rhind, S., Esq., Shipley
 Rhodes, G. S., Esq., Dewsbury
 Richardson, B. W., M.D., F.R.S., London
 Richardson, C., Esq., Leeds
 Richardson, W., Esq., Stockton-on-Tees
 Rickards, G. H. L., Esq., Leeds
 Ritchie, T., Esq., Otley
 Rivington, W., Esq., London
 Roberts, D. L., M.D., Manchester
 Roberts, O., M.D., St. Asaph
 Roberts, W., M.D., Manchester
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 Robinson, M. K., M.D., Harrogate
 Robson, R. N., Esq., Durham
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 Seaton, James, Esq., Leeds
 Seaton, Joseph, M.D., Sunbury
 Senior, R., Esq., Bowden, Cheshire
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 Sharpe, G. M., Esq., Hunslet
 Sibson, F., M.D., F.R.S., London
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 Simpson, Sir J., Bart, M.D., Edinburgh
 Simpson, J. H., M.B., Pontefract
 Slesser, Charles, M.D., Bramley
 Smeddle, Robert, Esq., Sheldon
 Smith, F. A. A., M.D., Cheltenham
 Smith, G. P., M.D., Mount Stead
 Smith, Protheroe, M.D., London
 Smith, Thomas, M.D., Cheltenham
 Smith, T. Heckstall, Esq., St. Mary Cray
 Southam, G., Esq., Manchester
 Spencer, H. M., Esq., Bradford
 Spratley, Samuel, M.D., Rock Ferry
 Squire, William, Esq., London
 Stawman, William, Esq., Barnsley
 Stearns, J., M.D., Boston, America
 Steele, A. B., L.K.Q.C.P., Liverpool
 Stewart, A. P., M.D., London
 Stewart, H. H., M.D., Dublin
 Stewart, T. Grainger, M.D., Edinburgh
 Stokes, William, jun., M.D., Dublin
 Stonehouse, Cornelius, Esq., Horsforth
 Storrs, R., Esq., Doncaster
 Sykes, B. C., M.D., Cleckheaton
 Sykes, J., M.D., Doncaster
 Sykes, Richard, Esq., Brighlington
 Tacey, W. G., Esq., Bradford
 Tait, Lawson, Esq., Wakefield
 Taylor, Chas. B., M.D., Nottingham
 Taylor, J. M., Esq., Leeds Barracks
 Taylor, M. W., M.D., Penrith
 Taylor, R. H., M.D., Liverpool

Teale, J., Esq., Leeds
 Teale, John W., Esq., Scarborough
 Teale, T. P., Esq., Leeds
 Teevau, W. F., Esq., London
 Terry, H., jun., Esq., Northampton
 Terry, J. N., Esq., Bradford
 Thomas, R., Esq., Rawdon
 Thorburn, J., M.D., Manchester
 Thornton, W. H., M.D., Dewsbury
 Thwaites, T. B., Esq., Bishop Auckland
 Tilt, E. J., M.D., London
 Townson, B., Esq., Liverpool
 Trewhella, H. E., M.D., Headingley
 Tuke, Harrington, M.D., London
 Turner, G., M.D., Stockport
 Turner, W., Esq., Liverpool
 Turton, F., Esq., Wolverhampton
 Umpleby, H., M.D., Bedale
 Underhill, T., Esq., Great Bridge
 Upton, T., Esq., Tadcaster
 Walker, G. E., Esq., Liverpool
 Wallace, J., M.D., Liverpool
 Walton, H. Haynes, Esq., London
 Warburton, E., Esq., Pateley Bridge
 Ward, J. B., M.B., Wakefield
 Waters, A. T. H., M.D., Liverpool

Waters, E., M.D., Chester
 Watts, W. F., Esq., Dewsbury
 Weaver, F. P., M.D., Frodsham
 Webster, B., M.D., Alderley Edge
 Webster, G., M.D., Dulwich
 Wheelhouse, C. G., Esq., Leeds
 Whitehead, James, M.D., Manchester
 Whytehead, H. Y., M.D., Beverley
 Wilkinson, M. A. E., M.D., Manchester
 Wilkinson, Wm., Esq., Hartshill
 Wilkinson, W. C., Esq., Spalding
 Williams, E., M.D., Wrexham
 Williams, T. W., Esq., Birmingham
 Wilson, C. B., Esq., Liverpool
 Wiltshire, A., M.D., London
 Wood, Arthur, Esq., Kirby Moorside
 Wood, S., Esq., Shrewsbury
 Wood, W., M.D., London
 Wrench, E. M., Esq., Baslow, Chesterfield
 Wright, C. J., Esq., Leeds
 Wright, F., Esq., Stamford Bridge
 Wright, T. G., M.D., Wakefield
 Wright, J. H., Esq., Halifax
 Wylie, Wm., M.D., Skipton
 Young, G. E., M.D., Leeds

CORRESPONDENCE.

HOSPITAL PRACTICE AT BALE.

SIR,—It may interest those of your readers who intend visiting Switzerland, to know that the old town of Bâle possesses several institutions deserving attention, and which would well repay them for a halt of a day or two. I venture to describe them, because guide-books are silent on the subject, and tourists are generally in so great a hurry to reach the Alps that they bestow but little time on the towns on their route. To the medical man, the chief object of interest here is the "Spital," or Cantonal Hospital, which should be visited at nine A.M., when the surgeons make their rounds. The building is well placed, and has ample space round it for garden and airing-ground. It contains three hundred beds; and, like most of the old hospitals, is built on the corridor-plan, the wards having six beds only, but with two large windows in each, and being well warmed in winter by German stoves as well as by steam-pipes. To ensure a more thorough ventilation, the lower panels of the doors are removed, and replaced either by light wooden bars or string-netting. Almost every ward is provided with a slipper-bath of tinned iron, having hot and cold water laid on. The beds have hair mattresses upon spring palliasses, with the large wedge-shaped bolsters and feather pillows seen in all continental hospitals. The greater height obtained by this arrangement renders the bed more convenient for clinical purposes. The surgical practice attracted me, as it will probably do others who are not proficient in German; and the assistant-surgeon, M. Courvoisier, speaks English perfectly. My attention was directed, first, to the treatment of fractures of the limbs, which is almost entirely by the *appareil immobile*, and in the first instance, provided that the case is brought in before any great infiltration of the part. As this method is but little employed in English practice, I may mention that, when the fracture has been set, the limb is enveloped in a thick sheet of cotton wool, and the bandages, which are of strong muslin net, and saturated with plaster of Paris, are carefully applied till a sufficient thickness is obtained to give the necessary support. If the fracture is compound, a fenestra is cut in the bandages after the plaster is set, so as to admit of the wound being examined and dressed. The success obtained by this method would seem to be uniformly good; and I saw a case of bad fracture of the thigh close to and into the knee-joint which was progressing well with this apparatus, and had not been disturbed for examination. In the Berne Hospital, I saw it applied to a compound fracture of the thigh, the limb being raised on a narrow inclined plane, which served as a back splint, while extension was kept up by a falling weight. This combination had answered perfectly, and seemed easier to the patient than the long splint and perineal bandage. Sandbags are used very generally to support the fractures, and are made of a cheap water-proof material.

The treatment of wounds and ulcers is simple and cleanly. Carbolic acid lotion is used almost exclusively, and applied on charpie covered with lead paper. The strength is generally five per cent. of the acid, with a little alcohol and glycerine added for the purpose of fixing the acid. Irrigation is also used extensively with the same lotion carried from bed to bed in a tin vessel with elastic tube and vulcanite nozzle. In the treatment of abscesses, the practice of making a small opening and squeezing out the contents has not yet been abandoned; nor would the use of drainage-tubes seem to be sufficiently appreciated. Scrofulous enlargement of the lymphatic glands and scrofulous diseases of the

joints seem common enough in this part of the country, and the local application in general use is a saturated tincture of iodine, with liberal diet and cod-liver oil.

Among many interesting cases, I noted more particularly a woman of middle age, in whom the common carotid artery had been tied for aneurism within the orbit with exophthalmos; the operation was said to have been followed by cerebral symptoms, and after the lapse of a month the tumour had become much reduced in size, though slight pulsation could still be felt; the wound was not healed, and seemed likely to give some trouble from suppuration under the fascia.

Amputation of the limbs is usually performed by the flap operation, and showed some good results, as in the case of a man who had both legs removed below the knee. In a young girl, the whole of the first metatarsal bone had been excised for scrofulous disease, leaving a foot which was but little deformed and quite useful for progression. Another interesting case was that of a young lad, who had had his bladder tapped above the pubes, for the relief of retention of urine caused by injury to the perinæum. The operation had been performed before his admission to the hospital, and an elastic gum catheter was still worn without any sign of irritation therefrom. It was proposed to divide the stricture from the perinæum.

The last case pointed out to me, was one of ovariectomy. The patient, a single woman of forty, not previously tapped, had been operated upon six days, and the wound had nearly healed without a bad symptom. The tumour consisted of an unilocular cyst, and in its dried state was not larger than a large pig's bladder. The operator, Dr. Toecin, surgeon to the hospital, uses the clamp invented by Kœberlé of Strasbourg, which is on the principle of the wire-écraseur, and is usually left on till the stump of the pedicle sloughs off. No deep sutures appeared to have been used, and the edges of the wound were united by means of cotton threads soaked in collodion, two or three longer threads on each side having their ends left free, so that they could be tied across the wound like the strings of a child's dress.

In another part of the hospital devoted to the aged and incurable, which corresponds to the union infirmary in our country, I visited the wards set apart for the reception of vagrants. The number of this class would not appear to be large, nor their character the same as in England. I followed a batch of seven into the house, who were all evidently young working-men, and some in the *Wanderjahr* of their apprenticeship. All had to produce their paper duly signed by the police. The accommodation provided for them is not inferior to that afforded to the pauper inmates of our unions. There are beds for forty-four men and six women, rather closely packed, but in lofty well-ventilated wards. Three meals a day are allowed: at breakfast, a bowl of oatmeal porridge; at dinner, a barley soup, and the same at supper, with a good slice of bread at each meal. A dietary so liberal as this would not be found to answer in a country overrun with professional tramps like ours; nor is this hospitality extended to the Swiss traveller for more than one day.

A visit to the Deaf and Dumb School at the village of Riehen, three miles distant on the Baden railway, will afford much interest, if it is only to witness the success attending the system of education generally pursued in Germany. The children, who are not admitted before the age of seven nor after twelve years, are taught to speak, and in no very long time. One child who had only been seven weeks in the institution, was able to write from dictation words of two letters, which had been taught simply by observing the various movements of the lips and tongue during articulation; while boys of ten and eleven could answer simple questions in a slow measured tone, and without much modulation of the voice. The children belong to the different classes of society, and are trained in the domestic pursuits suited to their station, and in gardening. The intelligent looks and demeanour of all I saw would not have led to a suspicion that they were deaf-mutes.

I am, etc.,

HENRY S. TAYLOR.

Bâle, August 1869.

MR. NUNNELEY AND THE ANTISEPTIC TREATMENT (CARBOLIC ACID).

SIR,—In the *Lancet* of the 28th August, Dr. Morton of this city gives expression in an unequivocal manner to sentiments entertained, I believe, by the bulk of the profession in Glasgow, regarding this, the latest toy of medical science so-called. On all hands I have heard but one expression of opinion as to Mr. Nunneley's address; that being, that it was characterised in an eminent degree by a comprehensive grasp of his subject, a fair statement of his propositions, and withal a sturdy eloquence, and correct logic.

It is all very fine to cry out "misapprehension of published views," etc.; but if Mr. Nunneley has misapprehended, I wonder exceedingly

who has apprehended the intricacies of this surgical arcanum. There is nothing more obstructive to scientific inquiry and progress than reasoning from false premises and confounding coincidences with necessary consequences, and there is no science or art which has suffered more, or is suffering more in this respect than that of medicine. This may be illustrated, as Dr. Morton justly puts it, in the "unrivalled success of Dr. Thomas Keith in ovariectomy." We can fancy how jubilant Mr. Lister might feel if Dr. Keith had been in the habit of "imbruing his surgical fingers" in the learned professor's oil, and making his incision behind the antiseptic screen. By what power does Dr. Keith succeed in excluding the wonderful sporules?

A distinguished physician of this city related to the Medico-Chirurgical Society his wonderful success in the treatment of typhoid fever by the exhibition, if I remember well, of one drop of carbolic acid night and morning! This within twelve months ago. Learned medicals gaped with astonishment, vowed there was an occult power in carbolic acid, that typhoid fever was due to sporules, that carbolic acid killed them, and that we were on the confines of the greatest discovery of modern medicine. We have heard nothing of carbolic acid in typhoid fever since!

Sarracenia purpurea, not long ago, played such fantastic tricks with "facts" and "observation" as bromide of potassium has been doing in later times. Small-pox was cured in an incredibly short time. Pitting there was none. *Sarracenia purpurea* is defunct! The hypsulphites have had their day. Pancreatic emulsion has passed the zenith of its glory, corroborated as its good effects are, like everything else, by thousands, and the folly of the million emblazoned in an octavo volume. The phosphates are finding their own level; and in the general chaos, I doubt not, a revulsion must certainly set in to the good old "friends we have, and their adoption tried."

It is but recently, with a pompous flourish of trumpets, that that innocent article of our materia medica, sulphur, amid the general clangour of spray-producers, etc., emanated, on a disease-exterminating mission, from Biggar and Kirkealdy. An infatuated public demanded a thirteenth edition of the grossest rhodomontade conceived by the mind of man. Cures flashed like lightning from the humble cottage, the manse of the sage divine, and the baronial hall. Human suffering and death fled howling before an offensive smell. Every house contained its quota of sulphur, and every matron toyed more with her spray-producer than her feeding-bottle. Medical men applauded, and swelled the insane chorus. Time wore on. Marvels died away. The "sulphur-cure" became known only in story. The bills of mortality were obese as formerly—people suffered, people died.

It is no discredit, I contend, to the carbolic acid mania, that we find its prototype in the above; like it, a plausible theory, based on false premises, and bolstered up by coincidences. Medical men cannot be too cautious in mounting hobbies, or in being led away by the seductive influence of discovery. There is nothing more calculated to shake the faith of the public in our art—nothing more opposed to the true progress of scientific medicine or surgery. I am, etc.,

Glasgow, Aug. 1869.

D. CAMPBELL BLACK, M.D.

POISONING OF HOSPITAL WALLS.

STR,—Allow me to make the following suggestion respecting hospital construction. Hints at the present moment may all become of some value in future erections, for it is improbable that all the scientific and practical views lately expressed will be ignored in new buildings, and the simple plan I am about to mention could be carried out in existing hospitals.

The great difficulty appears to be in eradicating poisonous infiltration (if it may be so called) when once it gets possession of walls, floors, and probably the whole structure. The suggestion of pulling down the building to get rid of poisonous matters is rather too serious a matter to be undertaken till everything else has proved unavailing.

What I wish to suggest is, that before the plaster is put on and the floors are laid, a thin sheeting of zinc should be fastened to the joists, etc., then the lath and plaster so adapted that it would admit of easy removal when considered necessary to take it down. The zinc thus exposed could be washed with diluted hydrochloric acid; it would appear impossible that the infection could pass through the metal, and what existed on the exposed surface would be destroyed by the chloride. This plan could be employed in existing buildings at a far less cost than the pulling down the entire fabric.

If such a suggestion is of any value, an architect would readily carry out details which would be unnecessary to attempt here.

I am, etc.,

St. Leonard's, Aug. 30, 1869.

GEO. FRED. GILES.

THE CONSTITUTION OF THE MEDICAL COUNCIL.

SIR,—My attention has been drawn to the Report of the Parliamentary Committee of the Association, presented at the Annual Meeting at Leeds, and published in the JOURNAL of Aug. 28. In the part of the Report which refers to the Medical Council, after some remarks in disparagement of that body, comes the following paragraph:—"In the very important function of really controlling and directing medical education and examinations, your Committee entertain serious doubts whether physicians out of practice and professors of abstract sciences are better advisers than actual practitioners for directing the acquirement of an art so thoroughly and essentially practical as the 'art of healing'."

Any person unacquainted with the facts would, on reading these words, be led to believe that the Medical Council is in great measure composed of "physicians out of practice and professors of abstract sciences." Now, what are the facts? Why, that from the first establishment of the Medical Council up to the present time the vast majority of its members have been medical men actively engaged in their profession. At all times, about twenty or more of the twenty-four have been "actual practitioners;" and as for "professors of abstract sciences," not one such has ever been a member of the Council.

As a member of the British Medical Association, and concerned for its honour, I protest against such remarks as those I have quoted. Whatever their purpose be, their effects are clear. They mislead those who are unacquainted with the facts. They discredit an Association, and bring it into ridicule among those who are better informed.

I am, etc.,

G. E. PAGET, M.D.

Cambridge, Aug. 28, 1869.

MR. NUNNELEY AND THE OPERATION FOR THE REMOVAL OF THE ENTIRE TONGUE.

SIR,—An address in surgery, delivered at Leeds by a Leeds surgeon, treating of operations for removal of stone without any mention of the name of Smith, in which plastic operations are made a prominent subject with but an incidental allusion to the name of Teale, and in which, with the bare exception I have given, the names of Hey, Smith, and Teale do not once occur, is calculated to discourage those who, like myself, have been accustomed to look with reverence upon the three great names which the surgical wards of the Leeds General Infirmary have produced during their century of existence.

It is not, however, with Mr. Nunneley's address, as a whole, that I wish to deal. My remarks will be restricted to that portion which treats of the removal of the entire tongue; and in asking you to insert them, my object is only to do that which, I am sure, Mr. Nunneley will approve—to acknowledge our indebtedness to French surgery for most, if not all, of the improvements which have been effected during late years in this operation. On reading the report of Mr. Nunneley's address, published in the JOURNAL of August 7, p. 146, any one, ignorant of the labours of others in this matter, would necessarily conclude that the only two persons who had ever discovered a method of removing the entire tongue are Mr. Syme and Mr. Nunneley; and that, whilst the operation performed by the former is bloody, of great magnitude, and very fatal—so fatal as to have called forth a solemn warning against its continued performance from its very author—that of the latter is bloodless, simple, and of easy performance, and absolutely free from danger; he would conclude that, by a sudden flash, as it were, upon the intellect of one man, a result, which before had been next to impossible, has not only happily been attained, but has been rendered in the highest degree feasible and altogether free from danger. Such, I say, must be the impression caused by Mr. Nunneley's address, however far it may have been from Mr. Nunneley's intention to convey such a meaning.

It is now about six years since I first saw Mr. Nunneley remove the tongue with the *écraseur*, by the submental method; and as the operation seemed to possess very considerable merit, I took some pains to make myself acquainted with its details. As I was not at that time aware that Mr. Nunneley laid claim to the authorship of the method, my attention was directed to published sources of information, with the result of finding that this important operation, like almost all others of any value, had been perfected through several successive stages. From time immemorial the anterior portions of the tongue have been removed by means of the ligature, applied directly to the organ through the oral orifice; but when the disease was situated near the base, other measures had to be substituted for the ligature, owing to the difficulty of its application, until M. J. Cloquet devised his method, which contains what is perhaps the most important step to-

wards the completion of the operation, as now performed, viz., the obtaining access to the base of the tongue by means of a needle passed from the middle line of the neck, immediately above the hyoid bone. M. Cloquet by this means encircled with the ligature diseased portions of tongue situated at the base. MM. Vidal and Mirault followed with unimportant modifications; and then M. Chassaignac substituted his *écraseur* for the ligature. In a pamphlet (*Mémoire sur une Nouvelle Méthode opératoire pour le traitement chirurgical du Cancer de la Langue*), published in 1855, M. Chassaignac describes his operations upon the tongue, including two for the complete removal of that organ, with one of which, both in principle and, with very trifling exceptions, in detail, the operation as performed by Mr. Nunneley completely agrees.

So far as I know, Mr. Nunneley did not operate upon the first of his nineteen cases until some years after the publication of M. Chassaignac's pamphlet. Mr. Nunneley may have made an independent discovery, unconscious of all that M. Chassaignac had wrought; and, if so, I can but feel surprise that a surgeon in Mr. Nunneley's position should have failed to have kept his eye upon all that was being accomplished by M. Chassaignac's *écraseur*—an instrument which, at the time of its invention, and for long afterwards, was by many expected to revolutionise the surgery of the world; and still more, that up to the present time he should remain in such apparent ignorance of all that has been effected by our French brethren towards improving the removal of diseases of the tongue by operative procedures.

I am, etc.,

T. R. JESSOP.

Leeds, August, 1869.

ADMISSION OF PATIENTS INTO HOSPITALS.

SIR,—May I be allowed a little space in your discussion column to make a few remarks on Dr. Heslop's paper on hospitals?

He there speaks favourably of the French system, as contrasted with the English, but omits to point out the difference in administration in the two countries; tending in one instance to efficient service; in the other, according to his own showing, to most extensive abuse. Dr. Heslop sees a remedy in the free *versus* the ticket system of admission, whereas the comparison obliges us to infer that the true remedy lies in the assimilation, as in Paris, of public and private charity; for, without this, we have constantly two large fields of pauperism, one unquestionable, in the hands of the municipality; the other by no means so well defined, administered to by amateur relief, and this at a most extravagant expenditure, without unity of purpose, concord in action, or benefit in result; for it is this latter class who are constantly recruiting the former, are indeed trained systematically to abandon all self-reliance.

Further, Dr. Heslop infers that acute and dangerous maladies would be the better for more ready admission to our hospitals, but one would have thought the statistics of Sir James Simpson would have exploded this notion—hospitals are but necessary evils, good for paupers, good for medical instruction, and as fields for scientific observation, but worse than useless as hygienic resorts. Who would like to have a mortality of 11 per cent. in one's private practice—for this is the chance of life for the 98,000 in-patients of our London hospitals.

The accumulative evidence on this subject leads one to perceive the soundest policy lies in amalgamation of parochial and charitable relief, and a tendency to foster provident habits among the working classes when in a state of health, that, when the evil day comes, they may be neither wholly dependent on the one, nor forced to the other—better that they should be assisted by both in maintaining their independence and, wherever possible, be doctored at home, rather than in the contaminated atmosphere of infected hospitals.

I am, etc.,

PERCY LESLIE, M.D.

July 30th, 1869.

ANTISEPTIC TREATMENT OF WOUNDS.

SIR,—Dr. Jones is quite right in what he says in his letter as to Professor Lister's antiseptic mode of treating wounds. Scepticism is pardonable until one visits the hospital where the professor has pursued his researches, and there witnessed the extraordinary success he has achieved, and the extraordinary care he practises in carrying out the details of the treatment. Such a visit has convinced me that when I fail in treating a case on this method, it is because I fail in the details; and it requires the constant exercise of thought and vigilance to carry it out properly. Such is, however, well repaid by the results.

I am, etc.,

JAS. MARTIN.

Aug. 13 9.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—Honours Examinations. First B.Sc. and Preliminary M.B. (conjointly). [*Obtained the number of marks qualifying for the Exhibition.]—Botany.

First Class.

Hartog, M. M., First B.Sc. and Prel. Sci. (Exhibition), University College
 *Aveling, E. B., First B.Sc., University College
 Duncan, Peter T., Prel. Sci., University College

Second Class.

Schafer, Edward A., Prel. Sci., University College
 Bonford, Gerald, Prel. Sci., King's College
 Rossiter, George F., Prel. Sci., (private tuition)
 Taylor, Herbert, Prel. Sci., St. Bartholomew's Hospital
 Eastes, Thomas, Prel. Sci., Guy's Hospital
 Russell, E. Geer, Prel. Sci., Guy's Hospital

Third Class.

Colgate, Henry, Prel. Sci., University College
 Bettany, George T., Prel. Sci., Guy's Hospital
 Harvey, Charles William, Prel. Sci., University College

Zoology.

First Class.

Schafer, Edward Albert, Prel. Sci. (Exhibition), University College
 *Aveling, Ed. B., First B.Sc., University College

Second Class.

Russell, Eben. Geer, Prel. Sci., Guy's Hospital
 Houghton, W. B., Prel. Sci., University College
 Duncan, A., Prel. Sci., King's College
 Skerit, E. M., Prel. Sci., University College } equal

Chemistry and Natural Philosophy.

First Class.

Bott, H. Septimus, First B.Sc. and Prel. Sci. (Exhibition), Owens College
 Routledge, Robert, First B.Sc., Owens College
 Clowes, Frank, First B.Sc., Royal College of Chemistry and private study

Second Class.

Houghton, W. B., Prel. Sci., University College

Third Class.

Russell, E. G., Prel. Sci., Guy's Hospital
 Whittle, E. G., Prel. Sci., University College } equal
 Elwes, John Wm., First B.Sc., King's College
 Firth, Charles, Prel. Sci., Norfolk and Norwich Hospital

First M.B. Examination. [†Worthy of a Gold Medal.]—Anatomy.

First Class.

Elkington, E. A. (Exhibition and Gold Medal), Queen's College, Birmingham
 Southee, H. E. (Gold Medal), Guy's Hospital
 Edger, E. R., B.A., University College } equal
 Hayes, T. C., B.A.Dub., King's College

Second Class.

Ball, James Barry, University College
 Jones, Thomas, Guy's Hospital

Physiology, Histology, and Comparative Anatomy.

First Class.

Carter, Alfred Henry, University College

Organic Chemistry and Materia Medica and Pharmaceutical Chemistry.

First Class.

Southee, H. Edward (Exhibition and Gold Medal), Guy's Hospital
 Jones, Thomas (Gold Medal), Guy's Hospital
 †Warner, Francis, King's College
 Ingoldby, Joseph Theodore, Guy's Hospital
 Elkington, Ernest Alfred, Queen's College, Birmingham

Second Class.

Hayes, Thomas Crawford, King's College
 Burn, William Barnett, St. Bartholomew's Hospital } equal
 Carr, William Ward, University College

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, August 26th, 1869.

Murphy, Michael Dominic, Egmont, Buttevant, Cork
 Preston, Theodore Julian, 42, Belsize Road, N.W.
 Schmidt, Alfred Edwin, Tyssen Street, Bethnal Green
 Sharpe, Henry John, Queen Street, Worship Street
 Vines, Henry Jeckell Kendrick, Friar Street, Reading

The following gentlemen also on the same day passed their first professional examination.

Ling, Edward Clayton, Middlesex Hospital
 Stephens, Thomas Palmer, Guy's Hospital
 Turner, Henry Gunton, Guy's Hospital

MEDICAL VACANCIES.

THE following vacancies are declared :—

ARDEE UNION, co. Louth—Medical Officer for the Collon Dispensary District (£100 per annum, and Vaccination Fees): applications, 7th; election, 8th.
 BALLYSHANNON UNION, co. Donegal—Medical Officer for the Ballintra Dispensary District (£60 per annum, and Vaccination Fees): election, 7th Sept.
 BICESTER UNION, Oxfordshire—Medical Officer for the Islip District (£58 per annum).

BLACKBURN UNION, Lancashire—Medical Officer for the Blackburn No. 2 District (£160 per annum).
 BLYTHING UNION, Suffolk—Medical Officer for District No. 1 (£54 per ann.); Medical Officer for the Workhouse (£50 per annum).
 BOURNEMOUTH GENERAL DISPENSARY—Resident Surgeon (£100 per annum, with furnished apartments, coal, gas, and attendance): applications, 9th September; duties, 18th October.
 CARLISLE UNION—Medical Officer for the Stanwix District (£70 per annum, to include medicine, and extra fees): applications, 8th Sept.; election, 9th Sept.
 CHRISTCHURCH UNION—Medical Officer for the Western District (£55 per annum); Medical Officer for the Workhouse (£15 per annum).
 DURHAM UNION—Medical Officer and Public Vaccinator for the Southern District.
 ECCLESALL BIERLOW UNION—Medical Officer for District No. 3: applications, Sept. 14th; election, Sept. 15th.
 GLASGOW UNIVERSITY—Regius Professor of Surgery.
 GREAT NORTHERN HOSPITAL, Caledonian Road—House-Surgeon: applications, 7th Sept.
 KILMUIR, and part of the Parish of SNIZORT, Isle of Skye—Medical Officer.
 KILMURICH AND LOCHGOILHEAD, Argyleshire (united Parishes of)—Medical Officer.
 LONDON HOSPITAL—Surgeon: applications, Sept. 7th; election, Sept. 14th.
 MANCHESTER, ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN—Resident Medical and Surgical Officer: applications, 23rd Sept.
 MELKSHAM UNION, Wilts—Medical Officer for District No. 4 (£40 per ann.).
 NEWHAVEN UNION, Sussex—Medical Officer and Public Vaccinator for District No. 4: applications, 23rd Sept.; election, 24th Sept.
 RATHDRUM UNION, co. Wicklow—Medical Officer for the Dunganstown Dispensary District.
 ROCHDALE DISPENSARY—House-Surgeon: applications, 6th Sept.
 ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road—Physician.
 ROYAL ISLE OF WIGHT INFIRMARY, Ryde—House-Surgeon: applications, 5th October.
 ROYAL SOUTH LONDON DISPENSARY, St. George's Cross—Honorary District Surgeon.
 SANDAY, Island of, Orkney—Medical Man (public appointments, £50 per annum; population, 2000): applications, 8th Sept.
 STOCKTON UNION, Durham—Medical Officer for the Yarm District (£45 per annum).
 TIVERTON UNION, Devon—Medical Officer and Public Vaccinator for the Tiverton East District; Medical Officer for the Washfield District; Medical Officer for the Workhouse: applications, 6th Sept.; election, 7th Sept.
 TOWER HAMLETS DISPENSARY, Commercial Road—Medical Resident (£100 per annum, with residence, coal, and candles): applications, 6th Sept.; election, 20th Sept.
 UNIVERSITY OF ABERDEEN—Three Examiners for Graduation in Medicine; election, October.
 WORCESTER DISPENSARY—House-Surgeon and Secretary.

BIRTHS.

AMBLER.—On August 7th, the wife of Vincent Ambler, Esq., of Norfolk Square, Hyde Park, of a daughter.
 AUSTEN.—On August 27th, at Ramsgate, the wife of Josiah Austen, Esq., Surgeon R.N., of a son, still-born.
 BARROW.—On August 15th and 16th, at Aldershot, the wife of T. S. Barrow, M.D., 23rd Royal Welsh Fusiliers, of twins, a boy and girl: the latter being still-born.
 CURTIS.—On August 26th, at Staines, the wife of Albert Curtis, Esq., Surgeon, of a daughter.
 FARQUHAR.—On August 22nd, at Aberdeen, the wife of Surgeon-Major T. Farquhar, M.D., Bengal Medical Service, of a daughter.
 HARMER.—On August 28th, at Hawkhurst, the wife of *W. Milsted Harmer, M.R.C.P.Edin., of a son.
 HEWLETT.—On August 23rd, at Sunning Hill, the wife of Thomas G. Hewlett, Esq., Surgeon Bombay Army, of a son.
 MARTYN.—On August 25th, at Clifton, Bristol, the wife of *S. Martyn, M.D., of a son.
 NEWHAM.—On August 23rd, at Winslow, Bucks, the wife of Thomas Newham, M.D., of a son.
 SUTHERLAND.—On August 24th, at St. Andrew's, the wife of J. Sutherland, M.D., Deputy Inspector-General of Hospitals, of a son.

MARRIAGES.

CANDY, John, M.D., Assistant-Surgeon H.M.'s 109th Regiment, to Constance, third daughter of Captain J. W. HARDING, retired list Madras Army, at Culworth, Northamptonshire, on August 25th.
 HAUSBURG, F. L. L., Esq., of Rosenfels, Woolton, to Isabella, eldest daughter of Francis HUTCHINSON, L.R.C.P.Ed., of Woburn Place, at Ryde, on August 25th.
 MATHEWS, Daniel, Esq., of Wednesbury, to Lucy, eldest daughter of *J. Vose SOLOMON, Esq., Surgeon, of Birmingham, at Handsworth, on August 25th.
 SCOTT, David, M.D., of Murray Street, Camden Square, to Emma Louisa, daughter of Henry R. ABRAHAM, Esq., of Mountfield House, Harrow Road, at Hampstead, on August 24th.
 WARD, John Hext, Esq., second son of *John Ward, Esq., Surgeon, of Bodmin, to Florence C. B., eldest surviving daughter of Price B. HALLOWES, Esq., Surgeon, of Canterbury, on August 26th.

DEATHS.

*BEGGIE, James, M.D., Physician-in-Ordinary to the Queen for Scotland, in Edinburgh, on August 26th.
 BELCHER.—On August 4th, at Brighton, aged 4, Minnie, fourth daughter of Henry Belcher, M.D.
 BROCK.—On August 29th, at Clevedon, aged 80, Anne, widow of W. W. Brock, M.D., of Clifton.
 *CLARK, Donald, L.R.C.P.Ed., at Spennymoor, aged 42, on August 12th.
 CROSS.—On August 29th, Marianne, wife of *William Cross, Esq., Surgeon, of Clifton, Bristol.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.

WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE regret to find that the author of the pamphlet you send us "William Ray, Esq.," is, as he professes himself, a member of our profession. What Mrs. Ray means when she describes herself as "homœopathic accoucheuse," we do not know. Probably it was she who attended the servant-maid who apologised for her misfortune by the plea that the baby "was a very little one."

QUEEN'S COLLEGE, BIRMINGHAM.

SIR,—The letter from your Birmingham correspondent, in your last number, contains a paragraph referring to the delivery of the introductory address at the opening of the session of the Queen's College. In accepting the unanimous and cordially expressed invitation of the Council (including four of the professors who were present) that I should give this address, my only desire was to manifest the warm and continued interest I felt in an institution with which I had been connected for so many years, and to promote the success of which I had given time and labour I could ill spare. This success is endangered in no slight degree, when the acts of the Council are criticised in the tone and spirit manifested in your correspondent's letter. It is not for me to refer to my labours in the cause of medical education, or to my claims for the position which the Council saw fit to assign to me. Much less should I think of retaining that position in the face of opposition, however unworthy. I have placed my resignation in the hands of the Council.

I am, etc.,

ALEXANDER FLEMING.

Temple Row, Birmingham, August 31st, 1869.

*** On re-reading the paragraph in our correspondent's letter, to which Dr. Fleming alludes, we admit the justice of his complaint, and willingly express our regret that it appeared.—ED. B. M. J.

A MONEY-LENDING DISPENSARY.—We observe that the Civil Dispensary at Trichinopoly has made a loan of Rs. 7000 to the municipality on account of the new market. The interest to be paid is nine per cent. The Bank of Madras wanted eleven per cent. The Municipal Commissioners very naturally accepted the lowest offer. But we fancy this must be the first instance in which a bank has been beaten on its own particular ground by a dispensary.—*Madras Mail*.

NOISES IN THE HEAD.

SIR,—A lady of excitable temperament, aged 50, or a little over, who, during a town residence in early life suffered much from indigestion and weak health, but now, or till lately, was robust as a consequence of her having married into the country, is a present martyr to noises in the head. They seem like bubbles bursting, or beads towards the front; so loud they appear in their tone, she fancies others must hear them. They are worse after fatigue, whether bodily or mental. The beads break towards the root of the nose, frontal sinuses, or fore part of the head. Can any one suggest a remedy for this perversion of the senses? What is the prognosis? Has any one seen the like? Her existence is made wretched by them. In all respects her mind is sound.

I am, etc.,

A MEMBER OF THE BRITISH MEDICAL ASSOCIATION.

A CIRCULAR.

SIR,—I enclose an advertisement, which was put into my hands during a professional visit, and was given to understand that the like has been left from house to house. Such a tradesmanlike circular requires no remark; but a publication of a copy in our JOURNAL will perhaps call the B.A. to a knowledge that there is such a thing as medical etiquette.

A MEMBER OF THE B. M. A.

Manchester, August 30, 1869.

COPY OF CIRCULAR.—"Mr. Edward Kennedy, Bachelor of Arts of the University of London, Member of the Royal College of Surgeons of England, Licentiate of the Honourable Society of Apothecaries of London, late Scholar and First Prizeman of the Manchester Royal School of Medicine and Surgery, respectfully informs the inhabitants of Gorton and the vicinity, that he has commenced the practice of his profession at Henshall's Buildings, 151, Cross Street, Gorton, where he may be consulted daily."

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to the Publisher, not later than *Thursday*, twelve o'clock.

H. M.—It was Southey who said that man was a "dupeable animal", and added that "there are quacks in medicine, quacks in religion, and quacks in politics; know this and act upon that knowledge. There is scarcely any one who may not, like a trout, be taken by tickling."

DEFORMITY OF THE EAR THROUGH MATERNAL INFLUENCE DURING PREGNANCY.

SIR,—A woman during pregnancy was horrified at seeing a man whose ear had been mutilated. Her child, a girl, was born with her right ear presenting a similar appearance. This girl grew up; and her sister, whilst pregnant, and during a fit of anger, called her "old one ear". She retorted, saying that she would be sorry one day for speaking of her deformity in that manner. After this, the sister felt some remorse, and feared the effect on her child, knowing how her sister's deformity arose. Her child, a boy, was born with his right ear deformed like his aunt's. The inferior portion of the pinna appears as if a large portion had been torn away, and the contraction of the cicatrix had obliterated the concha and external meatus. The parts recognisable are, an almost straight helix puckered at the lower end, a small lobule; the antitragus and tragus united; the antihelix, concha, and external meatus obliterated.

I have hitherto regarded cases of supposed maternal impressions with some degree of scepticism; but the above sequence of cases leads one to believe that there is some truth midst a good deal of fiction.

I am, etc.,

J. BRENDO CURGENVEN.

L. R. C. P. (Lond.).—Sir Henry Halford, Bart., M.D. Oxon, was elected President of the Royal College of Physicians in 1820; Dr. Paris, M.D. Cantab., succeeded him in 1844; Dr. Mayo, M.D. Oxon., followed in 1857; and was succeeded by Sir Thomas Watson, Bart., M.D. Cantab., in 1862.

OUR SYSTEM OF ARMY HOSPITALS.

SIR,—It is only fair to ask you to allow a word to be said in reply to your scheme for "civilianising" the medical department, as proposed in this day's JOURNAL.

To "civilianise" the department would simply be impossible. It is now as much a civilian branch of a military whole as it is possible to make it. From the nature of things, military surgeons are hybrid animals, that is to say, they are military and surgeons. A military man *per se*, or a surgeon *per se* will not do. The duties require a man to be a kind of professional compound, or, in other words, a military surgeon.

We cannot separate the two essentials, neither can we suppress the one nor the other without doing fatal mischief to this hybrid animal. His duties are not alone medical; if that were the case, your view of the matter would be quite correct, but I think in this particular you are mistaken, because his duties are so intimately blended with matters essentially military, that they become military in themselves. I allude to those duties which belong to field equipments, transport, organisation, discipline, and many others too numerous to enter upon now.

Both from force of circumstances, and *ex officio*, this must be the case, and this is the real reason why an army surgeon should be a *military* surgeon, and not simply because he wears a red coat, or is belonging to the Army. What is needed is a move in the other direction. We ought to endeavour not to destroy one, but to blend firmly together the two essentials of this compound. The department ought not only to be reorganised as an unified body, but as an unified *military* body. Its position, and the position of its members should be placed upon a fixed basis, well defined with relation to the whole. All "ranking with" must be abolished. *Real* rank should belong to *real* people, who are responsible for *real* duties to a *real* country, and these remarks hold good with all military departments.

We do not find the Engineers in the Army less engineers because they have substantive ranks. Sir H. Storks is a real military man, and the head of a department in the service. Why should not the officers under him be as real, and hold substantive rank, as well as their chief?

This is the true basis upon which all military departments should stand. No clashing of interests is necessary, for if the system is properly organised, the hand might as well try to arrogate to itself the duties and functions of the ear, as one branch of the military body do so with another. All reforms need time, because time alone can up-root inborn prejudices; but if this system be honestly organised, both increased efficiency and economy must result. In fact, even now the efficiency of the so-called Inspectorial ranks depends entirely on administration, in other words, *military* ability and knowledge; and this will be at first a great difficulty in the self-government of the department, because few, if any, of our seniors, with the exception of Dr. Muir, possess this administrative talent, partly because efforts have always been made to crush the military essential in the compound.

July 17th, 1869.

I am, etc.,

A. B.

MR. CHURCHILL (Plymouth).—The regulation which formerly permitted graduates in Medicine of your University to escape the Anatomical and Physiological Examination for the Fellowship of the London College of Surgeons has been rescinded.

A TRUE TAIL.

SIR,—The case of a "False Tail", reported in the JOURNAL, May 22nd, as having been removed by M. Gosselin at the Hôpital de la Charité, reminds me of one which occurred in my practice many years ago. I delivered the wife of a farmer in Essex of a full grown, well developed female child. To the extremity of the spinal column of the infant was attached an appendix, which was in every respect a tail. It resembled in form and appearance that of a pig about three or four months old. It was about the length and of nearly the thickness of a little finger, tapering at the end. It was well supplied with nerves and muscles; and, as it lay at rest, it was curled up over the back, and was moved actively upon being touched. Unlike the tail described by M. Gosselin, it was not soft; but resisted the pressure of the thumb and finger just as would that of a pig. It evidently consisted of a cartilage, but was rather less hard. The mother having expressed great anxiety for its removal, I applied a silk ligature about the fifth day; this completely effected its object in about four or five days. The child was restless during that period, but in other respects did not suffer at the time from the operation. She was, however, less fortunate in the after consequences; for, although she lived to about twelve years of age, she could never walk without the aid of crutches, or without holding on to chair. She subsequently died from hæmoptysis. The parents would not allow a *post mortem* examination. I presented the tail, with its history attached, to the late Mr. Bransby Cooper, who placed it in the museum of Guy's Hospital; where, I have no doubt, it may still be seen in alcohol.

61, Cleveland Square.

I am, etc.,

WILLIAM B. OWEN.

EDUCATIONAL NUMBER.

MEMORANDA FOR STUDENTS.

OUR present number is EDUCATIONAL in a sense somewhat different from that in which all efforts for the spread of science may be so named. We are all students, but some are further on than others; some fairly advanced, others but beginning. The present number of our JOURNAL is designed for the assistance of beginners. We have, as in former years, collected all the information we can as to the different Schools, etc., for professional study, and the Examination Boards by which their success will be tested. In presenting these data to our junior readers, we also gladly avail ourselves of the yearly recurring privilege of saying a few words on success in study, on methods of work, and on motives for it. Some of our suggestions will concern matters of detail, others will be so general that we almost fear they may be classed by not a few as *propiora sermoni*—things properer for a sermon, as Lamb translated it. For all, however, we ask the indulgence of those for whose help they are intended. We have not made any attempt to weave our *memoranda* into a continuous essay, but prefer to offer them in the detached and somewhat unconnected manner in which they have been written.

Mistaken Efforts at Saving Money.—Our first suggestion—addressed, perhaps, more to parents and guardians than to students—is that, circumstances permitting, the study of a liberal profession should be begun liberally. Let there be no false economy—*i.e.*, economy not absolutely necessary—in the means of education. If a cheap school be chosen because it is cheap, and in spite of disadvantages, the money so saved will be terribly wasted. If a student who might have afforded the advantages of residence in the house of a medical man forego them on account of the cost, he will probably rue it. If a young man be needlessly set to do two businesses at once—*i.e.*, to attend Hospital practice and lectures, and to discharge at the same time the duties of a dispenser and midwifery assistant—it is very possible that his health may give way; it is very certain that his career as a student will be crippled. The advantages of an insight into private practice are very great, and no one should neglect to secure them at proper times; but these times do not occur during the school sessions. We would not say one word of discouragement to those to whom economy is a matter of necessity: by all means let such undertake their career, and all that it requires, with cheerful hope. Many such have surmounted all obstacles, and attained splendid success. To those, however, to whom power of choice is permitted, we give a decided opinion—be liberal in matters of education.

Books, etc.—Buy books. Have as good a library as you can possibly afford. Do not trust to borrowing books, but have them at your elbow. If you are a real student, and have aptitude for your profession, any reasonable expenditure in books will pay you cent. per cent. for the rest of your life. The day is far gone by when any one, however original, however industrious, whatever tact he may possess, can hope to obtain good success without availing himself to the full of the labours of others. The printing press has been the grand agent in the revival of learning and the recent great advance of science. Avail yourself of it with no stinting hand; use it to the utmost. A farmer who is saving in his seed-corn, a merehant with a thriving business who dare not put his capital into it, a miser shivering in cold when he might be warm, do not present more definite examples of weak-hearted folly than a nineteenth-century student who will not afford himself books.*

The same remarks apply to the purchase of instruments of research. Every student should procure a good, cheap, usable microscope, a stethoscope, the simplest form of ophthalmoscope, and a clinical thermometer. With the first of these he should be daily at work on objects supplied either by human or by comparative anatomy; with the latter

three, he should experiment upon himself, his friends, or the lower animals, until he is quite familiar with the ins and outs of the employment of the instruments. He will find such previous practice of great advantage afterwards.

Osteology.—Every student should possess two skeletons, and he should frequently compare the one with the other. One should be as like as possible in condition to those of the patients upon whom he will finally have to apply his knowledge. It should be clothed with soft tissues. The other should be denuded, so that the details of form, etc., of the bones may be the better made out. It may be doubted which of the two is the more useful for purposes of study. He should employ them both together. Having read up the scapula, bone in hand, let him first find the tip of the coracoid in his own shoulder, and make his fingers perfectly familiar with its relations with the clavicle and acromion. Let him examine the points of bone about the elbow and wrist-joints, and do it over and over again until it would be impossible for him ever to hesitate a moment in recollecting which styloid process comes lower down, or as to the exact relation of the tip of the olecranon with the condyles.

We can imagine no better exercise for a student than to carefully examine all prominences, ridges, and tendons, presented in his own person; to catalogue them, and find out their names. He might examine, also, the Skin; and, with his ophthalmoscope-lens, note the ridges, furrows, orifices, arrangement of glands, hairs, etc.; then make a thorough examination of the Eye, eye-lids, puncta, etc.; then of the Mouth and throat, verifying in detail all the structures which it is possible to recognise. This method of studying external anatomy (or anatomy on the living subject) is far too much neglected, for it supplies the very kind of knowledge which is most useful in practice.

Natural History.—A medical man should be a naturalist in the widest sense; and none but those who have some sort of a taste for natural history are well fitted for the profession. Year by year the practical value of an extended acquaintance with the phenomena of life and of living beings, will be more strongly felt by all classes, and will be deemed more and more essential in surgeons. Year by year we shall come to put less and less faith in nostrums and panaceas, and shall value dogmas and rules less, and principles more. Meteorology, geology, ethnography, with other special departments of natural history, will claim their places amongst the collateral sciences of medicine. He who would gain a real insight into the influences which affect the health of mankind, and bring about its diseases, will find lessons in books of history and travel, new facts in the rabbit-hutch, the garden, and the farm-yard—a capital field for observation in an Alpine tour. He will be able to add a solid source of pleasure to his holidays. He will find springing up, even in his idlest hours, subjects of speculation which will help him in his life's business, and increase his usefulness amongst men.

The Art of Seeing.—

"I tell you, men won't notice; when they do, They'll understand."

Almost before the ability to reflect, we must place for the medical student the art of seeing. At any rate, more mistakes are made for want of observing what is under the eyes than from inability to interpret appearances. This art of noticing is one which may be much developed. M. Houdin, the French professor of legerdemain, has recorded the manner in which he trained his eyes to see quickly and accurately—a power very essential in some of his feats. He and his son used to walk rapidly past a shop window once or twice, and then sit down and write out a list of the things they had seen in it.* Now, this is just the sort of training, with adaptations, to which the medical student should subject himself. Another great aid to correct noticing, is to keep the mind in an unprejudiced condition. If anticipations have been formed, and we

* It may possibly be of some interest to the advocates of Female Medical Education to know that Houdin declared that neither he nor his son, with all their training, could ever equal the marvellous rapidity with which a lady in a passing glance will often secure the clearest perception of every article of another lady's dress. We are no advocates for the movement referred to, and think the arguments against it quite strong enough to allow us safely to give its friends the advantage of this little fact.

* We propose, before October, to give a general review of the Student's Library, with suggestions as to what it should contain.

come expecting to see certain things, we are but too apt to realise our expectations instead of receiving quite passively an exact image of the thing to be observed. We may just remark, also, that the practice of sketching probably cultivates well the faculty of observation, and is one which ought on no account to be neglected by the student who has facility in that direction.

Scholarships and Prizes.—The student who is wise will compete in succession for every scholarship and prize offered in connexion with his school. He will regard his doing so as means to an end, and that end his own improvement. There is no better plan for discovery of one's ignorance, or for getting one's knowledge better arranged, than the answering of questions. A morning cannot possibly be better spent than in an examination-room. Not only is knowledge freshened up, or the want of it found out, but facility in composition and the arts of arrangement and exposition are gained. These will be of great future use, not only in the other and more important examinations which await the student, but also throughout the general affairs of life.

Other advantages will also accrue from the habit of competing for everything that comes fairly in the course of your career. You will learn to care nothing for being beaten, or rather, to put it more correctly, you will learn to feel no annoyance at finding there is some one else yet more able than yourself. You will learn, also, that great lesson of life, to count nothing as of paramount value in itself, but as important only in its relation to the future. The prize list is posted, and your name is not either first or second. Well, what matters it? The thing was a competition, and but one could win; you have done your best, and that best possibly very good; you are conscious that in preparation for it you have gained much knowledge, that the thought of it has been for months past the motive to industry of a kind which otherwise it might have been difficult to sustain. Some one else may have carried off the prize, but you are certainly a gainer. At the least, you may have consolation in remembering that the merit of life is not so much to obtain as to deserve—not success but noble effort.

Another advantage on the side of systematic competition may be suggested in the fact that probably you will win sometimes. Many a man stands aloof from trials of this kind, from a diffident under-estimate of his own powers, or from a foolish false shame in not liking to do anything which those about him may interpret as conceit. Snub your over-susceptible feelings; value yourself for just what you are; be content to know that you are not really actuated by motives of conceit and vanity; and be very careless as to what others say or think. There is nothing that will be more helpful to you than to attain early to a fairly correct estimate of your own powers, and no means of doing this so good as coming frequently into open and fair competition with your equals. The world loses as much—perhaps far more—from the over-modesty and reticence of sound men as from the foolish presumption of shallow ones. Try your faculties, and see if they are not better than you at first thought. Having obtained their measure, you will be the better able to employ them; you will feel the more responsible for their use.

Faith the Mother of Work.—Attain, if possible, a clear and hopeful faith in your profession, and in the part you are to enact. There is good sound reason for such a sentiment, and those of us who fail in respect to it (and all fail at times)—fail chiefly through lack of mental vigour and want of power to realise the unseen. To warm your faith, familiarise your minds with facts, accustom your imagination to supply the detailed consequences which you know must have occurred, but which you have not been allowed to see. The student should read medical biography and the history of medicine, keeping especially in mind the facts as to improvements in our knowledge and their results. He should steep his faculties in the memories of the past, as a soldier would dwell on narratives of war and victory. He should keep in mind that a country gentleman, a member of the medical profession, a writer of rhymes, by no means a Newton in genius, but gifted with a keen eye for the wonders around him, and a heart warm with desire for human good, hit, in the most commonplace and common-sense manner possible, on

the discovery of vaccination. He should try to realise what the extent of loss to human happiness would be tomorrow, if such remedies as quinine and iodide of potassium were taken from us; and then reflect how our knowledge of these drugs, their discovery, and their reputation have been built up by the painstaking work not of one, but of thousands of observers, each bringing his own little, but very valuable, quota. Let him think how the discoveries of the cure of cataract, the cure of glaucoma, those respecting the right use of spectacles, have conferred the advantages and delights of sight upon thousands who must otherwise have foregone them. Then from the general let him not be ashamed to come down to detail, and warm his chilly faith at a household fire. There will come seasons when the general is too far off, too vague, to help us. At such times it is perfectly legitimate—it is the part of wisdom and of duty—to take comfort from ourselves and our small deeds. “Well, after all, Donders’ discovery would have availed nothing whatever to little Miss B, if I had not carefully studied and applied it. She would have had to grow up in the belief that she was, as regards reading and similar pursuits, almost blind, if I had not proved for her that +5 was all she wanted to see as well as anybody.” “Yes, there is no reasonable doubt about it, it was the scrupulous care with which I applied collodion to that man’s wound, and converted a compound into a simple fracture, which saved him the risk of an amputation—it may be, from death. He has returned to his wife and children with an excellent leg, and I had a large share in the result.” You may dwell with satisfaction on the many occasions in which your honestly expressed opinion has helped others to the formation of a sound judgment, and taken its share in the happy result. Such self-congratulation is needed by most minds at times, by some often, by others but seldom. Whilst we freely admit that in most it is well to balance it by a recollection also of good acts not done, and opportunities missed, we believe also that to many, such considerations, cherished almost to the exclusion of the latter, are absolutely essential to the development of motive and the production of energy.

Qualifications.—Remember that you will need for success in practice a *double qualification*. You must not only be a skilful doctor, but a trained gentleman. Has your early education been neglected? Improve it now. Are you conscious of any defect in manners or bearing? If possible, get rid of it. Read the best books, and cultivate the society of the best companions you can get. Study the nutrition of your mind as you do that of your body, and with the most scrupulous care avoid all kinds of poison. Your character will be the outcome of what you are, and the possession of a sound, clear, moral sense in the future will be your reward for self-restraint now. Keep in mind the cardinal doctrine of the Religio Medici, that no influence can fail of its proportionate effect. Add one drop of alcohol to a bucketful of water, and it is no longer pure water; pass your hand for one moment between the sun and an opening flower, and the ripening of its fruit will be correspondingly delayed. Just so one act of thoughtless folly, one coarse dissecting-room joke willingly listened to, will leave its stain on the purity of your feelings, will retard the growth of your moral sense, will make you somewhat—it may be but little, but just so much—the less a gentleman.

Your first lesson in Natural Philosophy has been the absolute indestructibility of all matter, and there has followed it, on evidence not less conclusive, that of the permanent existence of all physical forms of force. Acknowledge—which you may most safely do—that the same law obtains in the moral world; that the relation between cause and effect is inexorable; that we cannot safely neglect the very smallest causes; and that whenever we think we see exceptions, in reality we see but part. Live and work in the conviction of this truth, for it will at once warn and cheer you. It will nerve you to energy in the little as well as the great, and under unhelpful as well as hopeful conditions. Be it a mental effort or a moral one, a struggle of thought or a struggle of conscience, go through with it earnestly, and leave the results. Your success will be exactly proportionate to your endeavour. Rest perfectly certain, “There shall never be one lost good.”

REGULATIONS

OF

THE GENERAL MEDICAL COUNCIL AND
MEDICAL LICENSING BODIES.

SESSION 1869-70.*

THE GENERAL MEDICAL COUNCIL.

Recommendations and Opinions on Preliminary Examination.

THAT Testimonials of Proficiency granted by the National Educational Bodies, according to the subjoined list, may be accepted, the Council reserving the right to add to, or take from, the list. I.—*Universities of the United Kingdom.* Oxford: Examination for a Degree in Arts; Responsions; Moderations; Local Examinations (Senior), Certificate to include Latin and Mathematics. Cambridge: Examination for a Degree in Arts; Previous Examination; Local Examinations (Senior), Certificate to include Latin and Mathematics. Durham: Examinations for a Degree in Arts; Examination for Students in their Second and First years; Registration Examination for Medical Students; Local Examinations (Senior), Certificate to include Latin and Mathematics. London: Examination for a Degree in Arts; Matriculation Examination. Aberdeen, Edinburgh, Glasgow, or St. Andrew's: Examination for a Degree in Arts; Preliminary Examination for Graduation in Medicine or Surgery. Edinburgh: Examination of (Senior) Candidates for Honorary Certificates under the Local Examinations of the University of Edinburgh. Dublin: Examination for a Degree in Arts; Entrance Examination. Queen's University (Ireland): Examination for a Degree in Arts; Entrance Examination; Examination for the Diploma of Licentiate in Arts; Previous Examination for B.A. Degree. II.—*Other Bodies named in Schedule (A) to the Medical Act.* Royal College of Surgeons of England: Examination conducted, under the superintendence of the College of Surgeons, by the Board of Examiners of the Royal College of Preceptors. Society of Apothecaries of London: Examination in Arts. Royal College of Physicians, Edinburgh, and Royal College of Surgeons, Edinburgh: Preliminary Examination in General Education, conducted by a Board appointed by these two Colleges combined. Faculty of Physicians and Surgeons of Glasgow: Preliminary Examination in General Literature. Royal College of Surgeons in Ireland: Preliminary Examination, Certificate to include Mathematics. Apothecaries' Hall of Ireland: Preliminary Examination in General Education. III.—*Examining Bodies, in the United Kingdom, not included in Schedule (A) to the Medical Act.* Royal College of Preceptors: Examination for a First Class Certificate. IV.—*Colonial and Foreign Universities and Colleges.* University of Calcutta, Madras, or Bombay: Entrance Examination, Certificate to include Latin. University of McGill College, Montreal, of Toronto, of King's College, Toronto, of Queen's College, Kingston, or of Victoria College, Upper Canada: Matriculation Examination. University of King's College, Nova Scotia: Matriculation Examination; Responsions. University of Fredericton, New Brunswick: Matriculation Examination. University of Melbourne: Matriculation Examination, Certificate to include all the subjects required by the General Medical Council. University of Sydney: Matriculation Examination. Codrington College, Barbadoes: English Certificate for Students of two years' standing, specifying the subjects of Examination; Latin Certificate, or "Testamur." Tasmanian Council of Education: Examination for the Degree of Associate of Arts, Certificate to include Latin and Mathematics. Christ's College, Canterbury, New Zealand: Voluntary Examinations, Certificate to include all the subjects required by the General Medical Council.—That it be recommended to the Licensing Boards not to accept the Certificate of proficiency in General (preliminary) Education from any of the Bodies, the names of which are contained in the list annually circulated, unless such Certificate testify that the Student to whom it has been granted has been examined in—1. English Language, including Grammar and Composition.† 2. Arithmetic, including Vulgar and Decimal Fractions;

* To save space, we omit those portions of the Recommendations of the General Medical Council and of the Regulations of the Examining Bodies, which are not of direct importance to medical students.

† The General Medical Council will not consider any examination in English sufficient that does not fully test the ability of the candidate—1. To write a few sentences in correct English on a given theme, attention being paid to spelling and punctuation as well as to composition. 2. To write a portion of an English author to dictation. 3. To explain the grammatical construction of one or two sentences. 4. To point out the grammatical errors in a sentence ungrammatically composed, and to explain their

Algebra, including Simple Equations. 3. Geometry: First Two Books of Euclid. 4. Latin, including Translation and Grammar. And in one of the following *Optional Subjects*:—Greek; French; German; Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics.—That Students who cannot produce any of the Testimonials referred to in the first Recommendation be required to pass an Examination in Arts, established by any of the Bodies named in Schedule (A) to the Medical Act, and approved by the General Medical Council.—That Certificates of Proficiency, to be received from all Bodies legally authorised to examine in General Education in Great Britain and Ireland, and from the several Licensing Bodies enumerated in Schedule (A) to the Medical Act in Great Britain and Ireland, shall bear evidence that the Candidates have been examined and approved in at least the above subjects.—That, in the case of Certificates received from similar Educational and Licensing Bodies in other parts of the Empire and Foreign Countries, satisfactory evidence shall be given to the Medical Council, or Branch Councils, that such Certificates are equivalent to those recognised in the United Kingdom.—That it shall be delegated to the Executive Committee to prepare annually and lay before the Council for recognition a list of Examining Bodies, whose Examinations shall fulfil the conditions of the Medical Council as regards Preliminary Education.

Registration of Medical Students.

Every Medical Student shall be registered in the manner prescribed by the General Medical Council.—No Medical Student shall be registered until he has passed a Preliminary Examination, as required by the General Medical Council.—The commencement of the course of Professional Study recognised by any of the Qualifying Bodies, shall not be reckoned as dating earlier than fifteen days before the date of Registration.—The Registration of Medical Students shall be placed under the charge of the Branch Registrars.—Each of the Branch Registrars shall keep a Register of Medical Students according to a form, containing the Date of Registration, the Name, the Preliminary Examination and Date, and the Place of Medical Study.—Every person desirous of being registered as a Medical Student, shall apply to the Branch Registrar of the division of the United Kingdom in which he is residing, according to the annexed form,* which may be had on application to the several Qualifying Bodies, Medical Schools, and Hospitals; and shall produce or forward to the Branch Registrar a Certificate of his having passed a Preliminary Examination, as required by the General Medical Council, and a statement of his place of Medical Study.—The Branch Registrar shall enter the Applicant's name and other particulars in the Students' Register, and shall give him a Certificate of such Registration.—Each of the Branch Registrars shall supply to the several Qualifying Bodies, Medical Schools, and Hospitals, in that part of the United Kingdom of which he is Registrar, a sufficient number of blank Forms of Application for the Registration of Medical Students.—These several Branch Councils shall have power to admit special exceptions to the foregoing Regulations as to Registration, for reasons which shall appear to them satisfactory.—A copy of the Register of Medical Students, prepared by each of the Branch Registrars, shall be transmitted, on or before the 31st December in each year, to the Registrar of the General Council; who shall, as soon as possible thereafter, prepare and print, under the direction of the Executive Committee, an Alphabetical List of all Students registered in the preceding year, and supply copies of such authorised List to each of the Bodies enumerated in Schedule (A) to the Medical Acts, and through the Branch Registrars to the several Medical Schools and Hospitals.—The several Qualifying Bodies are recommended not to admit, after October, 1870, to the final Examination for a Qualification under the Medical Acts, any Candidate (not exempted from Registration) whose name had not been

nature. 5. To give the derivation and definition of a few English words in common use. Provided always that an examination may be accepted as satisfactory that secures, on the part of the candidate passing it, a sufficient grammatical knowledge of English.

* *Form of Application for Registration as a Medical Student.*—I hereby apply to be registered as a Student in Medicine, in conformity with the Regulations of the General Council of Medical Education and Registration of the United Kingdom, for which purpose I submit the following particulars. [Name of applicant (to be written in words at length); Surname; Christian name; Preliminary examination; Date of preliminary examination; Place of medical study; Applicant's signature; Address; and Date of application. To the Registrar of the Branch Council for —.]

N.B.—The above Form of Application, duly and legibly filled up, must be forwarded to the Registrar, post free, and be accompanied by a Certificate of the applicant's having passed a Preliminary Examination, as required by the General Medical Council, and a statement of his place of medical study.

The Certificate of Examination must testify that the Student has been examined in—1. English Language, including Grammar and Composition. 2. Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations. 3. Geometry—First two Books of Euclid. 4. Latin, including Translation and Grammar. And in one of the following optional subjects: Greek, French, German, Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics.

entered in the Medical Students' Register at least four years previously.—In the case of Candidates from other than Schools of the United Kingdom, the Branch Councils shall have power to admit exceptions to this Recommendation.—* * * The Branch Councils are desired to take means to make these Regulations known to the Medical Students at the various Medical Schools.

Age for Licence to Practise.

That the age of twenty-one be the earliest age at which a Candidate for any Professional Licence shall be admitted to his final Examination; that the age shall, in all instances, be duly certified; and that a Return of any exceptions to this Recommendation allowed by the Licensing Bodies, together with the reasons for such exceptions, be transmitted to the Branch Council of that part of the United Kingdom in which they have been granted.—That no Licence be obtained at an earlier period than after the expiration of forty-eight months subsequent to the Registration of the Candidate as a Medical Student.

Professional Education.

That the course of Professional Study required for a Licence shall comprehend attendance during not less than Four Winter Sessions, or Three Winter and Two Summer Sessions, at a School recognised by any of the Licensing Bodies mentioned in Schedule (A) to the Medical Act.—That the following are the subjects without a knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered:—1. Anatomy; 2. General Anatomy; 3. Physiology; 4. Chemistry; 5. Materia Medica; 6. Practical Pharmacy; 7. Medicine; 8. Surgery; 9. Midwifery; 10. Forensic Medicine. Chemistry should include a knowledge of the principles of Chemistry, and of those details of the science which bear on the study of Medicine. Medicine and Surgery should include a knowledge of systematic and Clinical Medicine and Surgery, and also of Morbid Anatomy.—That it be recommended to the several Licensing Bodies that the courses of instruction required by them be framed in such a manner as to secure a due share of attention, both to Preparatory Branches and to those more strictly connected with the Practice of Medicine and Surgery; and that it be suggested accordingly to these Bodies, that their Regulations should be such as to prevent attendance upon Lectures from interfering with Hospital and Clinical Study.—That the Council will view with approbation any encouragement held out by the Licensing Bodies to Students to prosecute the study of the Natural Sciences before they engage in studies of a strictly Professional character.

Professional Examination.

That it is desirable that the different Licensing Bodies should combine their Examinations, when this is practicable, so as to secure that the knowledge of every practitioner whose name appears on the Register shall have been tested in all the subjects of Professional Education which the Council has determined to be essential, viz.: 1. Anatomy; 2. General Anatomy; 3. Physiology; 4. Chemistry; 5. Materia Medica; 6. Practical Pharmacy; 7. Medicine; 8. Surgery; 9. Midwifery; 10. Forensic Medicine.—That those Licensing Bodies which have not already done so, be requested to furnish a statement of the dates of their Examinations and of the modes in which such Examinations are conducted, whether by written, oral, or practical Examination, and of the length of time a Candidate is under Examination in each or all of these ways; and that the Registrar transmit these Reports to the Members of the Council, in order that they may be taken into consideration at the next meeting of the several Branch Councils.—That the Professional Examination for any Licence be divided into two parts; the first embracing the primary or fundamental branches directly connected with the Practice of Medicine and Surgery. That the former be not undergone till after the close of the Winter Session of the second year of Professional Study; and the latter, or final Examination, not till after the close of the prescribed period of Professional Study.—That the Examination in Physics, Botany, and Natural History may be undergone at an earlier period than the first Professional Examination.—That the Professional Examinations be conducted both in writing and orally; and that they be practical in all branches in which they admit of being so.—That not less than two Examiners, or one Examiner with an Assessor, should be present at every Oral Examination.—That the Oral Examinations should be so far public as to be open at least to the Medical and Surgical Graduates, or Members of the Examining Body.—That the questions to be answered in writing should be so numerous, and embrace such a variety of the details of each subject, as may adequately test the proficiency of the Candidate; and that they should be submitted to the whole body of Examiners for consideration and revision, if desirable, before being proposed to the Candidates.—That the written answers should be submitted to more than one of the Examiners.—That excellence in one or more subjects should not be allowed to com-

pensate for failure in others.—That if a Candidate be rejected for failure in any one subject, he should be re-examined in all.—That Examiners should only be elected for definite periods, with power of reappointment.—That the Professional Examinations be held by the several Licensing Bodies, except in special cases, at stated periods, to be publicly notified.—That returns from the Licensing Bodies in Schedule (A) be made annually, on January 1st, to the General Medical Council, stating the number and names of the Candidates who have passed their First as well as their Second and Third Examinations, and the number of those who have been rejected at the First and Second and Third Examinations respectively.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.*

BYE-LAWS RELATING TO MEMBERS.

1. The Members of the College, present and future, shall be alone eligible to the Fellowship. They shall have the use of the Library and Museum, subject to the Regulations relating thereto, and shall be admitted to all Lectures, and shall enjoy such further privileges as may from time to time be defined by the Bye-Laws; but they shall not be entitled to any share in the government, or to attend or vote at general meetings, of the Corporation. II. All persons who have been admitted before February 16th, 1859, Licentiates of the College, shall be entitled to be admitted Members of the College, provided that they have, since their admission as Licentiates, obeyed the Bye-Laws, and do accept such Membership, and engage henceforth to obey the Bye-Laws of the College. III. Any Extra-Licentiate who shall have produced testimonials as to character, satisfactory to the Censors, and shall have assured the said Censors that he is not engaged in the practice of Pharmacy, and who shall comply with such other regulations as are required by the Bye-Laws of the said Corporation, may be proposed to the College to be admitted a Member of the College. IV. Any person who shall have satisfied the College touching his acquirements in general Science and Literature, and his knowledge of Medicine, Surgery, and Midwifery, and who shall comply with the Bye-Laws and Regulations of the College, may be proposed to the College to be admitted a Member of the College. V. Every Candidate for the Membership of the College, under the last Bye-Law, who shall have commenced his Professional Studies after September 1861, shall satisfy the Censors' Board that previously to the commencement of his Professional Studies he has obtained a Degree in Arts from some University of the United Kingdom or of the Colonies, or from some other University specially recognised by the Medical Council, or that he has passed Examinations equivalent to those required for a Degree in Arts. All other Candidates for Membership shall be examined on the subjects of General Education by the President and Censors of the College. VI. Every Candidate for Membership shall furnish proof that he has attained the age of twenty-five years. VII. Every Candidate shall produce a Testimonial from a Fellow or Member of the College, satisfactory to the Censors' Board, to the effect that, as regards moral character and conduct, he is a fit and proper person to be admitted a Member of the College. VIII. Every Candidate (*except such as shall be admissible under the provisions of Sections XV and XVI*) shall produce proof of his having been engaged in Professional Studies during a period of five years, of which four years at least shall have been passed at a Medical School or Schools recognised by the College. IX. Every Candidate (*except such as shall be admissible under the provisions of Sections XV and XVI*) shall produce evidence, satisfactory to the Censors' Board, of having studied the following subjects. [The subjects are the same as those required for the Licence (see next page); but Morbid Anatomy must be attended during six months, and Clinical Medicine during *three Winter and three Summer Sessions*.] He must also give evidence of having attended diligently during three Winter Sessions and three Summer Sessions the Medical Practice, and during *three Winter Sessions and two Summer Sessions the Surgical Practice*, of an Hospital containing at least 100 beds; of having been engaged during six months in the Clinical Study of Diseases peculiar to Women; and of having served the office of Clinical Clerk in the Medical Wards during at least six months. X. Every Candidate who has prosecuted his studies abroad, whether in part or to the full extent required by the preceding Bye-Law (*except such as shall be admissible under the provisions of Section XVI*), shall, nevertheless, bring proof of his having attended, during at least twelve months, the Medical Practice of an Hospital in the United Kingdom containing at least 100 beds. XI. If the Censors' Board doubt the sufficiency of the Certificates and Testimonials

* The requirements printed in italics apply to candidates who commence their Professional Education in the United Kingdom on or after October 1st, 1867; and to candidates who commence their Professional Education at a recognised Foreign or Colonial School on or after October 1st, 1868.

produced by any Candidate, or his fitness, in any respect, for admission to Examination, they may submit the case to a General Meeting of the Fellows. XII. No Candidate shall be admitted to Examination who is engaged in trade; or who dispenses medicine, or makes any engagement with a Chemist, or any other person, for the supply of medicines; or who practises Medicine or Surgery in partnership, by deed or otherwise, so long as that partnership continues. XIII. No Candidate shall be admitted to Examination who refuses to make known, when required by the President and Censors, the nature and composition of any remedy he uses. XIV. Every Candidate (except in cases specially exempted under Sections XV and XVI) shall give proof of his acquirements by written answers to questions placed before him, and shall be examined *viva voce* at three separate Examinations, and shall be approved by the President and Censors, or by the major part of them. XV. Any Candidate who has already obtained the Degree of Doctor or Bachelor of Medicine at an University in the United Kingdom, wherein the Courses of Study, and the Examinations to be undergone by the Students previously to graduation, shall have been adjudged by the Censors' Board to be entirely satisfactory, shall be exempt (if the Censors shall think fit) from all or any parts of the Examinations hereinbefore described, except such as relate to the Third or Pass Examination; the nature and extent of which Examination shall, in the case of each Candidate, be determined by the Censors' Board. Every Candidate for the Membership will, however, be required to translate into English a passage from a Latin author, and he will have the opportunity of showing a knowledge of Greek, or of one or more of the modern European languages. XVI. If any Candidate who has attained the age of forty years shall produce Testimonials not merely satisfactory as to his moral character and conduct, and his general and professional acquirements, but further showing that he has improved the art or extended the science of Medicine, or has at least distinguished himself highly as a Medical Practitioner; the Censors' Board, having well weighed and considered these Testimonials, may, if they see fit, submit them to the Fellows at a General Meeting, and it shall be determined by the votes of the Fellows present, or of the majority of them, taken by ballot, whether the Candidate shall be admitted to Examination, which shall, in every such case, be as full and complete as the Censors may deem sufficient. XVII. Any Candidates who shall produce satisfactory evidence of having passed an Examination on Anatomy and Physiology, conducted by any of the Bodies named in Schedule (A) to the Medical Act, and recognised by the College as requiring a Course of Study and an Examination satisfactory to the College, will be exempt from re-examination on the subjects of the Primary Examination. XVIII. Any Candidate who shall have obtained a Degree in Surgery, at an University in the United Kingdom, after a Course of Study and an Examination satisfactory to the College, will be exempt from re-examination on Surgical Anatomy, and the Principles and Practice of Surgery. XIX. Any Candidate who shall have passed the Examination on Surgery conducted by the Royal College of Surgeons of England, or the Royal College of Surgeons of Edinburgh, or the Royal College of Surgeons in Ireland, after a Course of Study and an Examination satisfactory to the College, will be exempt from re-examination on Surgical Anatomy, and on the Principles and Practice of Surgery. XX. Every Candidate approved by the Censors' Board, shall be proposed, at the next General Meeting of Fellows, as qualified to become a Member of the College; and if the majority of the Fellows present shall consent, he shall, on complying with the Regulations prescribed by the Bye-Laws, be admitted a Member of the College. The Fee to be paid for admission as a Member of the College shall be Thirty Guineas.

Every Candidate for the Membership of the College (except such as shall be admissible under the provisions of Sections XV and XVI of the Bye-laws) will be required to pass the following Examinations.

The First Examination, on Anatomy and Physiology, will be conducted on successive days as follows. First Day: *Evening*, from seven to ten, by written questions. Second Day: *Evening*, commencing at seven o'clock, *viva voce*, on Dissections and Preparations.

The Second Examination will be conducted on successive days, as follows. First Day: *Evening*, from seven to ten, by written questions on Surgical Anatomy, and on the Principles and Practice of Surgery. Second Day: *Morning*—The Candidate's practical knowledge will be tested, either at the College or in the Surgical Wards of a Hospital. *Afternoon*, from one to four, on *Materia Medica*, and on *Chemistry in its applications to Pathology, Pharmacy, and Toxicology*. (This Examination will be conducted partly by written questions and partly in a practical manner.) *Evening*, commencing at seven o'clock, by written questions on Midwifery and the Diseases Peculiar to Women.

* Candidates who shall have passed the first examination for the Licence at this College before October 1st, 1867, are exempted from re-examination on *Materia Medica*, and on *Chemistry in its application to Pharmacy*.

The Third, or Pass Examination, will be conducted on successive days as follows. First Day: *Afternoon*, from two to six, by written questions on Medical Anatomy and on the Principles of Medicine. Second Day: *Afternoon*, from two to six, by written questions on the Practice of Medicine, including the *Principles of Public Health*, and on Psychological Medicine. Third Day: The Candidate's practical knowledge will be tested, either at the College or in the Medical Wards of a Hospital. Fourth Day: *Afternoon*, commencing at three o'clock, *viva voce*, on Medical Anatomy, and on the Principles and Practice of Medicine.

Examinations of Candidates for the Membership of the College will take place as follows. *First Examination*, commencing on Mondays, October 5th and December 7th, 1869; February 7th, April 4th, July 4th, October 3rd, and December 5th, 1870. *Second Examination*, commencing on Tuesdays, October 12th and December 14th, 1869; February 14th, April 11th, July 11th, October 10th, and December 12th, 1870. *Third, or Pass Examination*, commencing on Thursdays, October 21st, 1869; January 20th, April 21st, July 21st, and October 20th, 1870.

BYE-LAWS RELATING TO LICENTIATES.

The College will, under its Charter, grant Licences to practise Physic, including therein the Practice of Medicine, Surgery, and Midwifery (which Licences are not to extend to make the Licentiates Members of the Corporation) to persons who shall conform to the following Bye-Laws.

Every Candidate for the College Licence (except when otherwise provided by the Bye-Laws) is required to produce satisfactory evidence to the following effect.

I.—Of having attained the age of twenty-one years.

II.—Of moral character.

III.—Of having passed, before the commencement of Professional Study, an Examination in the subjects of General Education recognised by the College.

IV.—Of having been registered as a Medical Student in the manner prescribed by the General Medical Council.

V.—Of having been engaged in Professional Studies during four years, of which at least three Winter Sessions and two Summer Sessions shall have been passed at a recognised Medical School or Schools, and one Winter Session and two Summer Sessions in one or other of the following ways: 1. Attending the practice of a Hospital or other Institution recognised by the College for that purpose. 2. Receiving instruction as the Pupil of a legally qualified Practitioner, holding any Public Appointment which affords opportunities, satisfactory to the Examiners, of imparting a practical knowledge of Medicine, Surgery, or Midwifery. 3. Attending Lectures on any of the required subjects of Professional Study at a recognised place of instruction.*

VI.—Of having attended, during three Winter Sessions and two Summer Sessions, the Medical and Surgical Practice at a recognised Hospital or Hospitals, and of having been engaged during six months in the Clinical Study of Diseases peculiar to Women.

VII.—Of having studied the following subjects: Anatomy (with Dissections), Two Winter Sessions;† Physiology, Two Winter Sessions; Chemistry, Six Months; Practical Chemistry, Three Months; *Materia Medica*, Three Months; Practical Pharmacy, Three Months;‡ Botany, Three Months;§ Morbid Anatomy, Two Winter Sessions;|| Principles and Practice of Medicine, Two Winter Sessions;¶ Principles and Practice of Surgery, Two Winter Sessions; ** Clinical Medicine, and Clinical Surgery, each Two Winter Sessions and Two Summer Sessions;†† Midwifery and Diseases Peculiar to Women, Three Months;‡‡ Forensic Medicine, Three Months.

* Professional Studies commenced before the candidate shall have passed an examination in the subject of General Education, will not be recognised by the College.

† The Winter Session comprises a period of six months, and the Summer Session a period of three months.

‡ By Practical Pharmacy is meant instruction in the Laboratory of a Registered Medical Practitioner, or of a Member of the Pharmaceutical Society of Great Britain, or of a Public Hospital or Dispensary recognised by the College.

§ This Course of Lectures may be attended prior to the commencement of Professional Studies; and any candidate producing satisfactory evidence that Botany formed one of the subjects of his Preliminary Examination, will be exempt from attendance on this course.

|| This includes attendance and instruction in the *Post Mortem* Room during the period of Clinical Study.

¶ It is required that the Principles of Public Health should be comprised in this Course of Lectures, or in the Course of Lectures on Forensic Medicine.

** The attendance on the Lectures on Medicine and Surgery must not commence earlier than the second Winter Session at a recognised Medical School.

†† The attendance on the Lectures on Clinical Medicine and Clinical Surgery must not commence until after the first Winter Session at a recognised Medical School. By Clinical Medicine and Clinical Surgery are meant special Study and Instruction at the bedside, with Lectures on Cases.

‡‡ Certificates must also be produced of attendance on not less than twenty Labours, and of Instruction and Proficiency in Vaccination.

VIII.—Of having passed the Professional Examinations.

Examination for the Licence.

Every Candidate for the College Licence, before he is admitted to Examination, will be required to sign a Declaration, stating whether he has or has not been rejected within Three Months by any of the Examining Boards included in Schedule (A) to the Medical Act.

The First Examination, and the Second Examination as far as the end of the second day, are conducted at the same hours and on the same subjects as the First and Second Examinations for the Membership. The remainder of the Examination is as follows. Third Day: *Evening*, from seven to ten, by written questions on Medical Anatomy, and on the Principles and Practice of Medicine, including the Principles of Public Health. Fourth Day: *Morning*—The Candidate's practical knowledge will be tested, either at the College or in the Medical Wards of a Hospital. *Evening*, commencing at seven o'clock, *visà voce*, on the Principles and Practice of Medicine, Surgery, and Midwifery.

Candidates will not be admitted to the First Examination until after the termination of the second Winter Session of Professional Study at a recognised Medical School, nor to the Second or Pass Examination until after the termination of four years of Professional Study.—After October 1870, the College will not admit to the Pass Examination any Candidate (not exempted from Registration) whose name had not been entered in the Medical Students' Register at least four years previously.

Any Candidate who shall be rejected at the First Examination, will not be re-admitted to Examination until after the lapse of Three Months, and will be required to produce a Certificate of the performance of Dissections, or other Professional Study satisfactory to the Examiners, during that time. Any Candidate who shall be rejected at the Second or Pass Examination, will not be re-admitted to Examination until after the lapse of Six Months, and will be required to produce a certificate of attendance on the Practice of a recognised Hospital during that time, and also of attendance on Clinical Lectures.

Every Candidate intending to present himself for Examination, is required to give fourteen days' notice in writing to the Registrar of the College, at the same time transmitting the following certificates. *For the First Examination*—Evidence of having passed an Arts Examination; of having been duly registered as a Medical Student; and of having completed the second Winter Session of Professional Study at a recognised Medical School. *For the Second, or Pass Examination*—Evidence of having completed four years of Professional Study; of having attained the age of twenty-one years; of Instruction and Proficiency in the Practice of Vaccination; and of having attended not less than twenty Labours. A testimonial of Moral Character is required of every Candidate. Blank forms of the required certificates of attendance on Hospital Practice and on Lectures may be obtained on application at the College.

The exemptions in Clauses XVII, XVIII, and XIX of the Regulations regarding the Membership, are applicable also to Candidates for the Licence; and any Candidate who shall have obtained a Degree in Medicine at an University recognised by the College, after a Course of Study and Examination satisfactory to the College, shall be exempt from re-examination on the subjects of the Primary Examination.—Any Registered Medical Practitioner, whose Qualification or Qualifications shall have been obtained before the 1st day of January, 1861, having been, with the consent of the College, admitted a Candidate for the Licence, will be examined on the Principles and Practice of Medicine, Surgery, and Midwifery; but he will be exempted from such other parts of the Professional Examinations as his Qualifications may seem to the Examiners to render in his case unnecessary.*

The Fee for the College Licence is Fifteen Guineas, of which Five Guineas are to be paid on admission to the First Examination, which Fee will not be returned to any Candidate rejected at this Examination, but will be allowed in the Fee for the Licence; and he will be admitted to one subsequent First Examination without the payment of an additional Fee.† Any Candidate who shall be rejected at the Second or Pass Examination will have the Fee, paid on admission to this Examination, returned to him, less Three Guineas.

Licentiatees of this College shall not compound or dispense medicines except for patients under their own care.

Examinations of Candidates for the College Licence will take place as follows: *First Examination*, commencing October 5th and December 7th, 1869, February 7th, April 4th, July 4th, October 3rd, and December 5th, 1870. *Second, or Pass Examination*, commencing October 12th, December 14th, 1869, February 14th, April 11th, July 11th, October 10th, and December 12th, 1870.

* Forms of Application may be obtained of the Registrar of the College.

† The Fee must be paid within three days prior to the day on which the Examination commences.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

REGULATIONS RESPECTING THE DIPLOMA OF MEMBER.

Section I.—Preliminary General Education and Examination.

CANDIDATES who commenced their Professional Education on or after the 1st of January, 1861, will be required to produce one or other of the following certificates:—1. Of Graduation in Arts at an University recognised for this purpose; viz., Oxford; Cambridge; Dublin; London; Durham; Queen's University in Ireland; Edinburgh; Glasgow; Aberdeen; St. Andrew's; Calcutta; Madras; Bombay; McGill College, Montreal; and Queen's College, Kingston, Canada. 2. Of having passed an Examination for Matriculation, or such other Examination as shall, in either case, from time to time be sanctioned by the Council of this College, at an University in the United Kingdom, or at a Colonial or Foreign University recognised by the Council of this College.* 3. Of having passed the Preliminary Examination for the Fellowship of this College. 4. Of having passed the Preliminary Examinations of the Royal Colleges of Surgeons in Ireland and of Edinburgh, or of the Faculty of Physicians and Surgeons of Glasgow. 5. Of having passed the Examination in Arts of the Society of Apothecaries of London, or of the Apothecaries' Hall of Ireland. 6. Of having passed the First-Class Examination of the Royal College of Preceptors. 7. Testamur of the Codrington College, Barbadoes. 8. Degree of Associate of Arts granted by the Tasmanian Council of Education, with a certificate that the student has been examined in Latin and Mathematics. 9. Candidates who shall not be able to produce one or other of the foregoing certificates, will be required to pass an Examination in English, Classics, and Mathematics, conducted by the Board of Examiners of the Royal College of Preceptors, under the direction and supervision of this College.†

Section II.—Professional Education.

I. Professional Studies prior to the date at which the candidate shall

* The following are the Examinations at present recognised under this Clause (No. 2), viz.: Oxford—Responsions or Moderations; Middle-Class Examinations, Senior, the Certificates to include Latin. Cambridge—Previous Examination; Middle-Class Examinations, Senior, the Certificates to include Latin. Dublin—Entrance Examination. London—Matriculation Examination. Durham—Examination of Students in Arts in their second and first years; Middle-Class Examinations, Senior, the Certificates to include Latin; Registration Examination for Medical Students. Queen's University in Ireland—Two years' Arts Course for Diploma of Licentiate in Arts; Preliminary Examinations at end of B.A. Course; Middle-Class Examinations, the Certificates to include Latin; Matriculation Examinations. Edinburgh, Aberdeen, Glasgow, and St. Andrew's—Preliminary or Extra Professional Examinations for Graduation in Medicine. Calcutta, Madras, and Bombay—Matriculation Examinations. Canada, McGill College, Montreal—Matriculation Examination. Queen's College, Kingston—Matriculation Examination; Preliminary Examination of Students in Medicine. University College, Toronto, and Victoria College, Toronto—Matriculation Examinations. University of Melbourne—Matriculation Examination, with a Certificate that the Student has passed an Examination in Latin. New York, Bellevue Hospital Medical College—Matriculation Examination. [On or after the 1st of January, 1870, the Certificates of having passed the Middle-Class Examinations of Oxford, Cambridge, Durham, and the Queen's University, must include Mathematics as well as Latin.]

† The following are the subjects of the Examination (No. 9) during the year 1869; viz.—Part I. *Compulsory Subjects*. 1. Reading aloud a passage from some English author. 2. Writing from dictation. 3. English Grammar. 4. Writing a short English composition: such as a description of a place, an account of some useful or natural product, or the like. 5. Arithmetic. No candidate will be passed who does not show a competent knowledge of the first four rules, simple or compound, of Vulgar Fractions, and of Decimals. 6. Questions on the Geography of Europe, and particularly of the British Isles. 7. Questions on the outlines of English History; that is, the succession of the Sovereigns and the leading events of each reign. 8. Euclid, Book I. 9. Translation of a passage from the second book of Cæsar's *Commentaries De Bello Gallico*.—Part II. *Optional Subjects*. Papers will also be set on the following seven subjects; and each candidate will be required to offer himself for examination on one subject at least, at the option of the candidate; but no candidate will be allowed to offer himself for examination on more than four subjects:—1. Translation of a passage from the first Book of the *Anabasis* of Xenophon. 2. Translation of a passage from X. B. Saintine's *Picciola*. 3. Translation of a passage from Schiller's *Wilhelm Tell*. Besides these translations into English, the candidate will be required to answer questions on the Grammar of each subject, whether compulsory or selected. 4. Mathematics: Algebra to Simple Equations inclusive. 5. Mechanics: the questions will be chiefly of an elementary character. 6. Chemistry: the questions will be on the elementary facts of Chemistry. 7. Botany and Zoology: the questions will be on the Classification of Plants and Animals. The quality of the handwriting and the spelling will be taken into account. N.B. Each candidate is required to pay the Fee of £2 on the morning of the first day of the Examination, prior to his admission thereto. The Examination is at present held on or about the third Tuesday or Wednesday in June and December, at the College of Surgeons, Lincoln's Inn Fields. The exact dates of the Examinations are duly advertised when fixed in the Medical Journals; and candidates are required to send in the prescribed forms of application not less than three weeks before the commencement of each Examination. NOTE. A candidate, in order to qualify for the Fellowship, is required to pass in the subjects numbered 1, 2, and 4, and in one, at his option, of the subjects numbered 3, 5, 6, and 7, Part II, in addition to the compulsory subjects contained in Part I. In the year 1870, Algebra to Simple Equations inclusive, and Euclid, Books I and II, or the subjects thereof, will be included in the compulsory subjects in Part I. The subjects in 1870 will in other respects be the same as for the present year.

have passed an Examination in General Knowledge, in conformity with the Regulation in the preceding Section, are not recognised.*

II. The following will be considered as the commencement of Professional Education:—1. Attendance on the Practice of a Hospital, or other Public Institution recognised by this College for that purpose. 2. Instruction as the Pupil of a legally qualified Surgeon, *holding the appointment of Surgeon to a Hospital, General Dispensary, or Union Work-house, or where such opportunities of practical instruction are afforded as shall be satisfactory to the Council.*† 3. Attendance on Lectures on Anatomy, Physiology, or Chemistry, by Lectures recognised by this College. *The commencement of professional study otherwise than by attendance on Lectures in recognised Medical Schools, or by attendance on the Practice of recognised Hospitals, will not be admitted until a certificate thereof shall be furnished to the Secretary for registration at the College, by the practitioner whose pupil the candidate shall have become, or by the Medical Superintendent of the Hospital or other Institution to the practice of which he shall have entered, and will, consequently, date only from the reception of such certificate by the Secretary; the certificate to be accompanied by proof of having passed the necessary Preliminary Examination in General Knowledge.*

III. Candidates will be required to produce the following other certificates, viz.:—1. Of being twenty-one years of age. 2. Of having been engaged during four years in the acquirement of professional knowledge. 3. Of having studied Practical Pharmacy during three months. 4. Of having attended lectures on Anatomy, delivered not less frequently than four times in each week, during two Winter Sessions. 5. Of having performed Dissections during not less than two Winter Sessions. 6. Of having attended lectures on Physiology, delivered not less frequently than twice in each week, during two Winter Sessions. 7. Of having attended lectures on Surgery during two Winter Sessions, *of which one course must not be earlier than the Third Winter Session at a recognised Medical School.* 8. Of having attended one course of lectures on each of the following subjects; viz., Chemistry, Materia Medica, Medicine, and Midwifery. 9. Of instruction and proficiency in the practice of Vaccination.‡ 10. Of having attended, at a recognised Hospital or Hospitals in the United Kingdom or Colonies, the Practice of Surgery during three Winter§ and two Summer|| Sessions; and of having, subsequently to the first Winter Session of the foregoing attendance, attended, at a recognised Hospital or Hospitals, Clinical Lectures on Surgery, during two Winter and two Summer Sessions. 11. Of having attended, at a recognised Hospital or Hospitals in the United Kingdom or Colonies, the Practice of Medicine, and Clinical Lectures on Medicine, during one Winter and one Summer Session. 12. *Of having, subsequently to the completion of two years' professional education, taken charge of patients under the superintendence of a Surgeon during not less than six months at a Hospital, General Dispensary, or Parochial or Union Infirmary recognised for this purpose, or in such other similar manner as, in the opinion of the Council, shall afford sufficient opportunity for the acquirement of Practical Surgery.*

N.B. Blank forms of the required certificates may be obtained on application to the Secretary, and all necessary certificates will be retained at the College.

Section III.—Concerning Certificates, etc.

1. Certificates will not be received on more than one branch of science from one and the same lecturer; but Anatomy and Dissections will be considered as one branch of science. 2. Certificates will not be recognised from any Hospital in the United Kingdom, unless the surgeons thereto be members of one of the legally constituted Colleges of Surgeons in the United Kingdom; nor from any School of Anatomy and Physiology or Midwifery, unless the teachers in such School be members of some legally constituted College of Physicians or Surgeons in the United Kingdom; nor from any School of Surgery, unless the teachers in such School be members of one of the

* This Regulation applies to candidates who commenced their Professional Education on or after the 1st of October 1862.

† The Regulations in italics in Sections II and III, apply to candidates in the United Kingdom who commenced their professional education on or after the 1st of October 1863; and to candidates who commenced their professional education in the Colonies on or after the 1st of October 1864.

‡ In the case of Candidates who commenced their Professional Education on or after the 1st of October, 1868, the Certificate of Instruction in Vaccination will only be received from recognised Vaccine Stations, or from recognised Vaccine Departments in Medical Schools or Hospitals, or other Public Institutions, where the appointed Teacher of Vaccination is not liable to frequent change, and where ample means for study are provided by not less than such a number of cases (eight or ten on an average weekly) as may be found, after due inquiry, to be sufficient for this purpose at each place.

§ The Winter Session comprises a period of six months; and, in England, commences on the 1st of October and terminates on the 31st of March.

|| The Summer Session comprises a period of three months; and, in England, commences on the 1st of May and terminates on the 31st of July.

legally constituted Colleges of Surgeons in the United Kingdom. 3. No Metropolitan Hospital will be recognised by this College which contains less than 150, and no Provincial or Colonial Hospital which contains less than 100 patients. 4. The recognition of Colonial Hospitals and Schools is governed by the same regulations, with respect to number of patients and to courses of lectures, as apply to the recognition of Provincial Hospitals and Schools in England. 5. Certificates of attendance upon the practice of a recognised Provincial or Colonial Hospital unconnected with, or not in convenient proximity to, a recognised Medical School, will not be received for more than one winter and one summer session of the hospital attendance required by the regulations of this College; and in such cases Clinical Lectures will not be necessary, *but a certificate of having acted as Dresser for the period of at least six months will be required.* 6. Certificates will not be received from candidates who have studied in London, unless they shall have registered at the College their cards of admission to attendance on Lectures and Hospital Practice within fifteen days from the commencement of the Session; nor from Candidates who have studied in the provincial schools in England, unless their names shall be duly returned from their respective schools.* 7. Candidates who shall have pursued the whole of their studies in Scotland or Ireland will be admitted to examination upon the production of the certificates required respectively by the College of Surgeons of Edinburgh, the Faculty of Physicians and Surgeons of Glasgow, and the College of Surgeons in Ireland, from Candidates for their diploma. Candidates who shall have pursued the whole of their studies at recognised Foreign or Colonial Universities will be admitted upon the production of the several certificates required for their Degree by the authorities of such Universities. 8. Members or Licentiates of any legally constituted College of Surgeons in the United Kingdom, Graduates in Surgery of any University recognised for this purpose by this College. 9. Graduates in Medicine of any legally constituted College or University recognised for this purpose by this College, will be admitted to examination on producing their Diploma, Licence, or Degree, together with proof of being twenty-one years of age. In each of these cases, 7, 8, and 9, the Candidate will also be required to produce a certificate of instruction and proficiency in the practice of Vaccination, and satisfactory evidence of having been occupied, subsequently to the date of passing the Preliminary Examination, at least four entire years in the acquirement of professional knowledge.

Section IV.—Professional Examination.

This Examination is divided into two parts. 1. The First or Primary Examination, on Anatomy and Physiology, is partly written and partly demonstrative on the recently dissected Subject, and on prepared parts of the Human Body. 2. The Second or Pass Examination, on Surgical Anatomy and the Principles and Practice of Surgery and Medicine, is partly written, partly oral, and partly on the practical use of Surgical Apparatus. [A Candidate can claim exemption from examination in Medicine under the following conditions, viz.: 1. The production by the Candidate of a Degree, Diploma, or Licence in Medicine entitling him to register under the Medical Act of 1858, or a Degree, Diploma, or Licence in Medicine of a Colonial or Foreign University approved by the Council of the College. 2. A declaration by the Candidate, prior to his admission to the Final Examination for Membership or Fellowship, that it is his intention to obtain either of the Medical Qualifications mentioned in the foregoing paragraph, in which case the Diploma of the College will not be issued to him until he shall produce either the said Medical Qualification or proof of having passed the several examinations entitling him to receive the same.] 3. The Primary Examinations are held in the months of January, April, May, July, and November, and the Pass Examinations generally in the ensuing week respectively. 4. Candidates will not be admitted to the Primary Examination, until after the termination of the Second Winter Session of their attendance at a recognised school or schools; nor to the Pass, or Surgical Examination, until after the termination of the fourth year of their professional education. 5. The fee of Five Guineas, paid prior to the Primary Examination, and allowed on the whole fee of Twenty-two Pounds† payable for the Diploma, is retained; and after any two consecutive failures at the Primary Examination, the Candidate is required to pay an *additional* fee of Five Guineas prior to being again admitted to that Examination, which *additional* fee is also retained. 6. Five guineas, part of the sum of sixteen pounds fifteen shillings, the balance of the whole fee due for the Diploma and paid prior to the Pass Examination, is retained; and after any two consecutive failures at the Pass

* At the registration in October, candidates who shall have commenced their professional education subsequently to the 1st of October 1862, will be required to produce a certificate of having passed one or other of the Preliminary Examinations in General Knowledge recognised by this College.

† This sum of twenty-two pounds is exclusive of the fee of two pounds paid for the Preliminary Examination.

Examination, the Candidate is required to pay an *additional* fee of Five guineas prior to being again admitted to the said Pass Examination, which *additional* fee is also retained. 7. A Candidate having entered his name for either the Primary or Pass Examination, who shall fail to attend the meeting of the Court for which he shall have received a card, will not be allowed to present himself for examination within the period of three months from the date at which he shall have so failed to attend. 8. A Candidate referred on the Primary Examination is required, prior to his admission to re-examination, to produce a certificate of the performance of dissections during not less than three months, subsequently to the date of his reference. 9. A Candidate referred on the Pass Examination is required, prior to his admission to re-examination, to produce a certificate of at least six months' further attendance on the Surgical practice of a recognised hospital, together with Lectures on Clinical Surgery, subsequently to the date of his reference.

SOCIETY OF APOTHECARIES, LONDON.

REGULATIONS RELATING TO ALL CANDIDATES FOR EXAMINATION.

THE Court of Examiners meet in the Hall every Thursday, where Candidates are required to attend at a quarter before four o'clock.—Every Candidate intending to offer himself for Examination must give notice on or before the Monday previous to the day of Examination, and must at the same time deposit all the required Testimonials, with the fee, at the Office of the Beadle, where attendance is given every day, except Sunday, from ten to four o'clock; Saturdays, ten to two. The Examination of Medical Students is divided into two parts, and is conducted partly in writing, and partly *viva voce*.

The *First Examination*, which may be passed after the Second Winter Session, embraces the following subjects:—Physicians' Prescriptions; Anatomy and Physiology; General and Practical Chemistry; Botany and Materia Medica.

The *Second Examination*, at the termination of Medical Studies, includes: Principles and Practice of Medicine; Pathology and Therapeutics; Midwifery, including the Diseases of Women and Children; Forensic Medicine and Toxicology.

Testimonials Required of Candidates.

For the *First Examination*—1. Of having passed an Examination in Arts, recognised by the Medical Council; 2. Of having completed the Curriculum of Study to the close of the Second Winter Session. For the *Second or Pass Examination*—1. A Certificate of having completed five years' apprenticeship (which may include the period spent at the hospital), of being twenty-years of age, and of good moral conduct. 2. Of having passed the First Examination. 3. Of having completed the prescribed Curriculum of Study according to the Schedule, including a personal attendance of twenty cases of Midwifery; and of having received instructions in Practical Vaccination.

The fee for a Certificate of Qualification to practise is Six Guineas, the half to be paid at the First Examination.

Modified Examinations.

All Graduates in Medicine of British Universities will be admitted to a Practical Examination in Medicine and Midwifery only.—Licentiates of the Royal College of Physicians, London; of the Royal College of Physicians, Edinburgh; of the Royal Colleges of Physicians and Surgeons, Edinburgh; of the King and Queen's College of Physicians, Ireland; of the Faculty of Physicians and Surgeons, Glasgow; and of the Apothecaries' Hall, Dublin, will be admitted to a *viva voce* Examination in Medicine, Midwifery, Forensic Medicine, and Toxicology.—Members of the Royal College of Surgeons, England; Licentiates of the Royal College of Surgeons, Edinburgh; and Licentiates of the Royal College of Surgeons, Ireland, possessing a surgical qualification only, will be admitted to a first and second Examination on one evening. The first, or *viva voce* Examination, will include the subjects of Physicians' Prescriptions, Visceral Anatomy, Physiology, Chemistry, Materia Medica, Botany, and Pharmacy; the second, which is partly written and partly *viva voce*, will include the subjects of Practice of Medicine, Pathology, Therapeutics, Midwifery, Forensic Medicine, and Toxicological Chemistry.—Any Candidate who has passed his first examination for the Licence of the Royal College of Physicians, London; the Licence of the King and Queen's College of Physicians, Ireland; the joint Licence of the Royal Colleges of Physicians and Surgeons, Edinburgh; or for the single Licence of the College of Physicians, Edinburgh; the Licence of the Faculty of Physicians and Surgeons, Glasgow; the first Professional Examination for the Degree of M.B., or Master in Surgery in the Universities of Oxford, Cambridge, or London; or the second part of the Professional Examination for the Degree of M.B., or Master in Surgery in the Uni-

versities of Edinburgh, Aberdeen, St. Andrew's, and Glasgow; or the first Examination for Medical and Surgical Degrees in the Irish Universities; or the first Examination for the Licence of the Apothecaries' Company, Dublin, will be admitted to a single Examination in Materia Medica, Therapeutics, Medicine, Pathology, Midwifery, and Toxicology, part of which Examination will be conducted in writing.

Candidates who desire to avail themselves of the Modified Examination for Senior Candidates, must produce evidence—1. That they are more than forty years of age. 2. That they have served an apprenticeship of five years to an Apothecary; or at least that they have been engaged in such a course of study as shall be considered "serving after the manner of an apprentice, for five years," in conformity with the Act of 1815. 3. Of good moral conduct. 4. That they have attended such Lectures and Hospital Practice as were required of Students when their Medical Studies commenced, or such as shall be deemed equivalent. The Examination of the above Candidates will consist—In the Translation of Physicians' Prescriptions; in such parts of Chemistry and Materia Medica as bear upon the Practice of Medicine, and on Toxicology; in Visceral Anatomy; in the Practice of Medicine, including the Diseases of Women and Children, and in Midwifery. Candidates, unless registered, will be required to produce their Diploma. Any Candidate who presents himself for the first Examination and is rejected, may be admitted to re-examination at the expiration of *three months*. A Candidate who presents himself for the second or Pass Examination and is rejected, cannot be admitted to re-examination until the expiration of *six months*. A Candidate who presents himself for the first and second Examinations in one evening, and is rejected on either, cannot be admitted to re-examination until the expiration of *six months*.

An Examination in Arts will take place at the Hall three times in the year; viz., on the last Friday and Saturday in the months of January, April, and September. Testimonials of proficiency in General Education will be received from any of the *Licensing Bodies* under the Medical Act of 1858; and also from the National, Colonial, and Foreign Educational Bodies specially recognised by the Medical Council.

UNIVERSITY OF OXFORD.

DEGREES IN MEDICINE.

EVERY Student must reside either in one of the Colleges or Halls, or in a Licensed Lodging-House for three years. During these three years he has to pass two Examinations in Arts, and one in either Mathematics, Natural Science, or Law and Modern History; when, if he obtain a first, second, or third class, he can take his B.A. degree; if he do not gain such honours, he has to pass a third Examination in *Literis Humanioribus*. A Student deciding to graduate in Medicine must, after passing the requisite Examination for the degree of B.A., spend two years in study prior to a Scientific Examination for the Degree of Bachelor of Medicine, unless he shall have taken a first or second class in the Natural Science School, when he may go in at the first opportunity for the first M.B. Examination. Two years after passing this Examination, he may go in for the second or practical Examination for the M.B. Degree. These four years of medical study may be spent either in or out of Oxford, in an approved Medical School.

The M.B. Degree confers the Licence to practise. There is no subsequent Examination for the Degree of Doctor in Medicine. For that Degree a dissertation has to be publicly read three years after taking the M.B. Degree.

The Medical Examinations take place annually in Michaelmas Term.

The instruction in Natural Science is carried on at the Museum, where the following Teachers have their Departments.

Regius Professor of Medicine: H. W. Acland, M.D., LL.D., F.R.S.
Savilian Professor of Astronomy: W. F. Donkin, M.A., F.R.S.
Savilian Professor of Geometry: H. J. S. Smith, M.A., F.R.S.
Professor of Experimental Physics: R. B. Clifton, M.A., F.R.S.
Professor of Natural Philosophy: Bartholomew Price, M.A., F.R.S.
Professor of Geology: J. Phillips, M.A., D.C.L., F.R.S.
Professor of Mineralogy: M. H. N. Story-Maskelyne, M.A.
Professor of Chemistry: Sir B. C. Brodie, Bart., M.A., F.R.S.
Linacre Professor of Physiology: G. Rolleston, M.D., F.R.S.
Professor of Zoology: J. O. Westwood, M.A., F.L.S.
Lee's Reader in Anatomy: W. S. Church, M.A., M.B.
Demonstrator in Anatomy: C. Robertson, Esq.
Demonstrations in Morbid Anatomy: Dr. Tuckwell.
Radcliffe Librarian; H. W. Acland, M.D., LL.D., F.R.S.
Sherardian Professor of Botany (Botanical Gardens): J. S. Law-
son, M.A.

Clinical Medicine (Infirmary): Drs. Acland, Gray, and Tuckwell.

Lee's Reader in Chemistry (Christ Church): A. G. V. Harcourt, M.A., F.R.S.

Scholarships of about the value of £75 are obtainable at Christ Church, Magdalen, and other Colleges, by competitive Examination in Natural Science. Every year a Radcliffe Travelling Fellowship is competed for by any one who, having taken a first-class in any of the Public Examinations of the University, or having obtained some University Prize or Scholarship open to general competition, proposes to study medicine. The travelling Fellows receive £200 a year for three years, half this period being spent in study abroad.

UNIVERSITY OF CAMBRIDGE.

DEGREES IN MEDICINE AND SURGERY.

Degree of Bachelor of Medicine.

A STUDENT proceeding to this degree must—1, Reside in the University two-thirds of each of nine terms; 2, Pass the previous Examination*; 3, Pursue medical study for five years, unless he have obtained honours in the Mathematical, Classical, Moral Sciences, or Natural Sciences Tripos, in which case only four years are required. Of this time of five years he must spend six terms in medical study in the University† after passing the previous Examination, unless he has obtained honours in one of the above-mentioned Triposes, in which case four terms only are required.—A student who has not graduated in Arts is required, before keeping the terms of medical study, in addition to passing the Previous Examination, to pass in Algebra either in the Examination for the additional subjects of the Previous Examination (which he may do in his second term of residence or in any subsequent term), or in the general Examination for the ordinary B.A. Degree.

There are three Examinations for the Degree of Bachelor of Medicine, conducted partly by written answers, and partly *viva voce*. The Examinations include chemical analysis, the recognition and description of specimens (healthy, morbid, and microscopical), dissections, and the examination of patients.

The subjects of the first Examination are—1, Mechanics and Hydrostatics; 2, Chemistry with Heat and Electricity; 3, Botany.‡ The student may present himself for this Examination at any time after passing the Previous Examination. He must produce certificates of having diligently attended one course of Lectures on Chemistry, including Manipulations, and one course on Botany.

The subjects of the second Examination are—1, Elements of Comparative Anatomy; 2, Human Anatomy and Physiology; 3, Pharmacology. Before presenting himself for this Examination, the student must have completed two years of medical study, the time of medical study required to be spent in the University being included in these two years. He must have attended hospital practice during one year, have practised dissection during one season, and must produce certificates of having diligently attended a course of Lectures on each of the following subjects:—1, Elements of Comparative Anatomy; 2, Human Anatomy and Physiology; 3, Materia Medica and Pharmacy; 4, Pathology.

The subjects of the third Examination are—1, Pathology and the Practice of Physic (two papers); 2, Clinical Medicine; 3, Medical Jurisprudence.—Before presenting himself for this Examination, the student must have completed the course of medical study, must have attended Hospital practice during three years, and must produce certificates of

* A student who is, at least, in his second term of residence, may be admitted to the Previous Examination, and also to the Examination in the Additional Subjects, held in the Lent Term, provided he presents to the Registrar a Certificate from the Master of his College, or his *locum tenens*, stating that he has declared that it is *bona fide* his intention to register himself as a medical student and to study medicine in the University. But in order that such a student may be admitted to the Examination for any Tripos, or to the Degree of Bachelor of Arts or Bachelor of Law, a Certificate from the Regius Professor of Physic that he has been *bona fide* engaged in Medical Study, including Hospital Practice, subsequently to having passed the Previous Examination, and also Certificates that he has attended three Courses of Medical Lectures subsequently to his having passed the Previous Examination, must be presented to the Council.

† That is, by attending, in each Term, Courses of Lectures delivered in the University on two of the following subjects; viz., Chemistry, Botany, Human Anatomy and Physiology, Comparative Anatomy, Materia Medica and Pharmacy, Pathology; or, instead of two Courses of Lectures, by attending one Course of Lectures and the Medical Practice of Addenbrooke's Hospital.

‡ Students who have obtained Honours in the Mathematical, Classical, Moral Sciences, or Natural Sciences Tripos, or passed the general Examination for the B.A. Degree, are not required to be examined in Mechanics and Hydrostatics; and those students who have obtained Honours in the Natural Sciences Tripos are not required to be examined in Botany or Chemistry, with Heat and Electricity, if they have passed with credit the Examination in the Tripos in those subjects. Students who have passed the special Examination in Botany for the B.A. Degree, are not required to be examined again in that subject.

§ Students who have obtained honours in the Natural Sciences Tripos, and passed with credit the examination in Comparative Anatomy for that Tripos, are not required to be examined again in that subject.

having attended one course of Lectures on each of the following subjects:—1, Principles and Practice of Physic; 2, Clinical Medicine; 3, Clinical Surgery; 4, Medical Jurisprudence; 5, Midwifery.

After these Examinations have been passed, an Act must be kept in the Schools. The Candidate reads a thesis, composed in English by himself on some subject approved by the Professor; the Professor brings forward arguments or objections in English for the Candidate to answer, and examines him *viva voce* as well on questions connected with his thesis as on other subjects in the faculty of a more general nature. The exercise must continue at least one hour.

Degree of Doctor of Medicine.

This may be taken by a Bachelor of Medicine in the ninth term after his inauguration. He is required to produce certificates of having been engaged five years in medical study, to keep an Act similar to that for M.B., and write an extempore essay. He pays ten guineas to the Professor of Physic for the Act.—A Master of Arts may proceed to the Degree of M.D. in the twelfth term after his inauguration as M.A. without having taken the Degree of M.B. He must pass the three Examinations for M.B., and keep the Act, for the M.D. Degree. He must produce certificates of having been engaged five years in medical study, and the same certificates of attendance on Lectures and Hospital Practice are required as of the Candidate for the Degree of M.B.; but he is not required to have kept medical terms in the University.

Degree of Master in Surgery.

The subjects of the Examination for this Degree are—1, Surgical Anatomy; 2, Pathology and the Principles and Practice of Surgery; 3, Clinical Surgery; 4, Midwifery.—Before admission to this Examination, the Candidate must have passed all the Examinations for the Degree of M.B., and must produce certificates of having attended the surgical practice of a Hospital for three years, of having been House-Surgeon or Dresser for six months, and of having attended—1, a second course of Lectures on Human Anatomy; 2, one course of Lectures on the Principles and Practice of Surgery; 3, Lectures on Clinical Surgery, during one year; 4, ten cases of Midwifery; 5, of having practised Dissection during a second season.—The Examination takes place at the same time as those for M.B., and in a similar manner. The Candidate is required to perform operations on the dead body, and to examine patients in the Hospital.*

The Lectures by the Medical Professors and Teachers in the University begin in October. The following are given in the course of the year.

Pathology and Practice of Medicine: H. J. H. Bond, M.D.

Chemistry: G. D. Liveing, M.A.

Anatomy: G. M. Humphry, M.D., F.R.S.

Botany: C. C. Babington, M.A., F.R.S.

Materia Medica: W. W. Fisher, M.D.

Surgery: G. M. Humphry, M.D., F.R.S.

Clinical Medicine: G. E. Paget, M.D.; P. W. Latham, M.D.; J. L. Bradbury, M.B.

Clinical Surgery: C. Lesturgeon, M.A.; G. M. Humphry, M.D.

Practical Chemistry: G. D. Liveing, M.A.

Practical Anatomy: E. Carver, M.B., M.A.

UNIVERSITY OF LONDON.

DEGREES IN MEDICINE AND SURGERY.

THE following Examinations for Degrees in Medicine are held in the University of London. Each takes place once yearly.

Preliminary Scientific Examination, commencing on the third Monday in July.

First M.B. Examination: Last Monday in July.

Second M.B. Examination: First Monday in November.

Bachelor of Surgery: Tuesday following the fourth Monday in November.

Master in Surgery: Fourth Monday in November.

Doctor of Medicine: Fourth Monday in November.

The Certificates in each case must be transmitted to the Registrar at least fourteen days before the commencement of the Examination.

* A notice is published early in the Michaelmas and Easter Terms, stating when the examinations for Medical and Surgical Degrees respectively commence, and the date when candidates are required to send to the Regius Professor of Physic notices of their intention to offer themselves for Examination and the necessary Certificates. Each candidate sends Three Guineas to the Professor with the notice of his intention to offer himself for his First Examination. Schedules defining the range of subjects in the First Examination, and of the Comparative Anatomy in the Second Examination, also Schedules for the requisite Certificates, and a List of the Schools of Medicine recognised by the University, may be obtained, on application, from the Regius Professor of Physic.

The fee for each Examination is Five Pounds.* If a Candidate withdraw or fail to pass either of the Examinations, the fee is not returned; but he is admitted without further payment, to *two* subsequent Preliminary Scientific, First M.B., Second M.B., or B.S. Examinations, or to *one* subsequent M.S. or M.D. Examination, provided that he give notice to the Registrar at least fourteen days before the commencement of the Examination.

Bachelor of Medicine.

Every Candidate for the Degree of Bachelor of Medicine shall be required—1. To have passed the Matriculation Examination, or to have taken a Degree in Arts in either of the Universities of Sydney, Melbourne, or Calcutta (provided in the last case, that Latin has been one of the subjects in which he has passed). 2. To have passed the Preliminary Scientific Examination.† 3. To have been engaged in his Professional Studies during four years subsequently to Matriculation or Graduation in Arts, or one or more of the Medical Institutions or Schools recognised by this University; one year, at least, of the four to have been spent in one or more of the recognised Institutions or Schools in the United Kingdom. 4. To pass Two Examinations in Medicine.

First M.B. Examination.—The Candidate must produce Certificates:—1. Of having completed his nineteenth year. 2. Of having passed the Preliminary Scientific Examination at least one year previously. 3. Of having been a Student during two years at one or more of the Medical Institutions or Schools recognised by this University; and of having attended a Course of Lectures on each of three of the following subjects:—Descriptive and Surgical Anatomy; General Anatomy and Physiology; Comparative Anatomy; Pathological Anatomy; Materia Medica and Pharmacy; General Pathology; General Therapeutics; Forensic Medicine; Hygiene; Midwifery and Diseases peculiar to Women and Infants; Surgery; Medicine.‡ 4. Of having Dissected during two Winter Sessions. 5. Of having attended a Course of Practical Chemistry, comprehending Practical Exercises in conducting the more important processes of General and Pharmaceutical Chemistry; in applying Tests for discovering the Adulteration of articles of the Materia Medica, and the presence and nature of Poisons; and in the examination of Mineral Waters, Animal Secretions, Urinary Deposits, Calculi, etc. 6. Of having attended to Practical Pharmacy, and of having acquired a practical knowledge of the Preparation of Medicines. Candidates are examined in Anatomy; Physiology;§ Materia Medica and Pharmaceutical Chemistry; Organic Chemistry. Candidates must show a competent knowledge in all the subjects of examination. The Examinations are conducted by Printed Papers and *vivâ voce* Interrogation, by Demonstration from Preparations and Specimens, and by Dissections.

Examination for Honours.—Any Candidate who has been placed in the First Division may be examined for Honours in (1) Anatomy, (2) Physiology, Histology, and Comparative Anatomy, and (3) Materia Medica and Pharmaceutical Chemistry, and Organic Chemistry. If in the opinion of the Examiners sufficient merit be evinced, the Candidate who distinguishes himself most in each of these three divisions receives an exhibition of £40 *per annum* for the next Two Years, payable in quarterly instalments; provided that on receiving each instalment he declare his intention of presenting himself at the Second M.B. Examination within three years from the time of passing the First M.B. Examination. Under the same circumstances, the First and Second Candidates in each subject receive each a Gold Medal of the value of Five Pounds.

* For the Degree of Doctor of Medicine, the Fee will continue to be Ten Pounds to all such as, having taken their M.B. Degree under the former Regulations, shall not have paid the fee of Five Pounds at the Preliminary Scientific Examination.

† Candidates for the Degree of M.B. are strongly recommended by the Senate to pass the Preliminary Scientific Examination before commencing their regular Medical Studies. For the Preliminary Scientific Examination, a Candidate must have completed his seventeenth year, and have either passed the Matriculation Examination or taken a degree in Arts in one of the Universities of the United Kingdom or of Australia. Candidates are examined in Mechanical Philosophy, including Statics, Dynamics, Hydrostatics, Hydraulics, Pneumatics, and Optics; Natural Philosophy, including Heat, Electricity, and Magnetism; Inorganic Chemistry; Botany and Vegetable Physiology; Zoology and Comparative Anatomy. They must show a competent knowledge in all the subjects of Examination. Candidates who matriculated previously to January 1861, are not required to pass the Preliminary Scientific Examination in any other subjects than Chemistry and Botany; and they are allowed to pass the Preliminary Scientific Examination and the First M.B. Examination in the same year, if they so prefer.

‡ The subjects numbered 3, 4, and 5, must be attended after taking a Degree in Arts or passing the Matriculation Examination.

§ Any candidate is allowed, if he so prefer, to postpone his Examination in Physiology from the First M.B. Examination at which he presents himself for examination in the remaining subjects until the First M.B. Examination in the next or any subsequent year; but such candidate is not admitted to compete for Honours on either occasion; and he cannot be admitted as a candidate at the Second M.B. Examination until after the lapse of at least twelve months after having passed his Examination in Physiology.

*Second M.B. Examination.**—No Candidate is admitted to this Examination within Two Academical Years of the time of his passing the First Examination, nor without Certificates:—1. Of having passed the first M.B. Examination. 2. Of having subsequently attended a Course of Lectures on each of two of the subjects for which he had not presented Certificates at the First Examination. 3. Of having conducted at least Twenty Labours.† 4 and 5. Of having attended the Surgical and the Medical Practice of a recognised Hospital or Hospitals during Two Years, with Clinical Instruction and Lectures on Clinical Surgery and Clinical Medicine.‡ 6. Of having, subsequently to the completion of his attendance on Surgical and Medical Hospital Practice, attended to Practical Medicine, Surgery, and Midwifery, with special charge of patients, in Hospital, Infirmary, Dispensary, or Parochial Union, during Six Months. 7. Of having acquired Proficiency in Vaccination.§ The Candidate must also produce a Certificate of Moral Character from a teacher in the last School or Institution at which he has studied, as far as the teacher's opportunity of knowledge has extended. Candidates are examined in the following subjects:—General Pathology, General Therapeutics, and Hygiene; Surgery; Medicine; Midwifery; Forensic Medicine. The Examinations include questions in Surgical and Medical Anatomy, Pathological Anatomy, and Pathological Chemistry. The Examinations are conducted by Printed Papers and *Vivâ Voce* Interrogation; by Practical Examinations on Obstetric Preparations and Apparatus; by Examination, and Report on Cases, of Medical Patients in the Wards of a Hospital; Demonstration from Specimens and preparation. Candidates are expected to write Prescriptions in Latin, without abbreviations.

The Senate desire it to be understood that Bachelors of Medicine of the University of London have no right, as such, to assume the title of Doctor of Medicine.

Examination for Honours.—Any Candidate who has been placed in the First Division may be examined for Honours in (1) Medicine, (2) Midwifery, and (3) Forensic Medicine. If in the opinion of the Examiners sufficient merit be evinced, the Candidate who distinguishes himself the most in Medicine receives £50 *per annum* for the next Two Years, with the style of University Scholar in Medicine, and the Candidates who distinguish themselves the most in Midwifery and in Forensic Medicine receive each £30 *per annum* for the next Two Years, with the style of University Scholar in Midwifery and in Forensic Medicine respectively. The First and Second Candidates in each of the preceding subjects each receive a Gold Medal of the value of Five Pounds.

Bachelor of Surgery.

The Candidate must produce Certificates:—1. Of having taken the Degree of Bachelor of Medicine in this University. 2. Of having attended a Course of Instruction in Operative Surgery, and of having operated on the Dead Subject. The Examinations are conducted by Printed Papers on Surgical Anatomy and Surgical Operations; by Examination and Report on Cases of Surgical Patients; by Performance of Surgical Operations upon the Dead Subject; by Application of Surgical Apparatus; and by *Vivâ Voce* Interrogation.

Examination for Honours.—Any Candidate who has passed the B.S. Examination may be Examined for Honours in Surgery. If in the opinion of the Examiners sufficient merit be evinced, the Candidate who distinguishes himself the most receives £50 *per annum* for the next Two Years, with the style of University Scholar in Surgery. Under the same circumstances, the First and Second Candidates each receive a Gold Medal of the value of Five Pounds.

Master in Surgery.

The Candidate must produce Certificates:—1. Of having taken the

* Any candidate for the Second M.B. Examination who has passed the First M.B. Examination under the former Regulations, is required to have also passed the Examination in Physiology at some previous First M.B. Examination carried on under the present Regulations; at which Examination he is not allowed to compete for Honours.

† Certificates on this subject will be received from any legally qualified Practitioner in Medicine.

‡ The student's attendance on the Surgical and on the Medical Hospital Practice specified in Regulations 4 and 5, may commence at any date after his passing the Preliminary Scientific Examination, and may be comprised either within the same or within different years; provided that in every case his attendance on Hospital Practice be continued for at least eighteen months subsequently to his passing the First M.B. Examination. Attendance during Three Months in the Wards of a Lunatic Asylum recognised by the University, with Clinical Instruction, may be substituted for a like period of attendance on Medical Hospital Practice. The Senate regard it as highly desirable that candidates for the Degree of M.B. should practically acquaint themselves with the different forms of Insanity by attendance in a Lunatic Asylum.

§ Certificates on this subject will be received only from the authorised Vaccinators appointed by the Privy Council.

Degree of Bachelor of Surgery* in this University. 2. Of having attended subsequently—(a) To Clinical or Practical Surgery during Two Years in a Hospital or Medical Institution recognised by this University; (b) Or to Clinical or Practical Surgery during One Year in a Hospital or Medical Institution recognised by this University, and of having been engaged during Three Years in the Practice of his Profession; (c) Or of having been engaged during Five Years in the Practice of his Profession, either before or after taking the Degree of Bachelor of Surgery in this University.† 3. Of Moral Character, signed by two persons of respectability. The Examination is conducted by means of Printed Papers and *Viva Voce* Interrogation; and the Candidates are examined in Logic and Moral Philosophy,‡ and in Surgery. If in the opinion of the Examiners sufficient merit be evinced, the Candidate who distinguishes himself the most at the Examination for the Degree of Master in Surgery receives a Gold Medal of the value of Twenty Pounds.

Doctor of Medicine.

The Candidate must produce Certificates analogous to those required for Candidates for the Degree of Master in Surgery, but having special relation to Medicine. The Examination is conducted by means of Printed Papers and *Viva Voce* Interrogation; and Candidates are examined in Logic and Moral Philosophy, and in Medicine. The exemption from the Examination in Logic is the same as in the Degree of Master in Surgery. If in the opinion of the Examiners sufficient merit be evinced, the Candidate who shall distinguish himself the most at the Examination for the Degree of Doctor of Medicine receives a Gold Medal of the value of Twenty Pounds.

A Certificate under the Seal of the University, and signed by the Chancellor, is delivered at the Public Presentation for Degrees to each Candidate who has passed the second M.B. Examination, the Examination for Bachelor and Master in Surgery, and the Examination of Doctor of Medicine.

Candidates who commenced their Medical Studies in or before January 1839, and Practitioners in Medicine or Surgery (prior to 1840), are admitted to Examination under special regulations.

UNIVERSITY OF DURHAM.

REGULATIONS REGARDING DEGREES IN MEDICINE.

EVERY Student in Medicine must have been registered, and no one shall be registered unless he produce Certificates of Age and Character, and have passed one of the Preliminary Examinations recommended by the General Medical Council. The fee for Registration is five shillings. The Registration Examination is directed to the Rudiments of Religion, Literature, and Science; and is conducted by two or more Examiners nominated by the Warden. The Registration Examination will begin at Durham, on Tuesday September 21st, 1869; and on April 19th and September 20th, 1870, at 9 A.M., on each day.§ Application to be made to Arthur Beanlands, Esq., Durham, at least one month before the day of the Examination; to whom also Candidates must, at the same time, send the Examination fee, £1, and the Certificates of Age and Character. Every one who passes that Examination shall receive a Certificate signed by the Examiners without further payment. The

* Candidates who have obtained the Degree of Bachelor of Medicine previously to 1866, will be admitted to the Examination for the Degree of Master in Surgery without having taken the Degree of Bachelor of Surgery; and in the case of such candidates, the attendance on Surgical Practice required by Regulation 2, may commence from the date of the M.B. Degree.

† One year of attendance on Clinical or Practical Surgery, or two years of practice, will be dispensed with in the case of those candidates who at the B.S. Examination have been placed in the First Division.

‡ Any Candidate who has taken the Degree either of B.A., B.Sc., or M.D. in this University, is exempted from this part of the Examination; and any Candidate who has passed the Second M.B. Examination, may at any subsequent M.S. Examination present himself for Logic and Moral Philosophy alone, if he so prefer: thereby gaining exemption, if he should pass, from Examination in that subject when he presents himself to be examined for the Degree of Master in Surgery.

§ The Subjects of Examination are—*Necessary Subjects.* The History contained in the Acts of the Apostles; the History of England to the end of the Reign of Henry III; English Grammar and Composition; Arithmetic, including Vulgar and Decimal Fractions; Algebra, including Simple Equations; Euclid, Books I and II; the Geography of Great Britain, Ireland, and France. Candidates will be expected to draw from memory Outline Maps of these Countries, showing their chief ranges of Mountains and their principal Rivers, and also to answer questions connected with them. Latin Grammar, with—In September 1869 and 1870, Virgil, *Aeneid*, Lib. I and II; Cæsar, *De Bello Gallico*, Book IV; Arithmetic and Algebra; Euclid, Books I and II; History of the Reigns of Charles II and James II.—*Optional Subjects.* Greek Grammar, with Xenophon's *Memorabilia*; French Grammar, with Voltaire's *Charles XII*; German Grammar, with Goethe's *Dichtung und Wahrheit*, Book I; Elementary Questions in Mechanics, Hydrostatics, and Pneumatics. Candidates who intend to pass an examination in any of these subjects, must signify their intention fourteen days before their examination.—The Durham Senior Examination of persons not Members of the University, and the Durham Examination for Students in Arts in their first and second years, are also accepted as qualifications for Registration.

Warden has authority, in case of urgency, to appoint an Extraordinary Registration Examination, the fee for which is £2.

A *Medical Scholarship*, of the annual value of £25, will be awarded by Examination, commencing on Tuesday, October 6th, 1868, and open to all Candidates who have not been duly registered as Students in Medicine. The Scholarship is tenable for four years by a Student pursuing his Medical Studies, and not of sufficient standing to proceed to a Licence in Medicine. The first year at least must be passed at the University, and the remaining period at some recognised Medical School.*

Licence in Medicine.

Residence in Durham is not imperative. A Candidate must produce Certificates of Registration as a Student in Medicine, of having, after Registration, spent four years in medical study, at one or more of the Schools recognised by the Licensing Bodies named in Schedule A of the Medical Act, of good Moral Conduct, and of having attained the age of twenty-one years. There are two Examinations; one after the Second Winter Session, the other after the Fourth Winter Session of Medical Study. The first is directed to Anatomy, Physiology, and Chemistry; the second to the other branches of Medical Education, and more particularly to the Practice of Medicine.

Licence in Surgery.

The Regulations are the same as those for the Licence in Medicine, except that the final Examination is directed more particularly to Surgery, and may or may not be passed at the same time as the final Examination for the Licence in Medicine.

Candidates for the Licence in Medicine, and for the Licence in Surgery, must bring Certificates of having attended during their first two years of study, two Six Months' Courses of Lectures on Anatomy and on Physiology, and one Six Months' Course of Chemistry: of having been engaged Six Months in Practical Pharmacy, and for two Winter Sessions in Practical Dissection of the Human Body, and of having attended for twelve months the Surgical and the Medical Practice, with Clinical Lectures of a Hospital recognised by the University. During the remaining two years are required, two Six Months' Courses of Lectures on the Principles and Practice of Surgery, and the same on Medicine; two Three Months' Courses of Lectures and Demonstrations on Morbid Anatomy, and one Three Months' Course each of Lectures on Botany, on Materia Medica, on Practical Chemistry, on Midwifery, and on Medical Jurisprudence, together with Surgical and Medical Hospital Practice and Clinical Lectures during two Winter Sessions and one Summer Session.

Degree of Master in Surgery.

Residence during Three Terms at Durham is necessary. A Candidate must be a Licentiate in Surgery and also Licentiate in Medicine, of the University, and of the standing of eighteen terms (six years) at least from the date of his Registration at Durham, and of three terms at least from the date of his admission to the License in Surgery. He must be a Bachelor of Arts, or have passed the final Examination for B.A., or one equivalent thereto. He must have spent one year at least in Medical and Surgical Study in some School of Medicine in connection with the University, and have passed the Examination for the Degree of Master in Surgery. The Examination for this Degree is directed chiefly to the Practice of Surgery.

Degree of Bachelor in Medicine.

Residence during three terms at Durham is necessary. A Candidate must have obtained a Degree in Arts of the University of Durham, or have passed the final Examination for the Degree of Bachelor in Arts, or one equivalent thereto, and must be a Licentiate in Medicine of the University, and of the standing of eighteen terms (six years), from the date of his Matriculation at Durham. He must write an Essay on some Medical Subject appointed by the Reader in Medicine, and pass an Examination thereon and on the Collateral Medical Sciences involved in the subject of the Essay.

Degree of Doctor in Medicine.

A candidate must be of the standing of three terms at least as a Bachelor in Medicine of the University of Durham, and of the standing of twenty-one terms (seven years), from the date of his Matriculation at Durham. The Examination is similar to that for the Degree of Bachelor in Medicine.

The Examination for the Licences and Degrees in Medicine and Surgery are conducted in Newcastle, and those for the former as follows:—1, by Printed Papers; 2, practically in Anatomy, Physiology, Chemistry, Materia Medica, Surgery, Medicine, and Medical Jurisprudence; 3, *viva voce* on all the subjects.

* The Subjects of Examination for a Medical Scholarship on October 5th, 1869, are—The Gospel of St. Luke, in Greek; Latin Grammar. In April 1870, Cæsar, *De Bello Gallico*, Lib. I and II.

The next Examination will begin on Monday, June 14th. The Licences and Degrees are conferred in Convocation at Durham.

Fees for Examination and Degrees.—Senior Middle-Class Examination, £1; Examination at the end of First Year, £1; Registration Examination, £1; Extraordinary Registration Examination, £2; Registration, 5s.; each Public Examination in Medicine and in Surgery, £1; Licence in Medicine or Surgery, £3; Degree of Master in Surgery, Bachelor in Medicine, or Doctor in Medicine, each £6.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

REGULATIONS FOR THE LICENCE.

CANDIDATES for the Licence of the College must produce satisfactory evidence of having completed the age of twenty-one years, of having been engaged in the study of Medicine during at least four years, and of having attended the following courses at an University, or at a Medical School recognised by the College:—Anatomy, Practical Anatomy, Chemistry, Practice of Medicine, Clinical Medicine, and Principles and Practice of Surgery, each a Six Months' course; Practical Chemistry, Materia Medica and Pharmacy, Physiology or Institutes of Medicine, Clinical Surgery, Midwifery, Medical Jurisprudence, Pathological Anatomy or General Pathology, and Practical Pharmacy, each a Three Months' course. The applicant must have attended the practice of a Public Hospital (containing not fewer than 80 beds) during not less than twenty-four months, twelve of which must have been spent in attendance on the Medical Wards. He must also have attended at least six cases of Labour under the superintendence of a qualified Medical Practitioner. Every applicant, before being admitted to the final Examination, will be required to produce a certificate that he has studied Vaccination under a competent and recognised Teacher; that he has himself performed the operation successfully under the Teacher's inspection; that he is familiar with the different stages of Vaccine Vesicle, and with the methods of preserving Lymph; and that he is thoroughly informed in every necessary part of the subject. Every applicant for the Licence must have passed the Preliminary Examination in Literature and Science before he can be admitted to the Professional Examination.* Masters and Bachelors of Arts of any British or Foreign University, whose course of study may from time to time be approved of by the College, will be exempted from the Preliminary Examination; also those who have passed the Examination of the National Educational Bodies, or of any of the Licensing Boards recognised by the Medical Act.

The Professional Examination will be divided into two parts: (1) Anatomy, Physiology, Chemistry; (2) Materia Medica and Pharmacy, Pathology and Pathological Anatomy, Practice of Medicine, Midwifery, Medical Jurisprudence, Clinical Medicine, including the Examination of Patients, as well as of various Morbid Products. No candidate will be admitted to the first Examination until he has completed two, or of the second until he has completed four, years of Professional Study. The Examination will be conducted partly *visu voce*, partly by written papers. The following will be the periods of Examination, from October 1869 to October 1870:—1. Preliminary Examinations, October 23 and November 6, 1869; April 23 and July 23, 1870. 2. First Professional Examinations, October 26, 1869; January 25, April 5, May 3, July 12, July 26, and October 25, 1870. The Second Professional Examinations will take place immediately after the conclusion of each of the First Professional Examinations.

Candidates for the Licence of the College who already possess a qualification from a recognised Licensing Body, or who have passed the First Professional Examination before a Qualifying Body (provided it be as extensive as that required by this College), will be at once admitted to the second part of the Examination. Meetings for the Examination of candidates who already possess a qualification from a recognised Licensing Body, will be held on the first Wednesday of every month (with the exception of September and October), and, if necessary, on the following days. Candidates are required to communicate

* The Examination will embrace the following subjects:—1. English language, including Grammar and Composition. 2. Arithmetic, including Vulgar and Decimal Fractions. Algebra, including Simple Equations. 3. Geometry: First Two Books of Euclid. 4. Latin: Translation from one of the two following books, at the option of the candidate, viz.—Cicero in *Catilinam*, Orat. I; or Virgil, *Aeneid*, Lib. 11; and of an easy passage from a book not prescribed. Parsing: rendering English subjects, at the option of the candidate:—(1) Greek: Xenophon's *Anabasis*, Book III; Homer's *Iliad*, Book I. (2) French: La Fontaine's *Fables*. (3) German: Schiller's *Wallenstein's Tod*. (4) Natural Philosophy, including Mechanics, Hydrostatics, and Pneumatics. In Greek, French, and German, parsing of words from the passages given to be translated will be required; also, translation of short sentences from English into the respective languages.

with the Secretary to the College not less than eight days before the date of the Examination at which they propose to appear.

No candidate is admissible to Examination who has been rejected by any other Licensing Board within three months previous to his Examination.

The Fee payable by a Licentiate is Ten Guineas. If a candidate be unsuccessful at his Examination, Two Guineas will be retained to defray expenses.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH.

REGULATIONS FOR CANDIDATES FOR THE DIPLOMA.

THE Regulations regarding Schools of Medicine, Preliminary Examination, and Professional Study and Examination, are similar to those for the Double Qualification (see below); except that the third course of Medicine and the course of Pathological Anatomy are not required.

Registered Medical Practitioners whose Degree or Licence in Medicine is dated prior to October 1st, 1861, are exempt from the First Professional Examination. The Examinations under this Regulation may take place on the first and third Tuesdays of each month.

At the Second Examination, the student, in furnishing the statement of his Professional Study, must, if he has been an Apprentice, insert the name of his master, the date of his indenture, and the length of time for which he was bound. If the candidate have been an Apprentice to a Fellow of the College, he must also produce his discharged indenture.

All candidates will be subjected to a practical Clinical Examination in the Surgical Hospital, which Examination will include Surgical Apparatus, Bandages, etc.

The Fees are: for the First Examination, £4; for the Second, £6: in each, £2 will be returned to unsuccessful candidates. The Fee from candidates who have elsewhere passed the First Professional Examination is £10; of which £2 is retained, if the candidate be unsuccessful.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.

DOUBLE QUALIFICATION IN MEDICINE AND IN SURGERY.

THE Royal College of Physicians of Edinburgh and the Royal College of Surgeons of Edinburgh, while they still continue to give their Diplomas separately, under separate Regulations, have made arrangements by which, after one series of Examinations, the student may obtain the Diplomas of both Colleges. This Joint Examination is conducted by a Board, in which each body is represented for examination in those branches which are common to both Medicine and Surgery; but the College of Physicians takes exclusive charge of the Examination in Medicine, and the College of Surgeons of the Examination in Surgery. Students passing that Examination are enabled to register two Qualifications—Licentiate of the Royal College of Physicians of Edinburgh, and Licentiate of the Royal College of Surgeons of Edinburgh.

1. Every Candidate must have followed his course of study in an University, or in an Established School of Medicine, or in a Provincial School specially recognised by the College of Physicians and Surgeons of that division of the United Kingdom in which it is situate. 2. Under the title *Established School of Medicine* are comprehended the Medical Schools of those cities of Great Britain and Ireland in which Diplomas in Medicine or Surgery are granted, and such Colonial and Foreign Schools as are similarly circumstanced in the countries in which they exist.

Professional Education.

1. Candidates commencing Professional Study after September 16, 1866, must have been engaged, during four years after the Examination in General Education, in not less than four Winter Sessions' or three Winter and two Summer Sessions' attendance at a recognised Medical School.* 2. The Candidate must have attended the following separate and distinct Courses of Lectures:—Anatomy, two courses† of six months each, and Practical Anatomy, twelve months; or, at the option of the Candidate, Anatomy, one course of six months, and Practical Anatomy, eighteen months; Physiology, not less than fifty lectures;‡ Chemistry,

* Candidates commencing study prior to the above date, will be admitted to examination after four Winter Sessions' or three Winter and two Summer Sessions' attendance on Classes at a regular Medical School.

† The two Courses must not be attended in the same Session.

‡ In those Schools of England and Ireland in which two separate Courses of Lectures are delivered at separate hours—one on Anatomy, the other on Physiology—the former of these Courses will be received as a Course of Anatomy, and the other as a Course of Physiology.

Practice of Medicine, Clinical Medicine,* Medicine (a third course, either Practice or Clinical, at option of student),* Principles and Practice of Surgery, Clinical Surgery,* Surgery (a third course, either Principles and Practice or Clinical Surgery, at option)*, each six months; Practical or Analytical Chemistry, Materia Medica, Midwifery and Diseases of Women and Children, Medical Jurisprudence, and Pathological Anatomy,† each three months.‡ He must also produce certificates:—1. Of having attended at least six cases of Labour under the superintendence of a registered Medical Practitioner. 2. Of having attended, for three months, instruction in Practical Pharmacy. The Teacher signing the certificate must be a Member of the Pharmaceutical Society of Great Britain, or a Chemist and Druggist recognised by either College on special application, or the Superintendent of the Laboratory of a Public Hospital or Dispensary, or a Registered Practitioner who dispenses medicines to his own patients. 3. Of having attended, for twenty-four months, a Public General Hospital containing, on an average, at least eighty patients. 4. Of having attended, for six months, the practice of a Public Dispensary specially recognised by either College; or of having been engaged for six months as Assistant to a Registered Practitioner. 5. Of having been instructed in Vaccination; the certificate to be signed by the Teacher, who must be a Registered Practitioner. It is strongly recommended to Students to avail themselves of opportunities of attending Lectures on Ophthalmic and Mental Diseases, also on Natural History and Comparative Anatomy; and of obtaining practical instruction in the Use of the Microscope.§

Preliminary Examination in General Education.

1. All Students who intend becoming Candidates for the Diplomas of the Colleges must have passed the complete Examination in General Education, and have had their names inscribed in the Register of Medical Students instituted by the General Medical Council at the commencement of their Professional Studies. 2. The subjects of the Preliminary Examination are the same as those mentioned in the Regulations of the Royal College of Physicians of Edinburgh. Testimonials of proficiency granted by the Educational Bodies recognised by the Medical Council will be accepted as sufficient evidence of General Education, and will exempt from the Preliminary Examination. 4. The Preliminary Examinations will take place on October 23rd and November 6th, 1869, and on April 23rd and July 23rd, 1870. 5. Students who intend to undergo the Preliminary Examination must give in their names, addresses, and places of birth to the officer of either College, not later than two days before the day of Examination; and must pay a Fee of Ten Shillings, not to be returned in case of rejection; but they will be admissible to re-examination at a future period without paying another fee. 6. Candidates, the commencement of whose Professional Studies was prior to September 17th, 1866, may pass the Preliminary Examination in General Education at any of the periods previous to the First Professional Examination, but are recommended to do so at the earliest possible period. Candidates under this Regulation, who have not passed a Preliminary Examination in General Education, will be admitted to a special Examination in General Education previously to their First Professional Examination. For this they shall pay a Fee of £1.

Professional Examination.

1. Candidates for the Double Qualification are subjected to two Professional Examinations. 2. The First Examination embraces Anatomy, Physiology, and Chemistry; and takes place not sooner than the end of the Second Winter Session. 3. Opportunities for both Examinations will be presented six times in each year. On each of these occasions, the Candidates write answers to the questions proposed. The Oral Examinations are conducted on the days immediately succeeding. 4. Candidates who desire to pass the First Professional Examination must apply to the Inspector of Certificates on or before the

Saturday preceding the day of Examination;* and must produce tickets, and also certificates of attendance on those Courses of Lectures which have reference to the subjects of that Examination. They must also produce evidence of having passed the Preliminary Examination. 5. The sum of £6 must be paid to the Inspector of Certificates for this Examination, not later than 10 A.M. of the day preceding it. This sum will be considered as paid to account of the entire Fee of £16 payable for the two Diplomas. 6. In the case of a Candidate being unsuccessful at this Examination, £4 will be returned to him. 7. The Second Examination embraces Medicine, Surgery and Surgical Anatomy, Midwifery, Pathological Anatomy, Materia Medica and Pharmacy, and Medical Jurisprudence; and does not take place before the termination of the Winter Session of the last year of study. In the case of Candidates who began their course of Study after September 16th, 1866, it will not take place until four years after the Examination in General Education. 8. Applications for Examination must be made to the Inspector of Certificates not later than the Monday previous to the day of Examination. 9. Every Candidate must produce to the Inspector—1. A Certificate of having passed the Preliminary Examination, unless this Certificate have been already seen by the Inspectors of the Colleges; 2. A Certificate of registration in the books of the General Medical Council; 3. A Certificate of his having passed the First Professional Examination; 4. The Certificates of his Classes, etc.; 5. A tabular statement (for which a printed form will be furnished by the Inspector), exhibiting the full amount of his Professional Education, and distinguishing the Classes, Hospitals, and Dispensaries attended during each Session of his studies. 10. The Fee payable for this Examination, which is £10, must be lodged with the Inspector not later than 10 A.M. of the day preceding the Examination-day. 11. On the production of the above documents, and after receiving the Fees, the Inspector gives the Candidate a letter authorising the Examiners to take him on trial. 12. Unsuccessful Candidates at either the First or Second Examination are remitted to their studies for a period to be determined by the judgment of the Examiners, but not in any case less than three months. 13. In case of a Candidate being unsuccessful at the Second Examination, £8 will be returned to him. 14. Candidates who have passed the First Professional Examination in Anatomy, Physiology, and Chemistry, at any of the Licensing Boards recognised by the Medical Act, will be admissible to the Second Professional Examination on producing Certificates of the whole course of Study prescribed, and of having passed their Preliminary and First Professional Examinations. If any of the three subjects of the First Examination have been omitted, such Candidates will have to undergo an Examination on the omitted subjects; and none of the subjects set down in § 7 will be omitted at the Second Examination, even if some of them should have formed part of the First Examination by another Board. The Fee payable by such Candidates is £16, and unsuccessful Candidates will receive back £14. 15. In addition to the Written and Oral Examinations, all Candidates shall be rejected to a Practical Clinical Examination in Medicine and Surgery, which shall include the Examination of Patients, Physical Diagnosis, the Use of the Microscope, Surgical Appliances, Bandages, etc. 16. Candidates desirous of Special Examinations on other days than those fixed by the Regulations must prepare a Case to be submitted for the consideration of the authorities of the Colleges, with evidence to show why it was and is impossible for them to avail themselves of the Ordinary Examinations, past or future. They must at the same time produce Certificates of the whole of the prescribed Course of Study and of the Preliminary Examination, and state the earliest and the latest days within which they can present themselves. It is very desirable that all such Candidates, and especially those who are at a distance from Edinburgh, should present their applications as long beforehand as possible. The Fees for Special Examinations are as follows; viz.:—£28 for First and Second Examinations, of which £22 will be returned to Candidates remitted on the First Examination, and £10 to Candidates successful in the first, but unsuccessful in the Second Examination. £25 for Second Examination, when the Candidate has passed the First under the conditions of § 14. Of this, £16 will be returned to the Candidate, if unsuccessful. £19 for Second Examination when the Candidate has passed the First before the Examiners of the Colleges. Of this, £10 will be returned to the Candidate, if unsuccessful. 17. No candidate shall be admissible to Examination who has been rejected by any other Licensing Board within the three months preceding his Examination.

Communications from Candidates to be addressed to DR. GAIRDNER,

* Candidates at a distance are requested to send their Certificates much earlier, so as to give sufficient time for the exchange of one or two explanatory letters; as much disappointment has been occasioned by the discovery of defects in their Course of Study when it was too late to rectify them by the production of documents.

* Two Courses of Clinical Medicine or of Clinical Surgery of Three Months each, if not simultaneous, will be held equivalent to one Course of Six Months. They must be attended during the period of attendance at the Hospital where they are delivered.

† A Certificate of Attendance at the *Post Mortem* Examinations at a General Hospital will be accepted in lieu of this course.

‡ The six months' courses delivered in Scotland must consist of not fewer than one hundred Lectures, with the exception of Clinical Medicine and Clinical Surgery. The three months' courses must consist of not fewer than fifty Lectures.

§ The following order of study is recommended as a guide to the student, though not enjoined. *First Year*—Anatomy; Practical Anatomy; Chemistry; Practical or Analytical Chemistry; Hospital. *Second Year*—Anatomy; Practical Anatomy; Physiology; Surgery; Materia Medica (the last either in this or the third year); Hospital. *Third Year*—Practice of Medicine; Clinical Surgery; Practical Anatomy; Practical Pharmacy; Clinical Medicine; Pathological Anatomy; Hospital. *Fourth Year*—Surgery or Clinical Surgery; Midwifery and Diseases of Women and Children; Practice of Medicine or Clinical Medicine; Medical Jurisprudence; Practical Midwifery; Hospital.

Inspector and Treasurer of the Double Qualification, at 45, Northumberland Street, Edinburgh. Attention to this will save much time and trouble. It is also requested that Candidates will attend punctually to the dates fixed by the Regulations for lodging their Certificates and for paying their Money. See also the Note relating to Candidates who are at a distance. If these preliminaries are neglected by Candidates, their Examinations may require to be postponed.

The following will be the periods of Examination for the Double Qualification of the Royal Colleges of Physicians and Surgeons of Edinburgh, for the year 1869-70.

I. *Preliminary Examination in General Education.*—Saturdays, October 23rd and November 6th, 1869, April 23rd and July 23rd, 1870.

II. *First Professional Examinations.*—Tuesdays, October 26th, 1869, January 25th, April 5th, May 3rd, July 12th, July 26th, October 25th, 1870.

III. *Second Professional Examinations.*—These will take place immediately after the conclusion of the First Professional Examinations, at each of the above mentioned periods. In no case will they be begun on an earlier day than the Thursday of any period, nor will they usually be later than that day.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

REGULATIONS FOR THE DIPLOMA.

THE Regulations respecting the Curriculum of Professional Study are similar to those of the Royal College of Surgeons of Edinburgh.

Preliminary Examinations in General Literature will be held in the Faculty Hall, during 1869, on October 22nd and November 5th.*

The Examinations will be conducted chiefly by means of Written Papers. Those gentlemen who pass will receive Certificates. Those who are unsuccessful may appear again without paying a second Fee. The Fee for the Examination and Certificate is Ten Shillings. Candidates are requested to give in their names to the Secretary at least two days before the Examination, and to give intimation of the optional subjects they select.

The First Professional Examinations take place on the second Tuesday of every month. The Second Professional Examinations take place, the written part on the second Tuesday of every month, and the clinical and oral parts on the succeeding day.

The Fee for the Diploma is £10; viz., £4 for the First Examination, and £6 for the Second Examination.

The Examinations are conducted partly in writing and partly orally. Recent Dissections, Anatomical Specimens, Chemical Tests, Articles of the Materia Medica, the Microscope, Surgical Apparatus, and Pathological Specimens, are employed at the discretion of the Examiners. Candidates are also subjected, at the Second Examination, to a Practical Clinical Examination at the Hospital.

Candidates for the Diploma of the Faculty, who possess a Qualification to practise, or who have passed the Examination in Anatomy, Physiology, and Chemistry, before any of the Licensing Bodies enumerated in Schedule (A) of the Medical Act, 1858, on complying with the Regulations in other respects, will be admitted to the Second Professional Examination. In such cases, the full Fee is exigible. In the case of unsuccessful Candidates, £2 of the Fee is retained.

A Candidate, on showing a sufficient reason, may be admitted to Examination on a day specially arranged, on paying an extra Fee of £3, which will be forfeited, in addition to the £2 ordinarily retained, in the event of his being remitted to his studies.

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH, AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

DOUBLE QUALIFICATION IN MEDICINE AND IN SURGERY.

THE Faculty of Physicians and Surgeons of Glasgow, and the Royal College of Physicians of Edinburgh, conjointly grant their Diplomas

* The Examination will embrace the following subjects:—1. English Language, including Grammar and Composition. 2. Latin: Translation from one of the two following Books, at the option of the candidates; viz., the Fourth Book of *Cæsar's Commentaries, De Bello Gallico*; Virgil, *Æneid*, Lib. I; an Exercise in rendering English correctly into Latin, the Latin words being supplied. 3. Arithmetic: to Vulgar and Decimal Fractions inclusive. Algebra, including Simple Equations. 4. Geometry: First two Books of Euclid. 5. One of the following subjects at the option of the candidate. a. Natural Philosophy: Mechanics, Hydrostatics, and Pneumatics. b. Greek: Xenophon's *Anabasis*, Book II; or Homer's *Iliad*, Book VI. c. French: Voltaire, *Histoire de Charles XII.* d. German: First Two Books of Schiller's *Geschichte des dreissigjährigen Kriegs*. In the Latin, Greek, French, and German Papers, questions on Grammar will be given.

after one series of Examinations before a Board of Examiners in which each body is represented. The Regulations as to the Curriculum of Study are the same as those for the conjoined Examinations of the Royal Colleges of Physicians and Surgeons of Edinburgh. The Fee for the two Diplomas granted conjointly is £16.

The First Examination for the Double Qualification will be held on the second Thursdays of January, April, May, July, August, and October. The Second Examination will be held, the written part on each of the above days, and the clinical and the oral part on the succeeding day.

UNIVERSITIES OF EDINBURGH, GLASGOW, ABERDEEN, AND ST. ANDREW'S.

REGULATIONS RESPECTING DEGREES IN MEDICINE.

[The Regulations of these Universities are nearly similar. We therefore give but one statement, noticing points of difference when necessary.]

Three Medical Degrees are conferred by each University; viz., Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.). The Degree of C.M. is not conferred on any person who does not also at the same time obtain the Degree of Bachelor of Medicine.

Preliminary Education.

The preliminary branches of extra-professional education are English, Latin, Arithmetic, the Elements of Mathematics, and the Elements of Mechanics; and Candidates must also pass a satisfactory Examination in at least two of the following subjects in addition: Greek, French, German, Higher Mathematics, Natural Philosophy, Logic, Moral Philosophy.* The Examinations on both classes of subjects take place† before the Candidate has entered on his Medical Curriculum.‡

* The Universities of Glasgow, Aberdeen, and St. Andrew's, include Natural History.

† As far as possible.—*Aberdeen.*—At *Glasgow*, the examination in the first class of subjects must take place before the commencement of the Medical Curriculum; and that in the second class previously to the first professional examination (as far as possible, previously to the commencement of professional study).

‡ In Edinburgh, examinations on these subjects will be held on 19th and 20th of October 1869, and 22nd and 23rd March 1870. 1. *English*—A portion of an English author must be written to dictation; the grammatical construction of one or two sentences must be explained; the grammatical errors in a sentence ungrammatically composed must be pointed out, and their nature explained; and the derivation and definition of a few English words in common use must be given (see Bain's *English Grammar*, and Angus on the *English Language*). 2. *Latin*—Eighth *Æneid* of Virgil, an easy passage from a Latin Prose Author, and a single passage of English (translated from a Latin Author) to be re-translated into Latin, the more difficult Latin words being given. 3. *Arithmetic*—The Common Rules including Decimals. 4. *Elements of Mathematics*—Euclid, Books I, II, and III; and the Rudiments of Algebra, including Simple Equations. A knowledge of Euclid alone will not be sufficient. 5. *Elements of Mechanics*—Elementary Mechanics and Hydrostatics.—At the same date, examinations will also take place in the additional subjects, as follows. 1. *Greek*—Third Book of Xenophon's *Anabasis*. 2. *French*—First half of Voltaire's *Charles XII.* 3. *German*—Schiller's *Wallenstein*. 4. *Higher Mathematics*—Euclid, Books I to VI; Algebra, Trigonometry, and Conic Sections. 5. *Natural Philosophy*—A general knowledge of the Elements of Natural Philosophy, as in Ganot's *Physics*, translated by Atkinson. 6. *Logic*—Stewart's *Outlines of Moral Philosophy*, Part I; Fowler's *Elements of Deductive Logic*. 7. *Moral Philosophy*—Stewart's *Outlines of Moral Philosophy*, Part II, with McCosh's Notes.

In Glasgow, examinations will take place in October 1869, and April 1870, as follows. *First or Elementary Part*, Exercises in all of which are required. *English*—Writing correctly a passage to dictation; Composition of a short Essay on a given theme; Questions in Grammar. *Latin*—Second Book of the *Æneid* of Virgil, and Third Book of *Cæsar De Bello Gallico*: Translations of passages from authors not prescribed, and of English passages into Latin, the principal Latin words being supplied: Questions in Grammar and Construction. *Arithmetic*—the Common Rules, including Vulgar and Decimal Fractions. *Elements of Mathematics*—Euclid, Books I, II, and III; Algebra, as far as Simple Equations. *Elements of Mechanics*—Questions, for which Tomlinson's *Rudimentary Mechanics* may serve as a text-book. —*Second Part*, Exercises in two of which, to be selected by the candidate, are required. *Greek*—*Anabasis* of Xenophon, Book I, and the Gospel according to St. John; Translations of passages from Greek authors not prescribed, and of English passages into Greek—the principal Greek words supplied; Questions in Grammar. *French*—Voltaire's *Charles XII.*; Translations and exercises as in Latin and Greek. *German*—Schiller's *William Tell*; Translations and exercises as in the other languages. *Mathematics*—Euclid, Books I to VI; Algebra, including Quadratic Equations, and the Rudiments of Trigonometry. *Natural Philosophy*—Such a knowledge of the principles as may be obtained from the Text-books of Golding Bird, Brooke, and Ganot. *Natural History*—Geology or Zoology. Text-books—Jukes, Lyell, Dana, R. Jones, Dallas, Milne-Edwards. *Logic*—Whately's *Logic*, Books II and III. *Moral Philosophy*—The General Principles, as stated in Dugald Stewart on the Active Powers, or Dr. Fleming's Manual.

At St. Andrew's, the following are the details regarding the Preliminary and extra-Professional Examinations. In *English*, the qualifications will be tested by the style and general character of the written translations and answers; and by the knowledge of the derivations of words employed in Medicine. *Latin*—First Book of Cicero, *De Officiis*, Second *Æneid* of Virgil. *Mathematics*. *Arithmetic*, including Vulgar and Decimal Fractions, First Book of Euclid, Algebra as far as Simple Equations and Proportion. *Elements of Mechanics*—Composition and Resolution of Forces, the Lever, the Wheel and Axle, the Pulley, and the Inclined Plane, and the Centre of Gravity. *Greek*—First two Books of Xenophon's *Anabasis*, or in any one Book of Herodotus or two Books of Homer. *French*—Voltaire's *Charles XII.* *German*—Schiller's *Thirty Years' War*, or any one of his Dramas. *Higher Mathematics*—

A Degree in Arts (not Honorary) in any one of the Universities of England, Scotland, or Ireland, or in any Colonial or Foreign University specially recognised by the University Court, exempts from all Preliminary Examination; [and an Examination in Arts by any Corporate Body, whose Examination has been recognised by the General Medical Council, and also approved by the University Court, shall exempt from Preliminary Examination in Arts on all subjects comprised in the said Examination.]*

Degrees of Bachelor in Medicine and Master in Surgery.

Candidates for the Degree of Bachelor of Medicine or Master in Surgery must have been engaged in Medical and Surgical Study for four years—each *Annus Medicus* being constituted by at least two courses of not less than 100 Lectures each, or by one such course, and two courses of not less than 50 Lectures each; with the exception of the Clinical Courses, in which Lectures are to be given at least twice a week.

Every Candidate for the Degrees of M.B. and C.M. must give sufficient evidence by certificates—1. That he has studied each of the following departments of Medical Science; viz., Anatomy, Chemistry, *Materia Medica*, Institutes of Medicine or Physiology, Practice of Medicine, Surgery, Midwifery and the Diseases of Women and Children,† General Pathology,‡ during courses including not less than 100 Lectures; Practical Anatomy, a course of the same duration as the preceding; Practical Chemistry, three months; Practical Midwifery, three months at a Midwifery Hospital, or a certificate of attendance on six cases from a Registered Medical Practitioner; Clinical Medicine and Clinical Surgery, each a six months' course, or two courses of three months; Medical Jurisprudence, Botany, Natural History, including Zoology, courses of not less than 50 Lectures. 2. That he has attended, for at least two years, the Medical and Surgical Practice of a General Hospital which accommodates not fewer than eighty patients. 3. That he has been engaged for at least three months, by Apprenticeship or otherwise, in compounding and dispensing drugs at the Laboratory of a Hospital or Dispensary, Member of a Surgical College or Faculty, Licentiate of the London or Dublin Society of Apothecaries, or a Member of the Pharmaceutical Society of Great Britain.§ 4. That he has attended, for at least six months, the out-practice of a Hospital or the practice of a Dispensary, or of a Registered Practitioner. Evidence of a practical knowledge of Vaccination is also required.

One of the four years of Medical and Surgical Study must be in the University granting the Degree sought. Another year must be either in the same University, or in some other University entitled to give the Degree of Doctor of Medicine.|| [At St. Andrew's, no one can be received as a candidate for the Degree of Bachelor of Medicine or Master in Surgery unless two years at least of his four years of medical and surgical study shall have been in one or more of the following Universities and Colleges; viz., the Universities of St. Andrew's, Glasgow, Aberdeen, Edinburgh, Oxford, or Cambridge; Trinity College, Dublin; and Queen's College, Belfast, Cork, or Galway.] Attendance during at least six winter months on the Medical or Surgical Practice of a General Hospital which accommodates at least eighty patients, and, during the same period, on a course of Practical Anatomy; and one year's attendance, to the extent of four of the departments of medical study required, on the Lectures of Teachers of Medicine in the Hospital Schools of London, or in the School of the College of Surgeons in Dublin, or of such Teachers of Medicine in Edinburgh or elsewhere as shall from time to time be recognised by the Edinburgh University Court, may be reckoned as one of the four years.¶ All Candidates not Students of the University of Edinburgh, availing themselves of the permission of attending the Lectures of Extra-Academical Teachers in Edinburgh, must, at the commencement of each year of attendance, enrol their names in a

First Four and the Sixth Books of Euclid, Algebra, Plane Trigonometry, and the Elementary Propositions on the Straight Line, Circle, and Conic Sections, treated analytically. *Natural Philosophy*, Elementary Mechanics, Hydrostatics, and Optics. *Natural History*—Milne-Edwards's *Eléments de Zoologie* (translation by Dr. Knox). *Logic*—Whately's *Logic*, or his *Easy Lessons on Reasoning*. *Moral Philosophy*—Paley's *Moral Philosophy*, or Macintosh's *Dissertation on the Progress of Ethical Philosophy*.

* This portion, enclosed in brackets, is in the Regulations of the University of Edinburgh alone.

† Two Courses of Midwifery, of Three Months each, are reckoned equivalent to a Six Months' Course, provided different departments of Obstetric Medicine be taught in each of the Courses.

‡ Or a Three Months' Course of Lectures on Morbid Anatomy, together with a Supplemental Course of Practice of Medicine, or Clinical Medicine.

§ In the Laboratory of an Hospital or Dispensary, of a Registered Medical Practitioner, or of a Member of the Pharmaceutical Society of Great Britain.—*Glasgow*.

¶ Entitled to grant Degrees in Medicine.—*Glasgow*.

|| The other two years may be constituted by attendance upon courses in the great Hospital Medical Schools of London or Dublin; and, in default of such attendance, one of the four years may be constituted by attendance on any general Hospital containing not less than eighty beds, provided attendance has been given at the same time on a course of Practical Anatomy.—*Glasgow*.

book to be kept by the University for that purpose, paying a Fee of the same amount as the Matriculation Fee.

Every Candidate must deliver, before the 31st day of March of the year in which he proposes to graduate, to the Dean of the Faculty of Medicine—1. A Declaration, in his own handwriting, that he is twenty-one years of age, or that he will be so on or before the day of graduation; and that he will not be, on the day of graduation, under articles of Apprenticeship. 2. A statement of his Studies, general and Professional, accompanied with proper certificates.*

At the Professional Examination, each Candidate is examined, both in writing and *viva voce*—1, on Chemistry, Botany, and Natural History; 2, on Anatomy, Institutes of Medicine, *Materia Medica*, and Pathology; 3, on Surgery, Practice of Medicine, Midwifery, and Medical Jurisprudence; 4, Clinically, on Medicine and on Surgery in a Hospital. The Examinations on Anatomy, Chemistry, Institutes of Medicine, Botany, and Natural History, are conducted, as far as possible, by demonstrations of objects placed before the Candidates. Students may be admitted to Examination on the first division of these subjects at the end of their second year, and on the second division at the end of their third year. The Examination on the third and fourth divisions cannot take place until the Candidate has completed his fourth *Annus Medicus*. Candidates may, if they choose, be admitted to Examination on the first two of these divisions at the end of their third year, or to the four Examinations at the end of the fourth year. If any Candidate be found unqualified, he cannot be again admitted to Examination unless he has studied during another year two of the prescribed subjects, either in the University or in some other School of Medicine.

[The above are the Regulations, regarding Professional Examination, of the University of Edinburgh. Those of the other three Universities differ somewhat from those of Edinburgh. They are as follows.]

Every Candidate for the Degrees of Bachelor of Medicine and Master in Surgery shall undergo three Professional Examinations, which will be conducted both in writing and *viva voce*, as follows. The First Examination (not to be taken before the end of the second year of study) to include Chemistry, Elementary Anatomy, and Botany.† The Second Examination (not to be taken before the end of the third year) to include Advanced Anatomy, Physiology, and Zoology with Comparative Anatomy.‡ The Third Examination (not to be taken before the end of the fourth year) to include *Materia Medica*, General Pathology, Surgery, Practice of Medicine, Midwifery, Medical Jurisprudence, Clinical Medicine, and Clinical Surgery.§ The Examinations in Anatomy, Chemistry, Physiology, Botany, Zoology, and *Materia Medica*, will be conducted, as far as possible, by demonstrations of objects exhibited to the Candidates; and those on Medicine and Surgery, in part, by clinical demonstrations. Candidates may be admitted to Examination on the first two of these divisions at the end of the third year, or to the three Examinations at the end of their fourth year. If any Candidate, on Examination, be found unqualified, he shall not be again admitted to Examination unless he shall have completed another year of Medical Study, or such portion of another year as may be prescribed by the Examiners when he is found unqualified.]

Degree of Doctor of Medicine.

The Degree of Doctor of Medicine may be conferred on any Candidate who has obtained the Degree of Bachelor of Medicine, and is of the age of twenty-four years, and has been engaged, subsequently to his having received the Degree of Bachelor of Medicine, for at least two years in attendance on a Hospital, or in the Military or Naval Medical Services, or in Medical and Surgical Practice. The Candidate must be a Graduate in Arts, or must, before or at the time of his obtaining the Degree of Bachelor of Medicine, or within three years thereafter, have passed a satisfactory Examination in Greek, and in Logic or Moral Philosophy, and in one at least of the following subjects; viz., French, German, Higher Mathematics, and Natural Philosophy.|| He must submit to the Medical Faculty a Thesis composed by himself, and which shall be approved by the Faculty, on any branch of knowledge comprised in the Professional Examinations for the Degree of Bachelor of Medicine, which he may have made a subject of study after having received that Degree.

Candidates who commenced their Medical Studies in Edinburgh before February 4th, 1861, and in Aberdeen before November 1861, are

* The Universities of Aberdeen and St. Andrew's require an Inaugural Dissertation to be presented previously to the final examination for M.B. In Edinburgh and Glasgow, no Thesis is now required until the candidate seeks the Degree of M.D.

† And *Materia Medica*.—*St. Andrew's*.

‡ And Surgery.—*St. Andrew's*.

§ *Materia Medica* and Surgery in the two previous examinations.—*St. Andrew's*.

|| In Greek and in Logic or Moral Philosophy, and in any one of the other optional subjects in the examination in General Education.—*Glasgow*. Natural Philosophy added in optional subjects.—*St. Andrew's*.

entitled to be examined for the Degree of Doctor of Medicine, without previously taking that of Bachelor of Medicine, under the Regulations then in force in each University respectively.

The Degree of Doctor of Medicine may be conferred by the University of St. Andrew's on any Registered Medical Practitioner above the age of forty years, whose professional position and experience are such as, in the estimation of the University, to entitle him to that Degree, and who shall, on Examination, satisfy the Medical Examiners of the sufficiency of the professional knowledge; provided always, that Degrees shall not be conferred under this section on a greater number than ten in any one year. Candidates must lodge with the Professor of Medicine—1. A Certificate of Age; 2. Certificates from three Medical Men, of such acknowledged reputation in the Profession, or of such standing in the Medical Schools, as shall satisfy the Senatus of the professional position and experience of the Candidate; 3. A certain portion (*viz.*, £10 : 10) of the Graduation Fees, which sum shall be forfeited, should the Candidate fail to appear at the time appointed for Examination, or should he fail to graduate. The Examination shall be conducted both in writing and *viva voce*, and shall include the following subjects: 1, *Materia Medica* and General Therapeutics; 2, Medical Jurisprudence; 3, Practice of Medicine and Pathology; 4, Surgery; 5, Midwifery. As regards the last two subjects—*viz.*, Surgery and Midwifery—a minute knowledge shall not be required from those who do not practise these branches of the profession.

The Graduation Fees in each of the Universities are: for the Degree of M.B., three Examinations, each £5 : 5 = £15 : 15; for the Degree of C.M., £5 : 5 additional; for the Degree of M.D., £5 : 5 additional to that for M.B., together with Government Stamp Duty (£10).

The Fee for graduating under the old Regulations in Edinburgh is £25; at St. Andrew's, the Fee for the Degree of M.D. under the section relative to Registered Medical Practitioners is 50 Guineas. Stamp Duty is included in both cases.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

REGULATIONS RESPECTING THE LICENCE IN MEDICINE.

CANDIDATES are required to give proof of having been engaged during four years in the Study of Medicine at a School or Schools recognised by the College, and must also produce evidence of having studied the following subjects; *viz.*, Anatomy, Physiology or Institutes of Medicine, Practical Anatomy, Chemistry, Practical Chemistry, *Materia Medica* and Botany, Medical Jurisprudence, Practice of Medicine and Pathology, Surgery, Midwifery; and of having attended a Medico-Chirurgical Hospital, in which regular courses of Clinical Lectures are delivered, together with Clinical Instruction, for twenty-seven months, or such Hospital for eighteen months, with nine months' attendance on a Medical Hospital, and similar courses of Clinical Lectures and Clinical Instruction; the attendance in each case being for not more than nine months in any year—namely, for six winter and three summer months; and the attendance on a Medico-Chirurgical Hospital and Medical Hospital not being taken out in the same year; and of having attended Practical Midwifery for six months at a recognised Lying-in Hospital, or produce evidence satisfactory to the College of having attended Practical Midwifery. Candidates who are not personally known to any Fellow of the College are required to transmit Testimonials of Character from Registered Physicians or Surgeons.

Examinations.—The Examination is divided into parts: First Part—Anatomy, Physiology, Botany, and Chemistry. Second Part—*Materia Medica*, Practice of Medicine, Medical Jurisprudence, and Midwifery. Students may be examined in the subjects of the first part at the termination of the first period of study, or in all the subjects of their education on the completion of their Medical Studies. The Examinations are partly written, and partly oral.

Candidates are required to have passed an Examination in General Education held by some one of the Qualifying Bodies, or by some one of the National Educational Bodies, approved by the College. Students in Arts of one year's standing, of any University in the United Kingdom requiring Examinations in the first year; Graduates or Licentiates in Medicine or Surgery, of any University or College in Great Britain or Ireland, will be exempted from the Preliminary Examination.*

Candidates qualified as follows are required to undergo the second part of the Professional Examination only; *viz.*: 1. Graduates in Medicine of an University in the United Kingdom, or of any Foreign Uni-

versity approved by the College. 2. Fellows, Members, or Licentiates of the Royal Colleges of Physicians of London or Edinburgh, who have been admitted upon Examination. 3. Graduates or Licentiates in Surgery. 4. Candidates who, having completed the Curriculum laid down above, have passed the First Professional Examinations of any of the Licensing Corporations in the United Kingdom. Graduates, Members, and Licentiates, of above five years' standing as such, are exempted from the Written Examination.

If the President and Fellows be not satisfied with the answering of a Candidate, they may admit him to re-examination after the lapse of not less than two months. The Examinations are open to all Fellows and Licentiates of the College. They are held on the second Wednesday in each month, except August and September.

Every Candidate, before being admitted as a Licentiate, must subscribe a Declaration that he will observe the Statutes and Bye-Laws of the College; that he will not keep open shop for the sale of Medicines; that he will not endeavour to obtain practice, or to attract public notice, by any unworthy means; and that, should he violate any of these conditions, he thereby renders himself liable to censure, or to expulsion and surrendering of the Diploma.

Licence in Midwifery.—Special Examination is required. Candidates for the Licence in Midwifery, who are not Members of the College, will be admitted to Examination on the following qualifications:—The Degree or Licence in Medicine or Surgery from any University or College of Physicians or Surgeons in the United Kingdom, together with a Certificate of having attended a six months' course of Lectures on Midwifery, with the attendance for six months at a recognised Lying-in Hospital, or evidence satisfactory to the College of having attended Practical Midwifery. Each Licentiate in Midwifery, if not already a Licentiate in Medicine, must subscribe a Declaration similar to that required of Licentiates in Medicine.

Fees for Licence and Examinations.—The Fee for the Licence is £15 : 15; *viz.*, for Examination at the termination of the first period of Study, £5 : 5; for final Examination for the Licence, £10 : 10. Fee for the Midwifery Diploma, £3 : 3. Fee for the Licences in Medicine and Midwifery, if taken out within the interval of a month, £16.

The Admission Fee may be returned in case of rejection, deducting £2 : 2 for the Licence in Medicine, and £1 : 1 for the Licence in Midwifery; and, in the case of a rejected Candidate afterwards presenting himself for Examination within twelve months, the sum previously deducted will be allowed in the Fee for such second Examination.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

REGULATIONS REGARDING DIPLOMAS.

REGISTERED Pupils are admitted to the Preliminary Examination at any period previous to the Final Examination for Letters Testimonial. Students who are not Registered Pupils are also admitted to answer the Preliminary Examination upon payment of ten shillings; but they are not enrolled as Registered Pupils, or entitled to the privileges of such Pupils, until they have paid the full Registration Fee of five guineas.* No Student is admitted as a Candidate to the Quarterly Examination, or to the Final Examination for Letters Testimonial, until he has been enrolled as a Registered Pupil.

Letters Testimonial.

Every Registered Pupil shall be admitted to an Examination for Letters Testimonial if he shall have laid before the Council the following documents:—A receipt showing that he has lodged a sum of £21 in the Bank of Ireland to the credit of the President, and for the use of the College. Certificates that he has passed an Examination in the Greek and Latin languages, and that he has been engaged in the study of his profession for not less than four years. Certificates of attendance on a Hospital recognised by the Council, where Clinical Instruction is given, during three years. Certificates of attendance on three courses of Lectures on Anatomy and Physiology; three courses of Lectures on the Theory and Practice of Surgery; and of the performance of three courses of Dissections, accompanied by Demonstrations; also certificates of attendance on two courses of Lectures on Chemistry; or one course of Lectures on General and one on Practical Chemistry; one course of Lectures each on *Materia Medica*, Practice of Medicine, Midwifery, Medical Jurisprudence, and Botany.

* Candidates may select, as the subject of Preliminary Examination, one Greek and one Latin work from the following course:—In Greek—The Gospel of St. John, the *Menippus* of Lucian, or the First Book of Xenophon's *Anabasis*. In Latin—The First and Second Books of the *Aeneid* of Virgil, the *Jugurthine War* of Sallust, or the Third Book of Livy. Candidates will also be required to write English correctly from dictation, and to give evidence of proficiency in Arithmetic.

* The above regulations respecting Preliminary Examinations will not apply to Candidates who have commenced their Professional Education previously to the 1st January 1861.

Candidates for Letters Testimonial are examined upon Anatomy, Physiology, the Theory and Practice of Medicine and Surgery, *Materia Medica*, and the forms of Prescription; and shall perform such Surgical Operations or Dissections, or explain such Anatomical and Pathological Preparations, as the Examiners may require. Candidates for Letters Testimonial or Fellowship of the College, being Licentiates of a College of Physicians or Graduates in Medicine of an University, are examined in General and Descriptive Anatomy, Physiology, the Theory and Practice of Surgery, and Operative Surgery; and, if recommended to the Council for admission as Licentiates, they shall be so admitted by the Letters Testimonial. The Examinations are both oral and written. Candidates, whose answering shall be found insufficient, will not be allowed to present themselves a second time until after six months from their first examination.

Examinations are also held quarterly, on the second Tuesday in February, May, August, and November, at which Candidates are divided into two Classes, Junior and Senior; the former being examined in elementary, the latter in practical subjects. The Fee for the Junior Examination is £5:5; for the Senior, £15:15; making, with the Preliminary Examination and Registration Fees, a total of £26:15 for Letters Testimonial.

Fellowship.

Every Registered Pupil or Licentiate may be admitted to Examination for the Fellowship on producing a Certificate that he is twenty-five years of age, and that he is a Bachelor of Arts, or has been examined with a view to ascertain that he has obtained a liberal Preliminary Education; also a certificate, signed by two or more Fellows of the College, of good general conduct. He must have been engaged in the acquisition of Professional Knowledge not less than six years (five years being required in the case of Bachelors of Arts), during three of which he must have studied in one or more of the Schools and Hospitals recognised by the Council. The other three years may have passed in any approved School. He must also have acted as House-Surgeon or Dresser in a recognised Hospital; and must have attended the Lectures required of Candidates for Letters Testimonial, together with one course of Lectures on Comparative Anatomy, one on Botany, and one on Natural Philosophy. He must present a thesis on some Medical subject, or Clinical reports, with observations of six or more Medical or Surgical cases taken by himself.

Licentiates of the College, who may not be able to show that they have followed the course of study specified in the regulations, may, at the expiration of ten years from the date of their diploma, be admitted to the Examination for the Fellowship, on producing satisfactory evidence that they have conducted themselves honourably in the practice of their profession.

Each Candidate for the Fellowship is examined on two days. The subjects of the First Examination are Anatomy and Physiology (Human and Comparative); those of the Second—Pathology, Therapeutics, the Theory and Practice of Medicine and Surgery, and such other branch of Medical Science as the Council may, from time to time, direct. The Examinations are both Oral and Written. The Candidates must perform Dissections and Operations on the Dead Body. Rejected Candidates cannot present themselves a second time until after one year from the first Examination.

The Fee payable is £10:10 if the Candidate be a Licentiate, or £26:5 if he be a Registered Pupil; provided in either case he intends to reside beyond ten miles from Dublin. Should the Candidate intend to reside in Dublin, or within ten miles thereof, he pays, if a Licentiate, £3:10; if a Registered Pupil, £47:5. Fellows entering on the country list, who may subsequently settle as Practitioners in Dublin, or within ten miles thereof, must pay £10:10 to the College.

Diploma in Midwifery.

Any Fellow or Licentiate of the College may be admitted to an Examination for the Diploma in Midwifery upon producing:—*a.* A certificate of having attended one course of Lectures on Midwifery and Diseases of Women and Children, delivered in a recognised School of Medicine or Surgery. *b.* A Certificate that he has attended the practice of a Lying-in Hospital or of a Dispensary for Lying-in Women and Children, recognised by the Council, for Six Months. *c.* A Certificate that he has conducted Thirty Labour Cases at least. Candidates for the Midwifery Diploma shall be publicly examined on the Organisation of the Female; the Growth and Peculiarities of the Fœtus; the Practice of Midwifery; and the Diseases of Women and Children.

A rejected Candidate cannot again be admitted to an Examination until three months shall have elapsed; and he must then produce satisfactory evidence of having been engaged in the study of Midwifery subsequently to such rejection.

APOTHECARIES' HALL OF IRELAND.

REGULATIONS REGARDING THE LICENCE TO PRACTISE.

EVERY Candidate for the Licence to practise is required to undergo a Preliminary and a Professional Education and Examination.* The Arts Examination will be held on the third Friday in January, April, July, and October, at 2 P.M. Answers in writing must be given to printed questions. Unsuccessful Candidates will be remitted to their studies for six months.

Professional Education and Examination.

Every Candidate for the Licence to practise must produce Certificates to the following effects:—1. Of having passed an Examination in Arts previously to entering on professional study. 2. Of being at least twenty-one years of age, and of good moral character. 3. Of Apprenticeship to a qualified Apothecary, or of having been engaged at practical Pharmacy with an Apothecary for a period of three years subsequent to having passed the Examination in Arts. 4. Of having spent four years in Professional Study. 5. Of having attended the following Courses; viz., Chemistry, Principles and Practice of Medicine, and Surgery, each during One Winter Session; Anatomy and Physiology, Demonstrations and Dissections, each during Two Winter Sessions; Botany and Natural History, *Materia Medica* and Therapeutics, and Forensic Medicine, each during One Summer Session; Practical Chemistry (in a recognised Laboratory), during Three Months; Midwifery and Diseases of Women and Children, during Six Months; Practical Midwifery at a recognised Hospital (attendance upon twenty cases); Instruction in the practice of Vaccination. 6. Of having attended, at a recognised Hospital or Hospitals, the Practice of Medicine and Clinical Lectures or Medicine, during Two Winter and Two Summer Sessions; also the Practice of Surgery and Clinical Lectures on Surgery, during One Winter and one Summer Session. 7. Of having performed Vaccination successfully under a recognised Vaccinator.

The Examination for the Licence to practise is divided into two parts: The First Part comprehends Chemistry, Botany, Anatomy, Physiology, *Materia Medica*, and Pharmacy. The Second—Medicine, Surgery, Pathology, Midwifery, Forensic Medicine, and Hygiene. The First Part may be undergone at the close of the Second Winter Session; and the Second at the termination of the Fourth Winter Session.

The Examinations will be held on the first and second Mondays in January, April, July, and October.

Candidates who fail to pass the First Part of the Professional Examination will be remitted to their studies for three months. Unsuccessful Candidates at the Pass Examination will not be re-admitted until after six months.

Doctors of Medicine of any of the Universities in the United Kingdom, or Surgeons of any of the Royal Colleges of Surgeons, whose qualifications as such appear in the *Medical Register*, and who, having passed an Examination in Arts, have also served an Apprenticeship, or the required term of Practical Pharmacy, to a qualified Apothecary, may obtain the Licence of the Hall by undergoing an Examination of one day—the former in Pharmacy, and the latter in Medicine and Pharmacy.

Candidates for the Certificate of an Assistant to an Apothecary, in compounding and dispensing Medicines, will be examined in the *British Pharmacopœia* and in Pharmacy, scientific and practical, including the history and character of Medicines, their preparations and doses, and in the translation of Latin Prescriptions.

UNIVERSITY OF DUBLIN.

DEGREES AND LICENCES IN MEDICINE.

THE degrees in Medicine and Surgery granted by the University are: 1, Bachelor of Medicine; 2, Doctor of Medicine; 3, Master in Surgery. It also grants Licences in Medicine and Surgery.

Bachelor in Medicine.

A Candidate for the Degree of Bachelor in Medicine must be a Graduate in Arts, and may obtain the Degree of Bachelor in Medicine at the same commencement as that at which he receives his Degree of B.A.,

* The following are the subjects of Preliminary Examination:—*Compulsory.* 1. *English*, including Grammar, Composition, and the leading events of English History. 2. *Arithmetic*, including Vulgar and Decimal Fractions; Algebra, to Simple Equations. 3. *Geometry*: First Two Books of Euclid. 4. *Latin*: The *Catiline Wars* of Sallust, and the First Three Books of the *Aeneid* of Virgil. 5. *Greek*: The Gospel of St. John, and the First Twenty *Dialogues* of Lucian, or the First Two Books of the *Iliad* of Homer. 6. *French*: *Telemachus* or *Charles XII.*—*Optional.* 1. *Natural Philosophy*, including Mechanics, Hydrostatics, and Pneumatics. 2. *Natural History*: The Classification and Elementary Structure of Vegetables and Animals.

or at any subsequent commencement, provided the requisite Medical education shall have been completed. The Medical education is of four years' duration, and comprises attendance on the following Lectures: *Winter Courses*—Anatomy; Practical Anatomy; Theoretical and Operative Surgery; Chemistry; Practice of Medicine; Midwifery. *Summer Course*—Botany; Institutes of Medicine; Materia Medica and Pharmacy; Medical Jurisprudence. *Term Courses*—Heat (Michaelmas); Electricity and Magnetism (Hilary); Comparative Anatomy (Trinity). Nine months' attendance on the Clinical Lectures of Sir Patrick Dun's Hospital. Nine months' additional attendance on the Clinical Lectures of any Hospital recognised by the Board.* Six months' instruction in Practical Midwifery, including Clinical Lectures. Six months' Dissection, and three months' Laboratory Instructions in Chemistry. Any of the Winter or Summer Courses may be attended at any Medical School in Dublin recognised by the Provost and Senior Fellows† (and three of them, at the discretion of the Candidate, may be attended in the University of Edinburgh), provided the Candidate have kept an *Annus Medicus* in the School of Physic. A year's attendance in the School of Physic may be kept—1, by attending at least two, or not more than three, of the Winter Courses; 2, by attending one Winter and two Summer Courses; 3, by nine months' attendance on Sir Patrick Dun's Hospital and Clinical Lectures; together with one of the preceding courses. The Fee for the *Liccat ad Examinandum*, £5; for the Degree of M.D., £11. Members of the Royal Colleges of Surgeons of England or Ireland, being Graduates in Arts of Oxford, Cambridge, or Dublin, are admissible to the Examination for M.B.

Doctor in Medicine.

A Doctor in Medicine must be M.B. of at last three years' standing, or have been qualified to take the degree of M.B. for three years, and must perform exercises for the degree before the Regius Professor of Physic, in accordance with the Rules and Statutes of the University. Total amount of Fees for this Degree, £13.

Master in Surgery.

The Degree of Master in Surgery can only be obtained by Students who are Bachelors of Arts, and who have completed the professional Curriculum, and passed the Examination required. The Curriculum comprises the following, in addition to the complete course for the M.B. Degree: Theoretical and Operative Surgery, one course; Dissection, two courses. Nine months in Sir Patrick Dun's or other recognised Hospital, with Clinical Lectures. Attendance on the practice of a recognised County Infirmary for two years previously to the commencement of Medical study in Dublin, is allowed to count as one year of Hospital attendance. Pathology, Ophthalmic Surgery, and Comparative Anatomy, are specially required. Candidates are required to perform Surgical Operations on the Dead Subject. Candidates for the Degree of Master in Surgery, who have already passed the Examination for the Degree of Bachelor in Medicine, will be examined in Anatomy and Surgery only. Fee for the *Liccat ad Examinandum*, £5; for the Degree of M.Ch., £11.

University Licences.

Candidates for the Licences in Medicine or Surgery must be matriculated in Medicine; must have completed four years in Medical studies; and must pass an Examination in Arts unless they be Students in the Senior Freshman, or some higher class.‡

The Medical Course and Examination for the Licence in Medicine is the same as for the Degree of M.B.

Candidates who are already Licentiates in Surgery of the Royal College of Surgeons in Ireland, or Members of the Royal College of Surgeons of England, on passing the Arts Examination, will be admitted to Examination for the Licence in Medicine. Such Candidates will be exempted from examination in Anatomy and Surgery; and Candidates who have also the Licence in Midwifery of the Irish College of Surgeons will be exempted from examination in Midwifery.

* The following Hospitals are recognised:—1. Sir Patrick Dun's School of Physic Hospital; 2. Meath Hospital; 3. Richmond, Whitworth, and Hardwicke Hospitals; 4. Dr. Steevens' Hospital; 5. Jervis Street Infirmary; 6. City of Dublin Hospital; 7. Mercer's Hospital; 8. St. Vincent's Hospital; 9. Adelaide Hospital; 10. Mater Misericordiae Hospital.

† The Schools recognised are:—1. The School of the Royal College of Surgeons in Ireland; 2. The Carmichael School; 3. The School of Dr. Steevens' Hospital. 4. The St. Peter Street School; 5. The School of the Catholic University. The recognition is conditional on the Students being furnished with *bona fide* Certificates of regular attendance equivalent to that required by the University; i.e., three-fourths of the entire Lectures in each course.

‡ The following are the subjects of examination. Homer's *Iliad*, Books I, II (omitting Catalogue of Ships), III; Lucian's *Dialogues* (Walker's edition); Xenophon's *Anabasis*, Books I, II, III; Virgil, *Aeneid*, Books I, II, III; Sallust; Horace, *Satires*; Latin Prose Composition; English Prose Composition; English History; Modern Geography; Arithmetic; Algebra, to the end of Simple Equations; Euclid, Books I, II, III.

A Licentiate in Medicine, on completing his Course in Arts, and proceeding to the Degree of B.A., may become a Bachelor in Medicine, on paying the Degree fees, without further Examination in Medicine, provided he has attended Sir Patrick Dun's Hospital for nine months, and taken out a course of Institutes of Medicine. Fee for the *Liccat ad Examinandum*, £5; for the Licence in Medicine, £5.

The Surgical Course and Examination necessary for the Licence in Surgery, are the same as for the Degree of Master in Surgery. Fee for the *Liccat ad Examinandum*, £5; for the Licence in Surgery, £5.

Examinations.

Candidates for Degrees and Licences in Medicine and Surgery are expected to pass two Examinations, the first at the close of the second year of Medical study, and the other after the full Curriculum has been completed. The subjects at the previous Examination are: Anatomy; Botany, Materia Medica and Pharmacy; Chemistry and Physics. Two Medical Scholarships, of £20 each for two years, are awarded to the best answerers at the previous Examination, on certain conditions.

QUEEN'S UNIVERSITY IN IRELAND.

DEGREES OF DOCTOR OF MEDICINE AND MASTER IN SURGERY.

EACH Candidate for the Degree of Doctor in Medicine or Master in Surgery is required—1. To have passed, in one of the Colleges of the Queen's University,* the Entrance Examination in Arts; and to have been admitted a Matriculated Student of the University. 2. To have attended, in one of the Queen's Colleges, Lectures on one Modern Continental Language for six months, and Lectures on Natural Philosophy for six months. 3. To have also attended, in one of the Queen's Colleges, at least two of the Courses of Lectures in the following lists. For the Second Course of Anatomy and Physiology, and of Practical Anatomy, authenticated certificates will be received from the Professors or Lecturers in recognised Universities, Colleges, or Schools. 4. To pass the First University Examination and the Degree Examination.

The Curriculum shall extend over at least four years, and shall be divided into periods of at least two years each.

Candidates are recommended to pass the Matriculation Examination prior to entering on the second Period.

It is recommended that the first Period shall comprise attendance on the following courses of Lectures:—Chemistry; Botany with Herborisations, and Zoology; Anatomy and Physiology; Practical Anatomy; Materia Medica and Pharmacy; and that the second Period shall comprise attendance on Anatomy and Physiology (second course); Practical Anatomy (second course); Surgery; Midwifery; Medicine; and Medical Jurisprudence. Candidates shall also have attended, during either the first or the second Period, courses of a Modern Continental Language, and Experimental Physics (in one of the Colleges of the University). Also, during the first Period, Practical Chemistry (in a recognised Laboratory), and a Medico-Chirurgical Hospital containing at least sixty beds; together with the Clinical Lectures, at least two each week—a Winter Session of six months. And, during the second Period, Practical Midwifery—a certificate of having attended at a recognised Midwifery Hospital, with the Clinical Lectures, for three months; or of having attended a Midwifery Dispensary for the same period; or of having attended ten cases of Labour, under the superintendence of the Medical Officer of any Hospital or Dispensary where cases of Labour are treated; and recognised Medico-Chirurgical Hospital, containing at least sixty beds; together with the Clinical Lectures—eighteen months; including either three Winter Sessions of six months each, or two Winter Sessions of six months each, and two Summer Sessions of three months each.

Medical Examinations are held in June, and in September and October. Each Candidate for Examination must forward to the Secretary, on or before the 1st of June, or the 1st of September, notice of his intention to offer himself as a Candidate, along with his certificates.

First University Examination in Medicine.

The First University Examination may be passed either in June or September. Students may present themselves for the Examination at the termination of the first period of the Curriculum, or at any subsequent period; but they are earnestly recommended not to put off this Examination to the time of the Degree Examination. Before being admitted to Examination, each Candidate must produce satisfactory evidence of having completed the Curriculum for the first Period.

The First University Examination comprises the subjects recommended during the First Period of the Curriculum; any Candidate may also present himself for Examination in Experimental Physics and

* Belfast, Cork, or Galway.

Modern Languages, if he have already attended, in one of the Queen's Colleges, the prescribed courses.

Competitors for Honours will be examined in all the subjects of the First University Examination, including Experimental Physics and Modern Languages. Two Exhibitions, one consisting of two instalments of £20 each, the other of two instalments of £15 each, will be awarded to the best answers, if of sufficient absolute merit. Candidates who postpone their First Medical Examination until they present themselves at the Degree Examination are not eligible for Honours with the First Examination.

Degree Examinations in Medicine.

Examinations for the Degrees of M.D. and M.Ch. will be held in June and September. The Fee for each Degree is Five Pounds.

Each Candidate must be recommended by the President of his College, and produce certificates—1. From the Secretary of the Queen's University, that he has passed the Previous Examination, unless the Candidate present himself for both Examinations simultaneously. 2. From the Council of his College, that he has passed a full Examination in the subjects of study prescribed in the entrance course of the Faculty of Arts, and has been admitted a Matriculated Student in the Faculty of Medicine. 3. That he has attended, in the Colleges of the Queen's University, two of the Medical Courses, Lectures on one Modern Language, and Lectures on Experimental Physics. 4. That he has completed all other prescribed courses.

The Examination for the Degree of M.D. comprises the subjects recommended for the second Period of Medical Education, with Experimental Physics and one Modern Language, unless an Examination in these subjects shall have been already passed.

The Examination for the Degree of M.Ch. comprises, in addition, an Examination in Operative Surgery; except in the case of those Candidates who obtained the Degree of M.D. in this University, before 1st January, 1865.

Candidates who take a First Class in Honours will receive a Medal and Prize; Candidates who take a Second Class will receive a Prize; Candidates who take a Third Class will receive a Certificate of Honour.

ARMY MEDICAL SERVICE.

EVERY Candidate desirous of presenting himself for admission to the Army Medical Service must be unmarried, and not under 21 or over 28 years of age. He must produce a certificate from the District Registrar, in which the date of birth is stated; or, if this cannot be obtained, an affidavit from one of the parents or other near relative, who can attest the date of birth, will be accepted. He must also produce a certificate of moral character from the parochial minister, if possible. The Candidate must make a declaration that he labours under no mental or constitutional disease, nor any imperfection or disability that can interfere with the most efficient discharge of the duties of a medical officer in any climate.* He must also attest his readiness to engage for general service, and to proceed on foreign service when required to do so. He must be registered under the Medical Act of 1858 as licensed to practise Medicine and Surgery in Great Britain or Ireland.

Candidates are examined by the Examining Board in the following subjects:—Anatomy and Physiology; Surgery; Medicine, including Therapeutics, the Diseases of Women and Children, Chemistry and Pharmacy, and a practical knowledge of Drugs. (The examination in Medicine and Surgery will be in part practical, and will include operations on the dead body, the application of Surgical Apparatus, and the examination of Medical and Surgical patients at the bedside.) The eligibility of each Candidate for the Army Medical Service will be determined by the result of the examinations in these subjects only. Candidates who desire it will be examined in Comparative Anatomy, Zoology, Natural Philosophy, Physical Geography, and Botany with special reference to *Materia Medica*, and the number of marks gained in these subjects will be added to the total number of marks obtained in the obligatory part of the Examination by Candidates who shall have been found qualified for admission, and whose position on the list of successful competitors will thus be improved in proportion to their knowledge of these branches of science. After passing this examination, every Candidate will be required to attend one entire course of Practical Instruction at the Army Medical School, on—1, Hygiene; 2, Clinical and

Military Medicine; 3, Clinical and Military Surgery; 4, Pathology of Diseases and Injuries incident to Military Service. At its conclusion, the Candidate will be required to pass an examination on the subjects taught in the School. If he give satisfactory evidence of being qualified for the practical duties of an Army Medical Officer, he will be eligible for a Commission as Assistant-Surgeon. During the period of his residence at the Army Medical School, each Candidate will receive an allowance of five shillings per diem with quarters, or seven shillings per diem without quarters, to cover all costs of maintenance; and he will be required to provide himself with uniform (*viz.*, the Regulation undress uniform of an Assistant-Surgeon, but without the sword). All Candidates will be required to conform to such rules of discipline as the Senate may, from time to time, enact.

The Army Medical School at Netley is governed by a Senate, composed of the Director-General of the Army Medical Department (President); the Physician to the Secretary of State for India in Council; the Principal Medical Officer at Netley, and the Professors of the School. The Candidates for the services remain for four months at Netley, attending Lectures on Military Surgery, Medicine, Pathology, and Hygiene. The Lectures on Military Surgery include gunshot and other wounds; arrangements for the transport of wounded; duties of Army Surgeons in the field, during sieges, on transports, etc.; and other special subjects. Those on Military Medicine refer to the tropical and other diseases of the British possessions and colonies, and to the losses by disease in peace and war at home and abroad. The Lectures on Hygiene comprise all duties relating to the examination of water, air, food, clothing, etc., of the soldier; his duties and exercise, and the circumstances affecting his health; the subjects of meteorology, statistics, and prevention of the principal diseases met with in the Army, on home or foreign service. The Lectures on Pathology have reference chiefly to the scientific examination of tropical diseases, and of other complaints which the Army Surgeon is especially called on to investigate. The Candidates also attend the wards of the Hospital to study the diseases of invalids under the Professors of Medicine and Surgery, the system of recruiting, and the modes of keeping the Army medical returns and records. They are also called on to make *post mortem* examinations, to operate on the dead body, and pass through courses of practical instruction in the laboratory on the modes of recognising the qualities and adulterations of food, and in the microscope-room on the modes of microscopic examination of morbid tissues and of adulterations of food, etc.

[The Regulations for the admission of Candidates to the Medical Department of the Navy are undergoing revision.]

ADDITIONAL NOTES CONCERNING THE HOSPITALS AND MEDICAL SCHOOLS.

IN addition to the Tables of the Classes, etc., and hours of attendance, given at pages 304 to 307, we subjoin Abstracts of the Programmes issued by the several Medical Schools. We have extracted those points of information which are of most interest to the student, in addition to those given in the tables. It will be seen, that many of the Schools make arrangements by which the Course of Instruction required by the Examining Boards for the general practitioner can be compounded for, by paying a sum either at once or in periodical instalments. For the information of those who may wish to attend separate Classes in any School for one or more Sessions, we give the respective fees demanded in each School. To avoid repetition, and save space, the titles of the Classes are indicated by letters, thus:

- | | |
|--------------------------------------|--------------------------------------|
| a. Anatomy and Physiology. | k. Forensic Medicine. |
| b. Descriptive and Surgical Anatomy. | l. Practical Chemistry. |
| c. Anatomical Demonstrations. | m. Comparative Anatomy. |
| d. Chemistry. | n. Pathology and Morbid Anatomy. |
| e. Medicine. | o. Dental Surgery. |
| f. Surgery. | p. Ophthalmic Surgery. |
| g. <i>Materia Medica</i> . | q. Operative Surgery. |
| h. Midwifery and Diseases of Women. | r. Histology or Microscopic Anatomy. |
| i. Botany. | H.P. Hospital Practice. |

ST. BARTHOLOMEW'S HOSPITAL.—Aggregate Fee, £99 15s.; or First Winter, £31 10s.; First Summer, £31 10s.; Second Winter, £36 15s.—For General Subjects for Students of Dental Surgery, £52 10s.; or, First Winter, £26 5s.; First Summer, £26 5s.—For Unlimited entrance for final M.D., there is an additional fee of £7 7s.—Separate Classes: a and b, single, £7 7s.; perpetual, £10 10s.; c, one course, £3 3s.; one session, £5 5s.; d, e, f, single, £5 5s.; perpetual, £7 7s.; g, h, single, £5 5s.; perpetual, £6 6s.; i, k, single, £3 3s.;

[Continued at page 308.]

* His physical fitness will be determined by a Board of Medical Officers, who are required to certify that the candidate's vision is sufficiently good to enable him to perform any surgical operation without the aid of glasses. A moderate degree of myopia would not be considered a disqualification, provided it did not necessitate the use of glasses during the performance of operations, and that no organic disease of the eyes existed. Every candidate must also be free from organic disease of other organs, and from constitutional weakness or other disability likely to unfit him for military service in any climate.

GUIDE TO LONDON HOSPITALS AND MEDICAL SCHOOLS: 1869-70.

For further particulars regarding each Hospital and Medical School, see pp. 303, 308, et seq.

LECTURES, ETC.	ST. BARTHOLOMEW'S HOSPITAL.	CHARING CROSS HOSPITAL.	ST. GEORGE'S HOSPITAL.	GUY'S HOSPITAL.	KING'S COLLEGE AND HOSPITAL.
WINTER SESSION.					
PHYSIOLOGY	Mr. Baker..M. Tu. Th. F. 9	Dr. Silver..M. Tu. Th. F. 3.30	Dr. W. Ogle..Tu. Th. 3; S. 11	Dr. Pavey..M. W. F., 4.15	Dr. Rutherford..M. W. Th. F., 4
ANATOMY, DESCRIPTIVE AND SURGICAL	Mr. Holden and Mr. Callender..Tu. W. Th. F. 2.30	Mr. Barwell..M. W. F., 9 Th., 3.30	Mr. Rouse..M. W. F., 3	Mr. Durham....Tu. W. Th. F., 9	Mr. Partridge..Daily, exc. M., 9
ANATOMICAL DEMONSTRATIONS	Mr. Langton, Mr. Marsh..Daily, 10.15 to 2	Mr. Bellamy..Daily, 10 to 1	Dr. Byam, Mr. Baber (<i>Anat.</i>) Mr. Sims (<i>Phys.</i>)	Dr. Pye-Smith, Mr. Howse, and Mr. Davies-Colley	Mr. J. Wood; Assist. dem., Mr. Perrin, Mr. Hayes, Mr. Rope, Mr. Skrimshiro
CHEMISTRY	Dr. Odling..M. W. F., 10	Mr. Heaton..M. W. F., 10	Dr. Noad..Tu. Th. S., 11.30	Dr. Taylor..Tu. Th. S., 11	Dr. Miller..M. W. Th. S., 10.15
MEDICINE	Dr. Black, Dr. Andrew..M. Tu. Th., 3.30	Dr. Salter..M. W. F., 2.30	Dr. Barclay..M. W. F., 9	Dr. O. Rees and Dr. Wilks..M. W. F., 3	Dr. Johnson..Tu., 4 P.M.; Th. F., 5
SURGERY	Mr. Coote, Mr. Savory..W. F., 3.30; S., 9 A.M.	Mr. Canton..Tu. Th. S., 9	Mr. Holmes..Tu. Th. S., 9	Mr. Birkett and Mr. C. Forster..Tu. Th., 3.30; F., 10.30	Sir W. Fergusson....M. T. W., 5
HOSPITAL PRACTICE: Physicians	Dr. Farre..Tu., 12; Th. S., 1.30 Dr. Black..M. Tu. Th., 1 Dr. Harris..Tu. Th. S., 1.30 Dr. Andrew..Daily, exc. W., 1.30	Dr. Salter, M. W. F. Dr. Headland, Tu. Th. S.	Dr. Fuller..Tu. S., 1 Dr. Barclay..M. F., 1	Dr. Owen Rees....Tu. Th. S., 1.30 Dr. Habershon..Tu. Th. S., 1.30	Dr. Johnson..M. W. F., 1.30 Dr. Beale..Tu. Th. S., 2
Obstetric-Physicians ..	Dr. Greenhalgh..in-p. Th., 1.30; out-p. S., 9	Dr. Parson, M. W. F.	Dr. J. Ogle..M. F., 1 Dr. Wadham..Tu. S., 1 Dr. J. Clarke..in-p. Tu. S., 1; out-p. Th., 12	Dr. Braxton Hicks..W. S., 1.30	Dr. Garrod..Tu. Th. S., 1.30 Dr. Guy (out-p.)
Assistant-Physicians ..	Dr. Southey..W. S., 11 Dr. Church..Tu. F., 11 Dr. Gee..M., 11 Dr. Duckworth..Tu., 11	Dr. Pollock, M. Th. Dr. Silver, Tu. F. Dr. Green, W. S.	Dr. Dickinson..Tu. S., 12 Dr. W. Ogle..M. F., 12	Dr. Pavy..F., 12 Dr. Moxon..M., 12 Dr. Fagge..W., 12 Dr. Phillips (<i>obs.</i>)....M. F., 1.30; out-p. Th. S., 12	Dr. Duffin..M. W., 1 Dr. Yeo..Tu. Th. S., 1 Dr. Kelly..Tu. Th. S., 1 Dr. Playfair (<i>obs.</i>)..Tu. Th. S., 12.30
Surgeons	Mr. Paget..Daily, exc. W., 1.30 Mr. Coote..M. W. F. S., 1.30 Mr. Holden..Tu. F. S., 1.30 Mr. Savory..M., 1; Tu. W. Th. F. S., 1.30	Mr. Hancock, Tu. Th. S. Mr. Canton, M. W. F. Mr. Bird (out-p.) Tu. Th. S. Mr. Barwell (out-p.) M. W. F.	Mr. P. Hewitt..M. F., 1 Mr. Pollock..Tu. S., 1 Mr. H. Lee..Tu. S., 1 Mr. Holmes..M. F., 1 Mr. Brodhurst (<i>orthopædic</i>) M. W. F., 2 Mr. Rouse..M. F., 12; Th., 12 (<i>ear</i>) Mr. Pick..Tu. S., 12	Mr. Hilton..M. Th., 1.30 Mr. Birkett..M. Th., 1.30 Mr. Poland..W. S., 1.30 Mr. C. Forster..S., 12 Mr. Bryant..M. Th., 12 Mr. Durham..W., 12	Sir W. Fergusson, Bart...Tu. Th. S., 1.30 Mr. Partridge....M. W. F., 1.30
Assistant-Surgeons ..	Mr. Callender..W. S., 12 Mr. T. Smith..M. Th., 12 Mr. Willett..F., 12 Mr. Langton..Tu., 12	..	Mr. H. Power..M. F., 9	Mr. Bader...W. S., 1.30; out-p.; Tu. F., 12	Mr. Wood..Tu. Th. S., 1
Ophthalmic Surgeons ..	Mr. Langton and Mr. Vernon..W. S., 12.30	..	Mr. Vasey..Tu. S. 9; Th. 1	Mr. J. Salter..Th., 12	Mr. H. Smith..M. W. F., 1
Dental Surgeon ..	Mr. Coleman..F., 9	Mr. Parkinson..Daily, 10	Dr. Fuller and Dr. Wadham M., 2 (Winter) Dr. John Ogle..M., 2 (Sum.)	Dr. Owen Rees, Dr. Habershon, Dr. Wilks (Win.) S., 1.30; Dr. Pavy, Dr. Moxon, Dr. Fagge (Sum.) W., 1.30	Mr. Soelberg Wells. Tu. Th. S., 1
CLINICAL MEDICINE ..	The Physicians..Weekly	The Physicians..Daily; special class, Dr. Salter and Mr. Headland	Dr. Hewitt and Mr. Pollock Tu., 2 (Winter) Mr. H. Lee..Tu., 2 (Sum.)	Messrs. Cock, Hilton, Birkett, Poland (Win.) F., 1.30; Messrs. C. Forster, Bryant, Durham (Sum.) F., 1.30	Dr. Johnson..alt. M., 3 Dr. Beale..alt. Tu., 3; alt. F., 3
CLINICAL SURGERY ..	Mr. Skey (Consulting Surgeon) and the Surgeons..Weekly	The Surgeons..Daily; special class, Mr. Hancock and Mr. Canton	Dr. J. Clarke..F., 2 (Win.)	Dr. Hicks (Win.)..W., 1.30	Dr. Garrod..alt. Tu., 3 Sir W. Fergusson..alt. Th., 3 Mr. Partridge..alt. F., 3 Mr. Wells (<i>ophth.</i>)..alt. M., 3 Mr. Cartwright (<i>dental</i>)..alt. Th., 10.30
CLINICAL MIDWIFERY ..	Dr. Greenhalgh..Weekly	..	Thursday, 1	Tuesday, 1.30	Dr. Priestley..alt. Th., 3
OPERATIONS	Wed. and Sat., 1.30	Saturday, 1	..	..	..
SUMMER SESSION.					
MATERIA MEDICA ..	Dr. F. J. Farre..Tu. Th. S., 10; W., 11.30	Dr. Headland..Tu. Th. S., 12	Dr. Dickinson..M. W. F., 3	Dr. Habershon....Tu. Th. F., 3	Dr. Garrod..Tu. W. Th. F., 8 A.M.
BOTANY	Rev. G. Henslow....M. W. F., 10	Vacant	Mr. Child..Tu. Th. S., 3	Mr. C. Johnson..Tu. Th. S., 11.30	Mr. Bentley..M. Tu. Th. F., 12.15
MIDWIFERY	Dr. Greenhalgh..Tu. W. F. S., 8.30 A.M.	Vacant	Dr. J. Clarke..M. W. F., 9	Dr. Braxton Hicks..Tu. W. Th. F., 8.45	Dr. Priestley..Tu. W. Th. F., 9
FORENSIC MEDICINE ..	Dr. R. Southey..M. Th. S., 9	Dr. A. J. Pollock	Dr. Wadham..Tu., Th. S., 9	Dr. Taylor..T. Th. S., 10	Dr. Guy..M. Tu. W. F., 12.15
COMPARATIVE ANATOMY ..	Dr. Church (Sum.)..Tu. Th., 11	Mr. Galton (Summer)	Dr. Bright (Summer)..M. F., 4.30	Dr. Pye-Smith (Summer)..Tu. F., 12.45	Mr. Rymer Jones....M. W. F., 4
HISTOLOGY	Mr. Savory: Mr. Vernon and Mr. Marsh, <i>Demonst.</i>	Dr. Silver	..	Mr. Howse....Tu. F., 10 (Win.); M. 3.30 (Sum.)	..
PRACTICAL CHEMISTRY ..	Mr. Matthiessen (Sum.) M. Tu. F., 10	Mr. C. W. Heaton (Sum.)..M. W. F., 11 to 1	Dr. Noad (Summer) M. W. Th. F., 10	Dr. Stevenson (Sum.)..M. W. F., 10 to 1	Mr. Bloxam..M. W. F., 10.15
PATHOLOGY AND MORBID ANATOMY	The Registrars. According to opportunity	Dr. T. H. Green (Summer)..Tu. Th., 10	Dr. J. Ogle (Winter)..Th., 3; (Summer) Tu. Th., 3	Dr. Moxon....Daily, 2.30 (Win.); S., 9 (Sum.)	Dr. Beale (Sum.)..Tu. Th., 4
OPERATIVE SURGERY ..	Mr. M. Baker and Mr. Langton, Christmas vac. & Sum.	Mr. Barwell (Summer)	Mr. Rouse (Summer)	Mr. Bryant (Sum.)..W., 3	..
OPHTHALMIC SURGERY ..	Mr. Vernon..W. S., 12.30	Mr. Hancock (Charing Cross Ophthalmic Hospital)	Mr. H. Power (Win.)..W., 10	Mr. Poland and Mr. Bader..M. 8.45 (Summer)	Mr. Soelberg Wells (Sum.)..M. Tu. W. Th., 9
DENTAL SURGERY ..	Mr. Coleman....Jan. Feb. March, S., 10	Mr. Parkinson (Summer)	Mr. Vasey (Summer)..Tu. 10	..	Mr. Cartwright (Summer)..Tu. F., 9
DISEASES OF SKIN ..	Dr. Gee..F., 1.30; Tu. Th., 1	..	Dr. Barclay (Sum.)..Th., 2.30	Dr. Fagge..Tu., 12 (Win.)	Dr. Duffin..F.
VACCINATION	Dr. Gee & Dr. Duckworth W.	Mr. R. W. Dunn	Obstetric Assistant..Th., 10	Dr. Phillips	Mr. R. W. Dunn
MISCELLANEOUS ..	<i>Diseases of the Ear:</i> Mr. T. Smith..M., 1.30 <i>Orthopædic Surgery:</i> Mr. Willett..F., 1.30 <i>Ophthalmosc. Demonstr.</i> W., 2 to 4	<i>Clinical Demonstrations:</i> Dr. Pollock..Th., 4 <i>Mental Diseases:</i> Dr. W. J. Hunt (Sum.)..M., 12 <i>Case-taking:</i> Dr. Silver <i>Auscultation:</i> Dr. Green, Tu.	<i>Orthopædic Surgery:</i> Mr. Brodhurst (Win.)..Tu., 10 <i>Psychological Medicine:</i> Dr. Blandford (Sum.) W., 3	<i>Experimental Philosophy:</i> Dr. Stevenson and Mr. Davies-Colley (Winter)..W., 12 <i>Operations on Eye:</i> Monday, Thursday, 1.30 <i>Aural Surgery:</i> Mr. Hinton (out-p.)..Tu. 12	<i>Discases of Throat and Laryngoscope:</i> Dr. Johnson, W. Chaplain's Lecture: F., 10.15 <i>Chapel:</i> ..Daily, 10 <i>Principal's Lecture:</i> ..Daily, 1.15 <i>Tutor's Class:</i> (Win.)..M. W. F., 5; (Sum.) daily, exc. S., 9

GUIDE TO LONDON HOSPITALS AND MEDICAL SCHOOLS: 1869-70.

For further particulars regarding each Hospital and Medical School, see pp. 303, 308, et seq.

LONDON HOSPITAL.	ST. MARY'S HOSPITAL.	MIDDLESEX HOSPITAL.	ST. THOMAS'S HOSPITAL.	UNIVERSITY COLLEGE AND HOSPITAL.	WESTMINSTER HOSPITAL.
Dr. H. Jackson and Dr. Fenwick..Tu. W. Th., 4 Mr. Rivington..M. Tu. Th. F., 3 Mr. Adams and Mr. Tay... M. Tu. Th. F., 10 to 3	Dr. Broadbent and Dr. Lawson..M. Tu. Th. F., 9 Mr. Gascoyen and Mr. Norton..M. Tu. Th. F., 2.45 Mr. Norton, Mr. E. Owen, & Mr. G. Watson..daily	Dr. J. B. Sanderson and Mr. Hulke..M. W. F., 4 Dr. R. Liveing..M. W. Th. F., 10 Dr. R. Liveing..daily, 8 to 5	Dr. Bristow and Mr. Ord.. M. W. F., 4 Mr. Sydney Jones...M. F. S., 1; Th., 3 Mr. Rainey, Mr. Croft, Mr. Wagstaffe..daily, 9 to 3	Dr. Sharpey, daily, exc. S., 10 Laboratory..daily, exc. S., 9 Mr. Ellis..daily, 12 [to 4 Mr. Ellis, Mr. F. T. Roberts, and Mr. T. R. Loy	Dr. Maclure..M. F., 3; W. 4 Mr. Mason..Tu. W. Th. F., 9 Mr. Pearse..daily, 10 to 1
Dr. Letheby and Dr. Tidy.. M. W. F., 10.30 Dr. H. Davies, Dr. A. Clark, Dr. Ramskill (before Chr.) M. W. F. 9.15; (after) Th. 9.15; M. F., 4 Mr. Hutchinson..Tu. F. S., 9	Dr. W. Russell..M. Tu. Th. F., 10.1 Dr. Chambers and Dr. H. Jones..M. W. Th., 4 Mr. S. Smith and Mr. J. Lane Tu. F., 4 P.M.; W., 3	Mr. Taylor and Mr. Heisch.. M. W. F. S., 11 Dr. Murchison..Tu. Th. S., 9 Mr. De Morgan and Mr. Moore..M. W. F., 9	Dr. Bernays..Tu. Th. S., 11 Dr. Barker and Dr. Peacock M. Th., 2; Tu., 4 Mr. Solly and Mr. Le Gros Clark..Tu. F., 3; W., 12.45	Dr. Williamsou..daily, exc. S., 11 Dr. Reynolds...daily, exc. M., 9 Mr. Marshall..Tu. W. F., 4	Dr. Dupré..Tu. Th., 3; F. 3.30 Dr. Basham..M. Th. F., 4 Mr. Holthouse..Tu. W. Th., 3
Dr. Davies..Tu. F., 8.30 Dr. A. Clark..M. Th., 1.30 Dr. Ramskill..W. S., 1.30 Dr. Down (out-p.)..Tu. F., 1.30 Dr. Head..Tu. F., 1.30 Dr. H. Jackson..M., 1.30 Dr. M. Mackenzie..S., 1.30 Dr. Sutton..Th., 1.30 Dr. Fenwick..W., 1.30 Dr. Palfrey (obs.)..W. S., 1.30 Mr. Hutchinson..M. Th., 1.30	Dr. Sibson..M. Th., 1.15 Dr. H. Jones..W. S., 1.15 Dr. Sieveking..Tu. F., 1.15 Dr. Tyler Smith....Tu. S. 1.30 Dr. Broadbent..M. Th., 1 Dr. Cheadle..Tu. F., 1 Dr. Lawson..W. S., 1 Mr. Lane..Tu. F., 1.15 Mr. S. Smith..M. Th., 1.15 Mr. Walton..W. S., 1.15 Mr. J. R. Lane (out-p.) Tu. F., 1 Mr. Gascoyen..M. Th., 1 Mr. A. J. Norton..W. S., 1 Mr. Walton..M. Th., 1.30 Mr. Sercombe..Th., 9.30; Mr. H. Hayward..Tu. S., 9.30 Dr. Sibson..M., after visit Dr. H. Jones..alt. S., after visit Dr. Sieveking..alt. F., after visit Mr. Lane..Tu., after visit Mr. S. Smith..alt. Th., after visit Mr. H. Walton..alt. S., after visit	Dr. Goodfellow..M. W. F., 1.30 Dr. H. Thompson..Tu. Th. S., 1 Dr. Murchison..M. W. F., 1 Dr. H. Davis (in-p.)..Tu. F. 1.30 P.M.; (out-p.) W. S., 1.30 Dr. Greenhow..F. 8.30 Dr. J. B. Sanderson..M., 8 Dr. R. Liveing..Tu., 8.30 Mr. De Morgan..M. Th., 1 Mr. Moore..M. Th., 1 Mr. Nunn..Tu. F., 1; (cancer, out-p.), Th., 1.30 Mr. Hulke..M. F., 1 Mr. Lawson, Th. S., 1 Mr. Hulke (out-p.)..Tu. F., 8.30; (in-p.)..Tu. F., 1.30 Mr. Tomes and Mr. Turner daily, 9.	Dr. R. Bennett Dr. Goolden Dr. Peacock Dr. Bristow Dr. Barnes Dr. Gervis (obs.)..S., 1 Dr. Clapton Mr. Solly Mr. Le Gros Clark Mr. Simon Mr. S. Jones Mr. Croft Mr. Elliott Dr. Bennett and Dr. Goolden..(Winter) Dr. Peacock and Dr. Bristow..(Summer) The Surgeons Dr. Barnes..M., 3 Dr. Clapton..Tu., Th. F., 2 Dr. J. W. Hicks..M. W. Th., 12 Dr. Barnes..M. Tu. Th. F., 3 Dr. Stone and Dr. Gervis.. Tu. F., 12; S., 8 A.M. Dr. Ord (Sum.)..Tu. Th., 1 Mr. Rainey (Winter)..Tu., 12.30 Dr. Bernays..Tu. Th., 10 to 12; F. 11; S. 10 to 1 Mr. Simon (lect.); Dr. Lees (demonst.)..9.30 Mr. S. Jones (Sum.)..M. F., 1	Sir W. Jenner, Bart. Dr. Reynolds Dr. G. Harley Dr. Wilson Fox Dr. Ringer Dr. Tilbury Fox (skin, inf.) Dr. Graily Hewitt Dr. C. Bastian Mr. Erichsen Mr. Marshall Sir H. Thompson Mr. Berkeley Hill Mr. C. Heath Mr. Wharton Jones Mr. Ibbetson..W., 10 Sir W. Jenner & Dr. Reynolds M. Tu. Th. F., 1 to 3 Dr. W. Fox (Holme Professor)..twice weekly Mr. Marshall and Sir H. Thompson..M. W. S., 1 to 3 fortnightly or oftener Mr. Erichsen (Holme Prof.) twice weekly Dr. G. Hewitt..fortnightly Dr. Ringer..daily, exc. S., 12 Mr. Oliver..daily, exc. S., 8 A.M. Dr. Graily Hewitt...M. T. Th. F., 9 ..Tu. W. Th. F., 10 Dr. Grant (Win.)..daily, exc. S., 3 Dr. M. Foster and Mr. W. H. Allchin..S., 10 to 12 Dr. Williamson (Win.) M. Tu. Th. F., 12; (Sum.) elem., Tu. W. Th. F., 11: sen. M., 10 Dr. Bastian (Summer)..Tu. Th. F., 4 Mr. Heath (Sum.)..daily, 3 Mr. W. Jones (Sum.)..Tu. Th.; clin. lect. alt. weeks Mr. Ibbetson (Winter)..Tu. Th. 5; clin..W., 10 Dr. Tilbury Fox, fortnightly [Pearse] Dr. G. L. Cooper or Mr. W. Surgical Apparatus, Bandaging; Mr. B. Hill (Win.) Tu. Th., 3.30; also Sum. Mental Diseases: Dr. Sankey (Sum.)..Tu. W. Th., 11 Hygiene and Public Health: Mr. Corfield (Sum.)..Tu. Th., 4	Dr. Basham..M. Th., 1.30 Dr. Fincham..W. S., 1.30 Dr. Radcliffe..Tu. F., 1.30 Dr. F. Bird..Tu. F., 3 Dr. Anstie..M. Th., 1 Dr. Gibb..Tu. F., 1 Dr. Sturges..W. S., 1 Mr. Holt..M. Th., 1.30 Mr. Holthouse..W. S., 1.30 Mr. Hillman..Tu. F., 1.30 Mr. Mason..M. Th., 1 Mr. Pearse..W. S., 1 Mr. Cowell..Tu. F., 1 Mr. Walker..W. S., 9.15 The Physicians..weekly The Surgeons..weekly
Mr. Maunder..Tu. W. F. S., 1.30 Mr. Couper..W. S., 1.30 Mr. Rivington..Tu. F., 1.30 Mr. James Adams..W., 2 Mr. Tay..W., 2 Mr. Hutchinson, Mr. J. Adams, & Mr. Tay..W. S., 9 Mr. Barrett..Tu., 10 The Physicians The Surgeons Dr. Head (Win. & Sum.) 2nd F. each mo., 1.30 Dr. Palfrey (Sum.) Tu., 3 Wednesday, 2 Dr. Down..Tu. Th. F., 4 Mr. Baker..M. W. F., 11 Dr. Head..M. W. Th. F., 3 Mr. Rodgers and Dr. P. James..daily, exc. S., 10 Dr. Woodman (Sum.) M., 4 Dr. H. Jackson (Summer) Dr. Letheby..M. Th. S., 9 Dr. Sutton (Win. and Sum.) Tu., 12.30 Mr. Maunder (Summer) Mr. Hutchinson (June), Tu. F., 8 A.M. Mr. Barrett (March), 5 Mr. Hutchinson & Mr. Tay.. W., 9 Obs. Phys. & Res. Accou. Diseases of Throat: Dr. M. Mackenzie (Sum.) Aural Surgery: Mr. Rivington (out-p. S., 9.30) Dental Operations: Mr. Barrett..Tu., 10	Wednesday, 1.30 Dr. Sieveking..Tu. W. Th. F., 8 A.M. Dr. Trimen..M. W. F., 9 Dr. Tyler Smith..daily, exc. S., 9 Dr. Randall..M. Tu. Th., 10 Mr. St. G. Mivart (Summer) W. F., 10 Dr. Lawson (Win.) W. S., 12 Dr. Russell (Sum.) Tu. Th. 11.30; S., 9 A.M. Dr. F. Payne (Sum.) W. S., 11 Lecture on Anatomy Mr. Walton (Sum.)..Tu., 2.45 Mr. Sercombe (Win.)..S., 9 Dr. H. Jones..Th., 1.30; Dr. Cheadle..Th., 1.30 (lecture) Mr. Gervais (Sum.) Diseases of Throat: Dr. Sieveking and Mr. Norton..S., 9 Aural Surgery (clinical):	Wednesday, 1 Vacant..M. W. F., 10 Dr. Cobbold..M. W. F., 4 Dr. Hail Davis..M. W. F., 9 Dr. Greenhow..Tu. Th. S., 9 Dr. Cobbold (Summer)..Tu. Th., 4 Dr. Cayley (Summer)..Tu. Th., 4 Mr. Taylor and Mr. Heisch..M. W. F., 11 Dr. Cayley and Mr. H. Arnot (Win.)..Tu. Th., 4 Mr. Nunn (Winter)..S. Mr. Hulke (clin.)..alt. Tu., 3 Dr. R. Liveing Mr. W. Pearse Pathological Chemistry: Dr. Thudichum (Win.).. Th., 4	Wed., 1 P. M.; Sat., 9.30 Dr. Clapton..Tu., Th. F., 2 Dr. J. W. Hicks..M. W. Th., 12 Dr. Barnes..M. Tu. Th. F., 3 Dr. Stone and Dr. Gervis.. Tu. F., 12; S., 8 A.M. Dr. Ord (Sum.)..Tu. Th., 1 Mr. Rainey (Winter)..Tu., 12.30 Dr. Bernays..Tu. Th., 10 to 12; F. 11; S. 10 to 1 Mr. Simon (lect.); Dr. Lees (demonst.)..9.30 Mr. S. Jones (Sum.)..M. F., 1	Dr. Ringer..daily, exc. S., 12 Mr. Oliver..daily, exc. S., 8 A.M. Dr. Graily Hewitt...M. T. Th. F., 9 ..Tu. W. Th. F., 10 Dr. Grant (Win.)..daily, exc. S., 3 Dr. M. Foster and Mr. W. H. Allchin..S., 10 to 12 Dr. Williamson (Win.) M. Tu. Th. F., 12; (Sum.) elem., Tu. W. Th. F., 11: sen. M., 10 Dr. Bastian (Summer)..Tu. Th. F., 4 Mr. Heath (Sum.)..daily, 3 Mr. W. Jones (Sum.)..Tu. Th.; clin. lect. alt. weeks Mr. Ibbetson (Winter)..Tu. Th. 5; clin..W., 10 Dr. Tilbury Fox, fortnightly [Pearse] Dr. G. L. Cooper or Mr. W. Surgical Apparatus, Bandaging; Mr. B. Hill (Win.) Tu. Th., 3.30; also Sum. Mental Diseases: Dr. Sankey (Sum.)..Tu. W. Th., 11 Hygiene and Public Health: Mr. Corfield (Sum.)..Tu. Th., 4	Tuesday, 2 Dr. Anstie..M. Th. F., 3 Mr. Bennett..M. W. F., 9.30 Dr. F. Bird..Tu. Th., F., 4 Dr. Gibb and Dr. Sturges.. Tu. W. F., 3 Mr. Carter Blake..W. S. 11 Dr. Dupré (Summer)..Tu. Th., 10 Dr. Cavafy and Mr. Davy Mr. Mason (bandaging, etc., Summer)..Tu. Th., 9 Mr. J. Walker..W., 9.30 Dr. W. Pearse Natural Philosophy: Mr. Brooke (Sum.)..Tu., 3

GUIDE TO HOSPITALS AND MEDICAL SCHOOLS IN THE PROVINCES: 1868-9.

For further Particulars regarding each Hospital and Medical School, see p. 312.

LECTURES, ETC.	BIRMINGHAM QUEEN'S COLLEGE. (a)	BRISTOL MEDICAL SCHOOL.	HULL AND EAST RIDING SCHOOL OF MEDICINE.	LEEDS SCHOOL OF MEDICINE (g).	LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE (i).	MANCHESTER ROYAL SCHOOL OF MEDICINE (h).	NEWCASTLE COLLEGE OF MEDICINE (n).	SHEFFIELD MEDICAL SCHOOL (p).
WINTER SESSION.								
ANATOMY AND PHYSIOLOGY	Dr. Norris and Mr. T. H. Bartlett... M. Th., 4	Mr. Atchley and Mr. Steele... M. W. F. S., 9.15	Mr. R. M. Craven and Mr. Rudd... Daily, 8 A.M.	Mr. Hall and Mr. Jessop... M. W., 10; Th., 6	Dr. Waters... M. W. F., 9.15	Mr. W. Smith... Tu. W., Th., 12	Dr. W. Murray... Twice weekly, 8.45 A.M.	Mr. T. Leeds and Mr. S. Morton... Tu. F., 6
ANATOMY, DESCRIPTIVE AND SURGICAL	Mr. C. J. Bracey and Mr. J. F. West... M. Tu. Th. F., 1	Mr. F. P. Lansdown and Mr. Tibbitts... M. W. F. S., 10.15	Mr. Nicholson... Daily, 5 A.M.	Mr. Seaton, Dr. R. T. Land, and Mr. J. A. Nunneley... Tu. Th. F., 10	Mr. Harrison... M. S., 3; Tu. Th. S., 9	Mr. Lund and Mr. Bradley... Tu. W. Th. F., 8.45 A.M.	Dr. Nesham, Mr. L. Armstrong, and Mr. J. Russell... Four days weekly, 8.45 A.M.	Mr. Skinner and Mr. A. Jackson... Daily, 5
ANATOMICAL DEMONSTRATIONS	Mr. J. Hinds and Mr. Thomas... M. Tu. Th. F., 12, W. S., 1	Mr. Ludlow, Mr. Dowson, and Mr. Dobson	Mr. Nicholson	The Lecturers on Anatomy, with Mr. Oglesby and Mr. C. J. Wright... Daily	Dr. Glynn and Mr. W. M. Banks... Daily, 9 to 5; exc. S., 9 to 2	Mr. S. M. Bradley... Daily	Dr. Nesham and Mr. L. Armstrong... Daily, from 10 to 4	Mr. Woodhouse
CHEMISTRY	Dr. Hill... Tu. Th. F., 12	Mr. Coomber... M. Tu. W. Th., 8.15	Mr. Walton... Tu. W. Th. F., 8 P.M.	Mr. J. C. Wilson... M. Tu. Th. F., 11	Mr. J. C. Drown... Tu. Th. F., 10.15	Mr. D. Stone... W. F., 1; Th., 11	Mr. Freire Marreco... Four days a week, 4	Mr. Allen... M. W. F., 11.30
MEDICINE	Dr. Russell and Dr. Foster... Tu. W. F., 3	Dr. Martyn and Dr. E. L. Fox... M. W. F., 8.15	Dr. Elliott... Daily, 3	Dr. Chadwick, Dr. Heaton, and Dr. Allbutt... M. Tu. W. Th., 5	Dr. Cameron... M. Tu. Th. F., 5	Dr. Roberts and Dr. Morgau... M. Tu. Th., 1	Dr. Charlton and Dr. Eubleton... M. W. F., 5	Dr. Frank-Smith... Tu. Th. S., 4
SURGERY	Mr. Pemberton and Mr. F. Jordan... Tu. W. F., 4	Mr. Coe and Mr. Crosby Leonard... Tu. Th. S., 8.15 A.M.	Dr. K. King... Tu. Th. S., 4	Mr. S. Hey, Mr. Wheelhouse, and Mr. Teale... M. W. F., 6	Mr. Bickersteth... Tu. Th. F., 6.30	Mr. G. Southam... M. Tu. Th., 2	Dr. Heath... M. W. F., 6	Mr. W. F. Favell and Mr. Parker... M. W. F., 8 P.M.
HOSPITAL PRACTICE	GENERAL HOSPITAL (b) QUEEN'S HOSPITAL (c) Daily (both hospitals) 9 to 12	ROYAL INFIRMARY (d) GENERAL HOSPITAL (e) Daily, 1 to 3	HULL GENERAL INFIRMARY (f)	LEEDS GENERAL INFIRMARY (h)	LIVERPOOL ROYAL INFIRMARY (k)	MANCHESTER ROYAL INFIRMARY (m) Daily, 10 to 12	NEWCASTLE INFIRMARY (o)	SHEFFIELD GENERAL INFIRMARY (q)
SUMMER SESSION.								
MATERIA MEDICA	Mr. Wilders and Dr. Mackey... M. W. F., 4	Dr. Burder... Daily, 9	Mr. Holden and Mr. Heuston... Daily, 8 A.M.	Dr. Eddison... M. Tu. W. Th., 11	Dr. J. B. Nevins... Daily (exc. S.), 8 A.M.	Mr. Somers... Tu. W., 12; F., 12.30	Dr. Humble... Daily, 4.45	Dr. Young... M. W. F., 8 A.M.
MIDWIFERY, ETC.	Mr. Clay and Mr. Bassett... M. Tu. Th. F., 1	Dr. Swayne... Daily, 8	Mr. H. Gibson... Daily, 7 A.M.	Mr. W. N. Price and Mr. W. Hall... M. Tu. Th. F., 4	Mr. Steele... Tu. Th. S., 9; Dr. Gee... W. S., 10	Dr. Thorburn... M. W. Th. F., 9	Dr. Gibson... Daily, 8.30 A.M.	Dr. Keeling and Dr. Hime... M. W. F., 4
BOTANY	Dr. W. Hinds... M. W. F., 3	Mr. Leipner... Daily, 7 A.M.	Mr. Niven... M. W. F., 3	Mr. E. Atkinson... Tu. W. F., 12	Mr. J. C. Drown... M. Tu. Th. F., 10.15	Mr. Grindon... Tu. W. Th., 10	Mr. Thornhill and Dr. Arnison... M. W. F., 3.45	Mr. Birks... M. Tu. F., 6.30
FORENSIC MEDICINE	Mr. Swain and Dr. Hill... Tu. Th. F., 12	Dr. Marshall... Daily, 9	Mr. T. M. Evans... M. W. F., 3	Mr. Scattergood... M. Tu. W. Th., 5	Dr. E. Whittle and Mr. J. C. Brown... M. W. F., 4	Mr. G. M. Harrison... M. W., 1; F., 1.30	Dr. Donkin... M. Tu. Th. F., 11	Mr. Baker and Mr. Hanson... Tu. Th., 4
PRACTICAL CHEMISTRY	Mr. Anderson... Th. F., 2	Mr. Coomber... Daily, 8	Mr. Walton	Mr. J. C. Wilson... Tu. Th., 9.30 to 11	Mr. J. C. Drown... M. Tu. Th. F., 10.15	Mr. D. Stone... Tu., 11; Th., 1	Mr. Freire Marreco... Daily, 10 to 5	Mr. Allen
CLINICAL MEDICINE	Physicians of Hospitals (b, c)	Royal Infirmary: Tu. S., 11.30 General Hospital: Three days weekly, 2.30 Royal Infirmary: F., 12 General Hospital: W. 12	Physicians of Infirmary (f) Twice weekly	Physicians of Infirmary (g) F., 5. Clinical class: Dr. Allbutt... Tu. S., 11.30 to 1	Physicians Royal Infirmary (i) Weekly	Physicians Royal Infirmary (m)	Physicians of Infirmary (o)	Physicians of Infirmary (q)
CLINICAL SURGERY	Surgeons of Hospitals (b, c)	General Hospital: W. 12	Surgeons of Infirmary (f) Twice weekly	Surgeons of Infirmary (g) Tu., 6	Surgeons Royal Infirmary (k) Weekly	Surgeons Royal Infirmary (m)	Surgeons of Infirmary (o)	Surgeons of Infirmary (q)

(a) ADDITIONAL COURSES (SUMMER).—*Diseases of Women and Children*, Mr. S. Berry and Dr. R. C. Jordan, M. 12, Tu. 3. *Ophthalmic Surgery*, Mr. J. V. Solomon, Tu. 4. *Comparative Anatomy*, Dr. Savage, Th. 3. *Dental Surgery*, Mr. Howkins.

(b) *Physicians*, Dr. Bell Fletcher, Dr. Russell, Dr. Wade, Dr. Foster. *Surgeons*, Mr. A. Baker, Mr. O. Pemberton, Mr. T. H. Bartlett, Mr. Goodall. *Clinical Lectures*—*Medicine*, S. 10; *Surgery*, F. 10. *Clinical Instruction*—*Medical*, Dr. Fletcher, M. 9.30; Dr. Russell, Tu. 9.30; Dr. Foster, W. 9.30; Dr. Wade, Th. 9.30; F. 10. *Physician of Week*. *Surgical*—Mr. Goodall, M. Th. 9; Mr. Baker, Tu. S. 9; Mr. Bartlett, Tu. F. 11; Mr. Pemberton, W. 10.30. *Operations*, Wed. 12.

(c) *Physicians*, Dr. Fleming, Dr. Johnston, Dr. Heslop. *Surgeons*, Mr. West, Mr. Gamgee, Mr. F. Jordan, Mr. J. St. S. Wilders. *Dental Surgery*, Mr. S. A. Parker. *Clinical Lectures and Instruction* daily.

(d) *Physicians*, Dr. Britton, Dr. Fairbrother, Dr. E. L. Fox, Dr. Beddoe. *Surgeons*, Mr. Pritchard, Mr. Bernard, Mr. C. Leonard, Mr. T. E. Clark, Mr. Tibbitts. *Operations*, Tu. F. 1.30.

(e) *Physicians*, Dr. Martyn, Dr. Burder, Dr. Frapp. *Surgeons*, Mr. Coe, Mr. F. P. Lansdown, Dr. Marshall, Mr. Atchley. *Physician-Accoucheur*, Dr. Swayne, M. Th. 2 (for Uterine Diseases). *Operations*, Th. 1.30. *Dental Surgery*, Mr. Parson, M. Th. 9.

(f) *Physicians*, Sir H. Cooper, Dr. Daly, Dr. Elliott. *Surgeons*, Dr. W. Lunn, Mr. R. M. Craven, Dr. K. King, Mr. J. St. S. Wilders. *Comparative Anatomy*, Mr. Wheelhouse and Dr. Allbutt (summer). *Operative Surgery*, Mr. S. Hey, Mr. Wheelhouse, and Mr. Teale. *Demonstrations of Skin-Diseases*, Dr. Allbutt, F. 11.30. *Ophthalmoscopic Demonstrations*, Mr. T. P. Teale. *Instruction in Vaccination*, Mr. Holmes.

(g) *Physicians*, Dr. Chadwick, Dr. Heaton, Dr. Allbutt. *Surgeons*, Mr. S. Hey, Mr. T. T. Nunneley, Mr. Wheelhouse, Mr. T. P. Teale.

(i) ADDITIONAL COURSES.—*Ophthalmic Medicine and Surgery*, Dr. Hibbert Taylor, Tu. F., 2 (summer). *Pathological Anatomy*, Mr. Banks, L. *Comparative Anatomy and Zoology*, Dr. Davidson, twice weekly in summer. *Surgical Apparatus, etc.*, Mr. Harrison, weekly (sum.). *Vaccination*, Mr. Steele. *Dental Department* (sum.), Mr. Snape, Mr. Stewart, Dr. Davidson, Mr. Brown.

(k) *Physicians*, Dr. Vose (W. S. 12.15), Dr. Turnbull (M. Th. 12.15), Dr. Inman (Tu. F. 12). *Surgeons*, Mr. Stubbs (Tu. 12.30; F. 1), Mr. Bickersteth (M. Tu. Th. 1), Mr. Hakes (Tu. W. S. 1). *Assistant-Surgeon*, Mr. R. Harrison. *Dental Surgeon*, Mr. Snape. *Pathologist*, Mr. Banks. *Operations*, Tu. 1.

(l) ADDITIONAL COURSES.—*Physiology and Pathology of the Eye*, Mr. Hunt (winter), M. 8.45 A.M. *Pathology*, F. 12 (winter). *Comparative Anatomy*, Mr. Bradley (summer).

(m) *Physicians*, Dr. Eason Wilkinson, Dr. Watts, Dr. Browne, Dr. W. Roberts, Dr. H. Simpson, Dr. J. E. Morgan. *Surgeons*, Mr. Beever, Mr. W. Smith, Mr. Dumville, Mr. Southam, Mr. F. A. Heath, Mr. Lund. (n) ADDITIONAL COURSES.—*Pathological Anatomy*, Dr. C. J. Gibb and Dr. Philipson (summer), W. 6. *Operative Surgery*, Dr. Heath (summer). *Psychological Medicine*, Dr. H. G. Stewart. *Vaccination*, Dr. Gibb.

(o) *Physicians*, Dr. Charlton, Dr. Embleton, Dr. Philipson. *Surgeons*, Dr. Heath, Dr. Gibb, Mr. Russell, Dr. Arnison. *Assistant-Surgeons*, Mr. L. Armstrong, Mr. A. Bell, Dr. Hime, Mr. J. Hawthorn.

(p) ADDITIONAL COURSES.—*Dental Mechanics*, Mr. Mosely (winter). *Dental Surgery*, Mr. Merryweather (summer). *Demonstrations of Pathology and Microscopy*, Mr. C. Dorrington Batt (summer). *Operative Surgery*, Mr. Favell and Mr. Parker (summer).

(q) *Physicians*, Dr. Bartolomé, Dr. Lav, Dr. Frank-Smith (Tu. Th. S. 10). *Surgeons*, Mr. Barber, Mr. W. F. Favell, Mr. Parker (Tu. Th. S. 10).

TABLE OF THE MEDICAL OFFICERS, PROFESSORS, AND LECTURERS IN MEDICAL SCHOOLS OF SCOTLAND.

For further particulars regarding each Hospital and Medical School, see p. 313. The letters (W.) and (S.) in this Table denote respectively Winter and Summer Courses.

LECTURES, ETC.	ABERDEEN UNIVERSITY.	EDINBURGH UNIVERSITY. (d.)	ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDIN- BURGH. (g.)	GLASGOW UNIVERSITY. (m)	GLASGOW, ANDERSON'S UNIVERSITY. (q.)
ANATOMY	Dr. Struthers, 11 (W.)	Mr. Turner, 1	Dr. Handyside, 1	Dr. A. Thomson, 11, (W. and S.)	Dr. G. Buchanan, 5 (W.)
ANATOMICAL DEMON- STRATIONS	Dr. Struthers, and De- monstrator, 2 (W. S.)	Mr. Turner, 4	Dr. Handyside, 4 (W.); 9 to 6 (S.)	Dr. A. Thomson, and Demonstrator, 2 (W.)	Dr. G. Buchanan, 1 (W.) r
DISSECTIONS	9 to 4 (W. and S.)	Daily (W. and S.)	9 to 4 (W.); 9 to 6 (S.)	9 to 4 (W.); 7 to 2 (S.)	Daily (W. and S.)
PHYSIOLOGY OR INSTI- TUTES OF MEDICINE	Dr. Ogilvie, 4 (W.)	Dr. Bennett, 11 (W.)	Dr. Sanders, 11 (W.)	Dr. Buchanan, 4 (W.)	Dr. E. Watson, 12 (W.)
CHEMISTRY	Mr. Brazier, 3 (W.)	Dr. Crum Brown, 10 (W.)	Dr. S. Macadam, 10 (W.)	Dr. Anderson, 10 (W.)	Dr. Penny, 10 (W.)
PRACTICAL CHEMISTRY	Mr. Brazier, 10 A.M. (W.)	Dr. Crum Brown (W. and S.)	Dr. Macadam, 9 to 5 (W. and S.)	Dr. Anderson, 12 (W.); 10 (S.) n	Dr. Penny, 11 (W.); 1 (S.) s
MATERIA MEDICA ...	Dr. Harvey, 3 and 4 (S.)	Dr. Christison, 9 (W.) e	Dr. A. Macdonald, 9 (S.)	Dr. Cowan, 11 (W.)	Dr. Morton, 3 (W.)
BOTANY	Dr. Dickie, 9 (S.)	Dr. Balfour (S.)		Dr. Dickson,	Mr. Hennedy, 10 (S.)
NATURAL HISTORY ...	Mr. Nicol, 2 (W.); 11 (S.) a	Dr. Allman, 2 (Win.); also in Summer f	Dr. H. A. Nicholson, (W. and S.)	Dr. Young, Zoology (S.)	
MEDICINE	Dr. Macrobin, 3 (W.)	Dr. Laycock, 3 (W.)	Dr. R. Haldane, 3 (W.)	Dr. Gairdner, 12 (W.) o	Dr. McCall Anderson, 4 (W.)
SURGERY	Dr. Pirrie, 10 (W.)	Mr. Spence, 10 (W.)	Dr. P. H. Watson, Dr. J. Bell, and Mr. An- nandale, 10 (W.) h	(Vacant), 1 (W.)	Dr. G. H. B. Macleod, 11 (W.) t
MIDWIFERY	Dr. Inglis	Sir J. Y. Simpson, Bt., 11 (W.)	Dr. Keiller, and Dr. M. Duncan, 10 (S.)	Dr. Leishman, 3 (W.)	Dr. J. G. Wilson, 3 (S.)
FORENSIC MEDICINE	Dr. Ogston, 9 (W.) b	Dr. D. MacLagan (S.)	Dr. Littlejohn, 2 (W.); 11 (S.)	Dr. Rainy, 4 (W.)	Dr. P. A. Simpson, 4 (S.)
PRACTICAL PHYSIO- LOGY & HISTOLOGY	...	Dr. Bennett (W. and S.)	Dr. Sanders (Summer)	...	...
GENERAL PATHOLOGY	...	Vacant.	Dr. Grainger Stewart, 4 (W.); 9 (S.) i	...	...
HOSPITAL PRACTICE	Royal Infirmary, c. Daily, 12	Royal Infirmary	Royal Infirmary, k	Royal Infirmary, p 8.30 A.M.	Royal Infirmary, 8.30
CLINICAL MEDICINE	Dr. Harvey and Dr. Smith	Drs. Bennett, Laycock, and MacLagan, Tu. F., 12 to 2	Drs. Sanders, R. Hal- dane, and G. W. Bal- four, 12 (W.); Tu. F., 12 (S.) l	Physicians of Royal In- firmary, M. Th., 8.30 (W.)	Physicians of Royal In- firmary, M. Th., 9 (W. and S.)
CLINICAL SURGERY	Dr. Keith and Dr. Pirrie	Mr. Lister, M. Th., 12 (W.); also in Sum.	Dr. Gillespie, 12 (W.); M. Th., 12 (S.)	Surgeons of Infirmary, Tu. F., 8.30 (W.)	Surgeons of Infirmary, Tu. F., 9 (W. & (S.)

a Zoology with Comparative Anatomy.

b With Medical Logic.

c ROYAL INFIRMARY, ABERDEEN: Physicians—Dr. A. Harvey, Dr. J. W. F. Smith, Dr. Beveridge; Surgeons—Dr. W. Keith, Dr. Pirrie, Dr. D. Kerr, Dr. Fiddes; Dental Surgeon—Mr. Williamson.

d Medical Psychology with Practical Instruction, Dr. Laycock (S.)

e With Dietetics.

f Mr. Turner lectures on Comparative Anatomy in the Summer.

g Vaccination, four six weeks' courses in Winter and Summer, Dr. Husband, Lectures on Diseases of Children (Hospital for Sick Children), Drs. Keiller, Grainger Stewart, and Stephenson (W. and S.). Diseases of the Eye, Dr. A. Robertson (S.)

h Operative Surgery and Surgical Appliances, Drs. Watson, Miller, and J. Bell (S.); Surgical Pathology and Operative Surgery, Mr. Annandale (S.)

i Practical Pathological Histology, Dr. Grainger Stewart (S.)

k EDINBURGH ROYAL INFIRMARY: Physicians—Dr. Bennett, Sir J. Y. Simpson, Bart., Dr. Laycock, Dr. MacLagan, Dr. J. M. Duncan, Dr. Sanders, Dr. R. Haldane, and Dr. G. W. Balfour; Surgeons—Mr. J. Syme, Mr. J. Spence, Dr. J. D. Gillespie,

and Dr. P. H. Watson; Consulting Surgeon—Dr. J. Dunsmure; Ophthalmic Surgeon—Mr. Walker; Pathological and Special Assistant Physician—Dr. T. G. Stewart; Assistant Surgeons—Mr. T. Annandale, Dr. J. Bell, and Dr. D. A. Robertson; Dental Surgeon—Dr. J. Smith.

l Dr. M. Duncan gives Clinical Lectures on Diseases of Women.

m Lectures on Eye; Dr. G. Rainy.

n Chemical Laboratory from 9.30 A.M. to 4.30 P.M. (W. and S.)

o Dr. Gairdner gives a special course on two days in the week during summer.

p GLASGOW ROYAL INFIRMARY: Physicians—Dr. Gairdner, Dr. Steven, Dr. Perry, and Dr. McCall Anderson; Surgeons—Dr. E. Watson, Dr. Dewar, Dr. Macleod, and Dr. G. Buchanan.

q Ophthalmic Medicine and Surgery, Dr. J. R. Wolfe.

r Surgical Anatomy, Dr. Buchanan, 12 (S.) Osteology for Beginners, Dr. Buchanan (S.)

s Chemical Laboratory, from 10 to 4 (W.)

t Operative Surgery, Dr. Macleod, 5 P.M. (S.)

[Continued from p. 303.]

perpetual, £4 4s.; *l*, single, £2 2s.; *m*, *o*, single, £2 2s.; perpetual, £3 3s.; *q*, one course, £2 2s.; *r*, one course, £1 1s. Unlimited entrance to all the Lectures, £65 2s.; H.P., Medical—6 months, £12 12s.; 2 years, £18 18s.; unlimited, £26 5s. Surgical—6 months, £15 15s.; 12 months, £21; unlimited, £26 5s. House-Physicianships and House-Surgeons, £26 5s. Dresserships—3 months, £12 12s.; 6 months, £18 18s.; 12 months, £26 5s.

The Anatomical Museum, and the Museums of Materia Medica and of Botany, are open to students daily from 10 A.M. to 2.30 P.M.—The Reading Room is open every day; during winter, from 10 to 5; summer, 9 to 5; vacation, 10 to 2.30. Subscription to Library, one year, £1 1s.; 4 years, £2 2s. Each subscriber may retain in his possession three volumes at one time.

Collegiate Establishment.—Students attending the Practice of the Hospital, or the Lectures in the Medical College, are admitted to Residence in the College on the recommendation of a medical officer of the Hospital, which may be obtained on adducing satisfactory evidence of good moral character. The entrance fee is £2 2s. Further information may be obtained from the Warden of the College, Mr. W. Morrant Baker.

Exhibitions, Scholarships, and Prizes.—Jeaffreson Exhibition, founded 1868: £20 yearly, tenable for two years. Confined to students of less than three months' standing. Subjects of Examination, those of Preliminary Education appointed by the Medical Council.—Seven Scholarships are awarded. Two Senior Scholarships, of the value of £50 and £25, in Medicine, Surgery, Materia Medica, and Therapeutics. Two Senior Scholarships, of the same value, in Anatomy, Physiology, and Chemistry. Three Junior Scholarships, of the value of £50, £30, and £20, will be awarded after the General Examination at the end of the Summer and Winter Sessions.—Wix Prize, for the best essay on "The Connexion between the Study of Ancient and Modern Literature and the Study of Medical Science."—Hichens Prize: Subject of Examination, Bishop Butler's Analogy.—Bentley Prize, for the best Report of not less than Twelve Surgical Cases occurring in the Wards of the Hospital during the previous year.—Foster Prize, for Practical Anatomy—Senior.—Treasurer's Prize, for Practical Anatomy—Junior. The Kirkes Gold Medal, for Clinical Medicine.

Appointments.—Four House-Physicians and four House-Surgeons (who must be qualified to practise) are appointed annually. Fee, £26 5s. Each of these officers is provided with rooms, and receives a salary of £25.—The Midwifery Assistant is appointed every six months. He must possess a diploma. He is provided with rooms.—Sixteen Dressers to the surgical in-patients and the Casualty Department are selected each year from the students who pass the best examination in Surgery, or who may be otherwise specially recommended. Other Dresserships may be obtained by payment of the usual fees.—The Clinical Clerks to the medical in-patients and the Clerks to the Physician-Accoucheurs, are chosen from the most diligent students.—Clerks to the Assistant-Physicians and the Assistant-Surgeons are selected to attend in the out-patient rooms.

All first years' students are arranged in classes, and are required to attend the Surgical Wards. Elementary Practical Instruction is given by the Assistant-Physicians in the Medical Wards.

Examinations.—Students preparing for their Examinations are arranged in Classes, and examined by the Lecturers and Demonstrators.

CHARING CROSS HOSPITAL.—First year: *a*, *b*, £4 4s.; *c*, *g*, £3 3s.; *d*, £5 5s.; *i*, *l*, £2 2s.; H. P., £10 10s.; Matriculation, £2 2s.—total, £36 15s. Second year: *a*, *b*, *c*, *h*, *n*, £2 2s.; *e*, £4 4s.; *f*, *h*, £3 3s.; H. P., £10 10s.—total, £31 10s. Third year: *e*, *f*, £2 2s.; H. P., £10 10s.—total, £14 14s. Matriculated students receive a deduction of eight per cent. H. P., Matriculated students, for full period required by Examining Boards in London, £31 10s.; Non-Matriculated students, either Medical or Surgical, 3 months, £6 6s.; 6 months, £10 10s.; 12 months, £15 15s.; full period, £21; both Medical and Surgical, 3 months, £10 10s.; 6 months, £15 15s.; 12 months, £21; full period, £31 10s. For a longer period, £5 5s. for each additional winter, and £3 3s. for each additional summer session.

Gentlemen who enter for their entire medical education at Charing Cross Hospital (Matriculated Students) enjoy certain privileges. They pay a proportionately lower amount of fees. They alone are eligible for the offices and appointments tenable by pupils. They are admitted to the use of the Library and Reading-room. They also attend, without additional fee, the practice of the Royal Westminster Ophthalmic Hospital; the special courses of practical instruction in Clinical Medicine, Clinical Surgery, and in Bandaging, as well as the Clinical and the Pathological Demonstrations; and the Lectures on Psychological Medicine. They are specially instructed in the use of all the instru-

ments of modern scientific research—the Microscope, the Ophthalmoscope, the Laryngoscope, etc. They alone are entitled to compete for the Scholarships, Medals, and Prizes.

Students who enter to the Charing Cross Hospital College from other medical schools for the remainder of their education are allowed to Matriculate. Students (non-matriculated) may enter for one or more separate courses, or to the Hospital Practice. Such students are admitted to the Library on terms proportioned to the period for which they enter.

Scholarships, Medals, and Prizes.—The Llewellyn Scholarship of £25, open to all Matriculated Students who have just completed their second academical year. Examination at the end of the second Summer Session, in Descriptive and Surgical Anatomy, Physiology, Materia Medica, Medicine, Surgery, Midwifery.—The Golding Scholarship of £15 a year, tenable for two years, open to all Matriculated Students who have just completed their first academical year. Examination at the end of the first Summer Session, in Descriptive and Surgical Anatomy, Physiology, and Materia Medica.—The following Medals are awarded annually: The Gold Medal, for General Proficiency; the Governor's Clinical Silver Medal; Silver and Bronze Class Medals, on all the subjects of the Lectures. Free Scholarships are awarded to sons of professional men of reduced circumstances and position, or of gentlemen in a corresponding station of society. Two of the Free Scholarships are annually placed at the disposal of the authorities of the Royal Medical Benevolent College, for Foundation Scholars who shall have passed in the first class at the University of London Matriculation Examination.

Residence.—Arrangements have been made with several medical gentlemen and others residing in the neighbourhood of the Hospital, to receive students as inmates.

Appointments.—The office of Medical and Surgical Registrar to the Hospital is opened to students of Charing Cross Hospital who are doubly qualified. The salary is £50 a year; and it may be held for two years.—The offices of Resident Medical Officer, Resident Surgical Officer, and Physician-Accoucheur's Assistant, with six months' residence, are awarded to senior students, or to those who are qualified, after competitive examination.—Clinical Clerks and Dressers are appointed by competitive examination for six months. A Pathological Assistant is appointed for three months.

ST. GEORGE'S HOSPITAL.—Perpetual Fee, £105;* or £115 10s. from those who have paid by instalments.—Aggregate Fees, £42 for first year, £42 for second year, and £10 10s. for each succeeding year.† Lectures and Hospital Practice for Diploma in Dental Surgery, £45 (none of these fees include Practical Chemistry).—Separate Classes—*a*, *b*, *e*, *f*, single, £6 6s.; perpetual, £7 7s.; *d*, single, £6 6s.; perpetual, £8 8s.; *g*, *k*, single, £4 4s.; perpetual, £5 5s.; *h*, single, £5 5s.; perpetual, £6 6s.; *i*, single, £3 3s.; perpetual, £4 4s.; *l*, single, £4 4s.; *n*, single, £5 5s. H. P.—Physicians', 6 months, £8 8s.; three years, £16 16s.; perpetual, £25 4s.; Surgeons', 6 months, £15 15s.; three years, £21; perpetual, £42.—House-Physician and House-Surgeon, each £50 per annum for board and residence.

Medical Tutor.—The studies of the pupils will be superintended by a medical tutor, who will hold periodical Examinations of all the students, three times a week, especially those who are preparing for Examination. Each student will pay one guinea per annum. Five guineas, in addition, will be charged for instruction in the special subjects required for each Examination at the University of London.

Hospital Appointments.—A House-Physician is appointed annually, and a House-Surgeon half-yearly, from among the perpetual pupils. An Assistant House-Physician and an Assistant House-Surgeon are also appointed half-yearly from among the perpetual pupils; they aid in the out-patient department.—The Obstetric Assistant, who must be a legally qualified practitioner, is appointed annually. He resides and boards in the Hospital, and receives a yearly salary of £100.—An Orthopaedic Assistant is appointed from time to time from among the senior pupils.—The pupils of the Hospital are divided into classes under the superintendence of the Physicians and Surgeons in rotation, and are placed in charge of cases as clerks and dressers.—A Curator of the Pathological Museum, and a Medical and a Surgical Registrar, are appointed annually from among the senior pupils, each with a salary

* Perpetual Pupils are entitled to admission to the practice of the Physicians and Surgeons, to all the Lectures (except Practical Chemistry), to compete for all Prizes and exhibitions, to hold the appointments of House-Physician, House-Surgeon, and Assistant House-Surgeon, and to become Clinical Clerks for two periods of three months each, and Dressers for two similar periods. This payment must in all cases be made at the time of entry.

† By payment of these Fees, a Pupil is entitled to hold the offices of Clinical Clerk and Dresser, but not to become House-Physician or House-Surgeon, or to compete for the "William Brown Exhibition" and the "Clinical" Prizes.

of £50. One of the pupils is appointed to assist the Curator.—A paid Demonstrator of Anatomy is appointed annually from among the senior students.

The *Library* and *Reading-room*, and the *Museum*, are open daily. Annual subscription to Library, 10s. 6d.

Exhibitions and Prizes.—The William Brown Exhibition, for general fitness and moral conduct, £40 *per annum*, tenable for three years.—Sir Charles Clarke's annual prize, interest of £200 annually, for good conduct.—The Thompson Silver Medal for the best Clinical Report (with observations) of Medical and Surgical Cases (not more than twenty in each department) observed in the hospital during the preceding year.—Sir Benjamin Brodie's Clinical Prize in Surgery, for the best Report (with notes) of not more than twenty Surgical Cases in the Hospital during the preceding twelve months.—Dr. Acland's Clinical Prize in Medicine, for the best Record of not more than twelve Cases of disease treated in the preceding twelve months.—The Henry Charles Johnson Memorial Prize, for Practical Anatomy.—General Proficiency Prizes: £10 10s. for students of each year.

GUY'S HOSPITAL.—First year, £40; second year, £40; each succeeding year, £10. Perpetual ticket, £100. Materials used in practical courses are charged extra. Separate Courses: *a, b, c, d, e, f, h, q*, each course, £5 5s.; *g, i, k, l, m, r*, each course, £4 4s.; Natural Philosophy, £4 4s.; H. P., either Medical or Surgical, 3 months, £10 10s.; 6 months, £15 15s.; perpetual, £26 5s.

Prizes.—Voluntary Examinations are held as follows. 1. At entrance, in Elementary Classics, Ancient and Modern History, and Mathematics. The first three of the successful candidates receive £25, £20, and £15. 2. At end of first year, in Anatomy, Physiology, Chemistry, Materia Medica, and Botany. Three prizes of £30, £25, and £10 10s. 3. At end of second year, in Anatomy and Physiology, Medicine, Surgery, Midwifery, Chemistry, and Therapeutics. Two prizes of £35 and £30. 4. At end of third year, in Medicine, Surgery and Midwifery (theoretical and practical), and Medical Jurisprudence. Two prizes of £40 and £25. Honorary Certificates are given to those gentlemen who pass creditable Examinations. Special Certificates are given to gentlemen who have attended 100 cases of Midwifery.—Two Gold Medals given annually by the Treasurer to Students who have completed the third and not exceeded the fourth year for proficiency in Clinical Medicine and Clinical Surgery.

There are Two Lecture Theatres, Museums of Anatomy, Pathology, and Comparative Anatomy, Model-rooms, Dissecting-rooms, a Museum of Materia Medica, Chemical Laboratories, and a Library.

Hospital Appointments.—House-Physicians and House-Surgeons, Resident Obstetric Clerks, Surgeons' Dressers, Clinical Clerks, Dressers in the Eye-Wards, Assistant Physicians' Clerks, Assistant Surgeons' Dressers, Dressers in the Surgery, Dental Surgeons' Dressers, Aural Surgeons' Dressers, Medical Ward Clerks, *Post Mortem* Clerks, Surgical Ward Clerks, Extern Obstetric Attendants, Obstetric Out-Patients' Clerks, Assistant-Surgeons' Clerks, and Clerks in the Electrifying-room, are selected from the Students, according to merit.

KING'S COLLEGE AND HOSPITAL.—Aggregate Fee for Matriculated Students, £105.* The payments may be made by payment of £100 on Entrance; or £52 10s. on Entrance, £42 at the beginning of the second Winter Session, and £10 10s. at the beginning of the third Winter Session. For each additional year, £10 10s.—Separate Classes, *a, b*, single, £7 7s.; unlimited, £10 10s.; *d*, single, £8 8s.; perpetual, £10 10s.; *e*, single or unlimited, £7 7s.; *f, h*, single, £6 6s.; perpetual, £7 7s.; *g, i, k*, single, £4 4s.; unlimited, £5 5s.; *l*, single, £5 5s.; perpetual, £8 8s.; *m*, single, £3 3s.; unlimited, £4 4s.; *n*, single, £2 2s.; *o*, single, £6 6s.; unlimited, £8 8s.; *p*, single, £3 3s. Tutor's Class, each Session, £3 3s. H. P.—Perpetual for Matriculated Students, £31 10s.; non-matriculated, £42. Medical Practice—3 months, £6 6s.; 6 months, £10 10s.; 18 months, £15 15s.; perpetual, £21. Surgical Practice—3 months, £10 10s.; 6 months, £15 15s.; 12 or 21 months, £21; perpetual, £26 5s.

The Students received into the Medical Department are—1. Matriculated Students, or those who (with certain exceptions) receive their entire Medical education at King's College. They alone can fill Hospital offices, and most of the Scholarships and special prizes are limited to them. 2. Occasional Students, or those who enter to one or more particular classes.

The *Medical Tutor* assists the Students living in the College, as well as the non-resident Students, in the subjects of the Lectures of their first Winter and Summer Session.

* Students are recommended to add £2 2s. for a second course of Chemistry, and £3; 3 for Medical Tutor's fee. Attendance on the Medical Tutor is compulsory on resident Students during their first year.

The *Museums* of Anatomy, Material Medica, Natural History, etc., are open daily from 10 till 4.

Resident Medical Officers, Clinical Clerks, and Dressers, are all chosen by Examination from Matriculated Students who are pupils at the Hospital.

A permanent record of every case received into the Hospital is kept by the Medical and Surgical Registrars.

Scholarships and Prizes.—The sum of £200 is set apart annually, in consideration of £5,000 presented to the College by the late Rev. S. W. Warneford, LL.D., for Scholarships to Matriculated Students of this department; viz.: Two Scholarships, £25 *per annum* for three years, for the encouragement of previous education; and one Scholarship of £25 *per annum*, for two years, for Resident Medical Students.*—College Scholarships given yearly to Matriculated Students:—One of £40 for two years, open to Students of the third and fourth year; one of £30 for one year, open to Students of the second year; three of £20 for one year, open to Students of the first year.—Daniell Scholarship, £20 *per annum* for two years, open to every Student who has worked at the Laboratory for at least six months.—Sambrooke Registrarships, annual value £50, tenable two years, to all Matriculated Students who have filled any one of the higher appointments of the Hospital, or who have become associates.—Leathes' Prizes: Interest of £300, applied in purchase of a Bible and Prayer-Book, as Annual Prizes to two Matriculated Students.—Warneford Prizes: £40 in Medals and Books, as Prizes to two Matriculated Students.—Class Prizes: Books of the value of £3, in each subject, are awarded annually for proficiency in Anatomy, Physiology, Chemistry, Materia Medica, Surgery, Medicine, Obstetric Medicine, Botany, Forensic Medicine, Comparative Anatomy, and Practical Chemistry. Certificates of Honour are also given. All Students can contend for the Class Prizes.—Two Medical Clinical Prizes, one of £3 for the Winter Session, and the other of £2 for the Summer Session; and two Surgical Clinical Prizes of the same value.—Todd Medical Clinical Prize: A Bronze Medal and Books to the value of Four Guineas.—Jelf Medal, to the Candidate of the Senior Scholarship Examination who is second in order of merit.

Associates of King's College.—At the end of each Winter Session, the Professors recommend to the Council the names of Medical Students to be elected Associates.

Residence.—Rooms are provided within the College for the residence of a limited number of Matriculated Students. The cost of the academical year varies from £50 to £60. Some of the Professors, etc., receive pupils into their houses. The Council have also sanctioned a limited number of medical gentlemen, residing in London or its immediate neighbourhood, to receive pupils into their houses.—There is a Dining Hall in the College, for the accommodation of the resident Students, and for such other Students who may desire to avail themselves of it.

* Two Scholarships, of the value of £25 *per annum* each, to be held for three years, will be given in October 1869. Candidates must be Matriculated Students of the Medical Department, and also perpetual Pupils of the Hospital. Their first Winter Session must commence in October 1869. The Examination will be in the following subjects. 1. Divinity: Maclear's *Class Book of New Testament History*, book ii. 2. The Acts of the Apostles, xv—xxviii, in Greek. The Church Catechism, with Maclear's *Class Book*. 3. The Greek and Latin Classics: Homer, *Odyssey*, book x. Cicero, *De Amicitia* and *Pro Archia*. 4. English Language and History: Shakespeare, *Merchant of Venice*. The Reign of Charles I. 5. Mathematics: Arithmetic; Algebra, as far as and including Quadratic Equations; Euclid, book i; book ii, except props. 8, 9, 10; book iii. 6. The Modern Languages: French, Ponsard, *L'Honneur et L'Argent*, comédie en vers; Erckmann-Chatrain, *Madame Thérèse, ou les Volontiers de '92*. German, Goethe, *Egmont*. An equal number of marks is assigned to each of the five subjects. A want of a sufficient knowledge in Divinity absolutely disqualifies from further examination; but candidates may omit any other subjects which they think proper. For further particulars respecting the Examination, etc., for these Scholarships, see the King's College Calendar. The days of Examination for 1869 are September 28, 29, 30, and October 1.—One Scholarship will be awarded at the close of the month of July, 1870, of the value of £25 *per annum*, to be held for two years. This Scholarship is open to all Second Year Matriculated Students of the Medical Department, being also perpetual Pupils of the Hospital, who, during at least six months of their first academical year, and the whole of their second academical year, have resided within the limits of the College, and who produce to the Principal certificates: (1) of good conduct from the Censor, or from the Physician or Surgeon with whom he has been residing; (2) of regular attendance on the Sunday and daily chapel service; (3) on the Divinity Lectures, from the Chaplain; and (4) of satisfactory attention to the regular medical studies, from the Dean of the Department. The Examination for 1870 will be in the Books of Samuel, the Acts of the Apostles, Westcott's *Bible in the Church*. Candidates will be required, at the time of examination—1. To write from memory the particulars of four cases which shall have been treated in the Hospital during the previous academical year. Each Candidate may select his own cases; but no two cases selected by him may be taken from the practice of the same physician or surgeon. 2. To give, in writing, with the aid of notes taken by himself at the time, the substance of four of the Clinical Lectures which shall have been delivered in the Hospital by the medical officers thereof during the previous academical year. The Lectures to be selected by the Examiners. 3. To answer, either *viva voce* or in writing, as the Examiners may direct, four questions on cases which shall have occurred or been treated within the Hospital, in the practice of the physicians and surgeons thereof, in the current session.

LONDON HOSPITAL.—Aggregate Fee, £88 4s., payable in two instalments of £44 2s. each, at the commencement of first and second years.—Perpetual Fee for Lectures alone, £48; for both Lectures and Hospital Practice, £98 14s., payable in two instalments of £49 7s. each, or two of £44 2s. each, and one of £10 10s. Students who have paid the general aggregate fee can become perpetual at any time by paying the additional £10 10s.—Extra Fees: Perpetual Subscription to Library (compulsory), £1 1s.; Instruction in Vaccination, £1 1s.; Practical Pharmacy, £4 4s. Separate Classes: *a, h*, one session, £4 4s.; unlimited, £6 6s.; *b, c*, one session, £5 5s.; unlimited, £8 8s.; *d*, one session or unlimited, £7 7s.; *e, f, n*, one session, £5 5s.; unlimited, £6 6s.; *g, i, k, m, r*, one session, £3 3s.; unlimited, £4 4s.; *l*, one course, to Students of School, £2 2s.; to others, £3 3s.; *o*, one course, £2 2s.; Diseases of Throat, and Diseases of Eye, each, one course, £2 2s.; unlimited, £3 3s.—H. P.—Medical: 6 months, £6 6s.; period required by Apothecaries' Hall, £12 12s.; unlimited, £21. Surgical Practice and Dressing: 6 months, including 3 months' Dressership, £8 8s.; 12 months, including 6 months' Dressership, £12 12s.; 18 months, including 12 months' Dressership, £18 18s.; 3 years, including 12 months' Dressership, £26 5s.; 3 years, including 2 years' Dressership, £3 10s.; 12 months' Dressership after the expiration of the above 3 years, £8 8s.

The Anatomical and Pathological Museum, the Materia Medica Museum, and the Library, are open daily.

Scholarships and Prizes.—Seven Scholarships will be offered for competition during the ensuing Winter Session. 1. Two Scholarships, value £30 and £20, will be given in October to the two students who pass the best Examination in the subjects appointed by the General Council of Medical Education and Registration as the subjects of Preliminary Education.* These Scholarships are open to all full Students of less than three months' standing, who have received their cards of admission to the Lectures and Practice. 3. A Scholarship, value £20, to the first-year Student who shall pass, in December 1869, the best Examination in Human Osteology. 4. A Scholarship, value £25, to the first-year Student who shall pass at the end of the Winter Session the best Examination in Anatomy, Physiology, and Chemistry. 5, 6, 7. Hospital Scholarships, value each £20, for proficiency and zeal in Clinical Medicine, in Clinical Surgery, and in Clinical Obstetrics. The Examinations for these Scholarships will take place at the end of the Winter Session.—The Duckworth Nelson Prize, value £10 10s., at the end of the Winter Session, 1871, open to all students who have not completed their education; subjects, Practical Medicine and Surgery.—Money Prizes to the value of £60 *per annum* to the most meritorious of the Dressers in the Out-patient Rooms.—Special Certificates to those gentlemen who have faithfully performed their duties in the Hospital, and to those who have distinguished themselves at the Examinations.

Appointments.—A Resident Medical Officer, who receives £75, is appointed for twelve months. He is eligible for re-election, and then receives £100. A Junior Resident Medical Officer is appointed every six months.—Three Medical Assistants, one for each Physician, are appointed every three months.—Ward Clerks and Clinical Clerks are also appointed to take notes of Cases.—A Resident Accoucheur is appointed for six months. He is the Clinical Assistant to the Obstetric Physician.—All Students who have attended a course of instruction in Midwifery can place their names on the list of Maternity Pupils, and have Cases assigned to them. Gentlemen who have attended 100 Cases are entitled to a Special Certificate.—Three House-Surgeons are elected, usually for six months. In cases of great merit they are eligible for re-election for three months.—Any Student may enter his name on the Dressing List.—Two Clinical Assistants are appointed every three months for the Medical Out-patients, and two for the Surgical Out-patients and the Patients attending in the Special Departments. They are eligible for re-election. Each receives a salary of £40 *per annum*.—A Medical Registrar and a Surgical Registrar are appointed annually; the former receives 25, the latter 35, guineas.—An Assistant Dentist,

Post Mortem Clerks, and two Prosecutors of Anatomy, are also appointed.

Full Pupils are eligible for all Scholarships, Prizes, and Appointments. Students who have commenced elsewhere, but who, at or before the beginning of their second Winter Session, enter to both Hospital and College for the remainder of their curriculum, paying the Composition Fee, will be considered eligible for the Dresserships, for three months as House-Surgeon, and for the offices of Ward Clerk, *Post Mortem* Clerk, Maternity Pupil, Clinical Assistant, and Registrar.

All the appointments are open to Students without fee or expense. The holders of all the Resident Appointments are provided with rooms and board free of expense.

Special Departments.—There are special departments for instruction in Diseases of the Eye, Ear, Skin, and Throat, etc. Students desirous of obtaining a practical knowledge of Mental Diseases can attend without additional fee, the practice of Dr. Millar at the Bethnal House Asylum. The Asylum is open daily from 10 to 12.

ST. MARY'S HOSPITAL.—Aggregate Fee, £89 5s. in instalments, or £84 in one sum.—Fee for all Lectures required for ordinary Examinations, £52 10s.; for Hospital Practice, £36 15s.—Unlimited Attendance on Hospital Practice and all Lectures, £105 in instalments, or £99 15s. in one sum.—For Hospital and Lectures required for Examination in Dental Surgery of Royal College of Surgeons, £52 10s.—Separate Classes: *a, b*, one course, £6 6s.; unlimited, £8 8s.; *c*, £1 15s. first and second Sessions; *d*, one course, £5 5s.; unlimited, £7 7s.; *e, f, g, h*, one course, £4 4s.; perpetual, £6 6s.; *i, k*, one course, £3 3s.; unlimited, £4 4s.; *l*, one course, £3 3s.; *m*, one course, £2 2s.; unlimited, £3 3s.; *n, o, p*, one course, £2 2s.—H. P.—Medical: 3 months, £5 5s.; 6 months, £7 7s.; 12 months, £12 12s.; 18 months, £15 15s.; unlimited, £21. Surgical: 3 months, £6 6s.; 6 months, £9 9s.; 12 months, or time required by College of Surgeons, £21; unlimited, £31. Practical Pharmacy: 3 months, £3 3s.; 6 months, £6 6s.; 12 months, £10 10s.—Vaccination, £1 1s.—Library Fee, £1 1s.

Students may make special entries to any course of Lectures or to Hospital Practice.

Special Courses of Lectures are given on Ophthalmic and Dental Surgery, Mental Diseases, Operative Surgery, Minor Surgery and Bandaging, and on Urology; and Clinical Demonstrations on Diseases of the Skin and Diseases of the Throat will be given.

Hospital Appointments are open to the Pupils without additional Fee. Three Resident Medical Officers are appointed for twelve months, and an Obstetric Officer for six months; all live free of expense in the Hospital.—A Resident Registrarship has been created, with a salary of £100 a year, tenable for two years and open to re-election, preference being given to past House-Surgeons and Perpetual Pupils.—All General Students must perform the duties of Clinical Clerks and Dressers for six months during the last two years.

Clinical Lectures twice a week by the Physicians and Surgeons. The Students are divided into three classes, each committed to the charge of a Physician and Surgeon for a definite period. The attendance of the Students in the wards is noted at each visit.

Prizes.—Examinations are held at the termination of each Session, the classes being grouped in accordance with the curriculum of the first, second, and third years. Average value of each prize, Five Guineas. Extra prizes according to merit. A prize is also given in the class of Comparative Anatomy.—Certificates of Honour are given for superior proficiency.—Scholarship in Anatomy, annual value £25 (the holder of which will be styled Assistant-Demonstrator).—Prize of £20 for Students of the First Year at the end of the Winter Session: it may be divided into Prizes of £15 and £5.—Prize of the value of £4 4s. to the Student who shall make to best Anatomical Preparation.—Two prosecutors are appointed annually, who each receive a Certificate and £5.

The *Reading-room and Library* is open daily. A fee of £1 1s. (perpetual) is paid on entrance by each Student.

The *Museum* is open daily to Students. It contains above 3,000 specimens of Morbid and Healthy Human Anatomy; also Materia Medica and Comparative Anatomy Collections, and Natural Philosophy Apparatus.

MIDDLESEX HOSPITAL.—Aggregate Fee, £90 in one sum; or in instalments of £35 at the beginning of the First and Second Sessions; £20 at the beginning of the Third Session; and £10 for every additional Year.—Aggregate Fee for Hospital Practice alone, £42.—Fee for Candidates for Certificates in Dental Surgery, £42; or £26 5s. at beginning of First Session, and £15 15s. at beginning of Second Session.—Separate Classes—*a, c, d, e, f*, single, £6 6s., unlimited, £8 8s.; *b*, single, £8 8s., unlimited, £12 12s.; *g, h, i, k*, single, £4 4s., unlimited, £5 5s.; *l, m, r*, single, £3 3s.; *n*, single, £3 3s., unlimited, £4 4s.; *q*,

* The subjects of Examination will be: 1. The English Language, including questions in Grammar and Composition. 2. Arithmetic—The ordinary Rules; Vulgar and Decimal Fractions; Extraction of the Square Root. 3. Algebra—Addition, Subtraction, Multiplication, and Division of Algebraical Quantities; Greatest Common Measure and Least Common Multiple; Proportion; Arithmetical and Geometrical Progression; Simple Equations. 4. Geometry—Definitions, Axioms, and first Two Books of Euclid. 5. Latin—Translation into English of passages from Cæsar's *De Bello Gallico*, book ii; with Grammatical Questions. 6. One or more of the following subjects at the discretion of the Candidate. (a) Greek—Xenophon's *Anabasis*, book i; (b) French—X. B. Saintine's *Picciola*; (c) German—Schiller's *Wilhelm Tell* (Translation, with Grammatical Questions, in each); (d) Natural Philosophy—Elementary Mechanics, Hydrostatics, Pneumatics.—Two Entrance Scholarships, of the respective values of £30 and £20, will be awarded at the commencement of the Session 1870-71, under the same conditions as those above stated. These Scholarships, being the interest of the fund raised under the name of the Buxton Scholarship Fund, will be called the Buxton Scholarships, and the holders of them the Buxton Scholars for 1870-71.

single, £5 5s.—H.P.—Medical, 3 months, £6 6s.; 6 months, £12 12s.; 12 months, £16 16s.; 18 months, £21; unlimited, £25. Surgical, 3 months, £6 6s.; 6 months, £10 10s.; 12 months, £15 15s.; 3 years, £21; unlimited, £25. Fee to Resident Medical Officer, Secretary, etc., £1 6s.; Vaccination, £1 1s.; Dental Practice (occasional Students), £5 5s.; Pharmacy, without Dispensing, 3 months, £4 4s.; with Dispensing, 6 months, £5 5s.; 12 months, £8 8s.

Hospital Appointments.—Two House-Surgeons and three Resident Physicians' Assistants are appointed annually after competitive examination. Each House-Surgeon pays a fee of £21; and each Physician's Assistant and Obstetric Assistant a fee of £10 10s. A Resident Obstetric Physician's Assistant is also appointed: he pays £10 10s. The Officers thus appointed reside and board in the Hospital free of expense.—Clinical Clerks and Dressers are appointed by competitive examination for six months, without additional fee.

The College Tutor assists all general students of the Hospital, especially those who are preparing for examination, so as to avoid the necessity of private teaching apart from that of the school.

Prizes.—Three Chief Prizes for competency in Clinical Knowledge are annually awarded after competitive examination; viz.: the Governors' Prize, of the value of £21, and two Clinical Prizes of £6 6s. and £4 4s. These are open to competition amongst Students who have completed their second, and not exceeded their third, Winter Session.—Written Periodical Class Examinations are held in the course of each Session, and must be attended by all general Students.—Class Prizes are given.

The *Museum* is open to Students daily from 9 to 5. It contains above 5,000 specimens.—Admission to the Library and Reading Room is included in the Fee paid by General Students. Occasional Students, who desire to use the Library, may do so on payment of £1 1s. The books are allowed to be taken out from the Library under proper regulations.

ST. THOMAS'S HOSPITAL.—Aggregate Fee (giving unlimited admission), £90 in one sum; or £40 each for the first and second years, and £10 for each succeeding year.—Separate Classes: *a, b, c, d, e, f, h*, each course, £5 5s.; *g, i, k, l, m, p*, each course, £3 3s.—H.P.—Either Medical or Surgical, three months, £5 5s.; six months, £9 9s.; nine months, £12 12s.; twelve or fifteen months, £15 15s.; perpetual, £26 5s. Both combined: three months, £8 8s.; six months, £13 13s.; nine months, £18 18s.; twelve or fifteen months, £31 10s.; perpetual, £47 5s.

Prizes.—The following prizes are awarded: To First Year's Students, the William Tite Scholarship, consisting of the interest of £1,000 consols, awarded every third year and tenable for three years; and two College Prizes of £20 and £10; to Second Year's Students, College Prizes of £30, £20, and £10; to Third Year's Students, three similar prizes.—The Cheselden Medal, annually, for Surgery and Surgical Anatomy.—The Treasurer's Gold Medal, annually, for general proficiency and good conduct.—The Grainger Testimonial Prize, value £20, biennially, to Third or Fourth Year's Students, for a Physiological Essay. Students of each year are classed according to merit in the Examinations; those in the first class receive Certificates of Honour.

Appointments.—Clinical Clerks and Dressers, and Obstetric Clerks, are selected according to merit; the Dressers and Obstetric Clerks are provided with Rooms and Commons free of expense. Two House-Surgeons and a Resident Accoucheur are selected according to merit from gentlemen who have obtained their diplomas: the former hold office for six or twelve months; the latter for three or six. All are provided with Rooms and Commons.—Two Hospital Registrars are appointed, preference being given to gentlemen distinguished for merit, and who have completed their studies in the school. Each Registrar, on presenting a satisfactory Report, on the practice of the Hospital, to the satisfaction of the Physicians or Surgeons, receives £40. One Registrar, with a salary of £80, may be appointed.

The *Museum of Human Anatomy* consists of a Physiological and a Pathological Department, the latter containing above 3,000 specimens. The preparations are described in a printed catalogue of three volumes.—The Museum of Comparative Anatomy contains about 1,000 preparations; and that of *Materia Medica* at least 600.—There are also a Cabinet of Microscopical Anatomy, and a Museum of Chemistry and Mineralogy.—The Students have access to a Library and to the use of a Microscope.

UNIVERSITY COLLEGE AND HOSPITAL.—Aggregate Fee, £95 5s. in one sum, or in instalments as follows (or otherwise at the option of the pupil): First Winter Session, £37 10s.; First Summer Session £16 16s.; Second Winter Session, £26 5s.; Second Summer Session £7 7s.; Third Summer Session, £7 7s.;—Separate Classes: *a, d, e*

Session, £6 6s.; half Session, £3 3s.; perpetual, £9 9s.; *b, c*, entire Session, £7 7s.; half Session, £4 4s.; perpetual to Lectures, with three years' Practical Anatomy, £10 10s.; Practical Anatomy after the third year, every Winter Session, £1 1s.; Practical Anatomy without Lectures for three Summer months, £2 2s.; *d*, whole course, £6 6s.; half course, £3 3s.; perpetual, £9 9s.; *f*, Session, £5 5s.; half Session, £3 3s.; perpetual, £6 6s.; *g, h, n*, single, £4 4s.; perpetual, £6 6s.; *i, k*, single, £3 3s.; perpetual, £4 4s.; *l*, elementary course, £4 4s.; senior course, £2 2s.; summer matriculation course, £4 4s.; *m*, Comparative Anatomy, £4 4s.; Zoology, £4 4s.; perpetual to both, £9 9s.; *o*, single, £1 1s.; *p*, single, £2 2s.; *q*, single, £4 4s.; *r*, single, junior, £2 2s.; senior, £4 4s.; perpetual, £5 5s.; Palæo-Zoology, single, £1 1s.; Mental Diseases, £2 2s.; Organic Chemistry, £2 2s.; Use of Surgical Apparatus, single, £1 11s. 6d.; perpetual, £2 2s.; Hygiene and Public Health, single, £2 2s.; perpetual, £3 3s.; Physiological Laboratory, a month, £2 2s.; single term, £4 4s.—H.P.—For Students of the Medical Faculty of the College who have already entered to three courses of six months' duration (two courses of three months' duration being considered equivalent to one of six months); and for pupils who produce Certificates of having attended a Course of Lectures of a recognised School of Medicine, and during one year the Practice of a recognised Hospital: Physicians' and Surgeons' Practice, perpetual, £27; one year, £21 15s.; six months, £16 10s. Physicians' and Surgeons' Practice separately, one year, £16 10s.; six months, £11 5s. Bandaging, £1 11s. 6d. each course. Six Months' Practical Pharmacy, £5 5s.; three months', £3 3s. Other Pupils are admissible on payment of fees somewhat higher.

Scholarships, etc.—Three Entrance Exhibitions, value £30, £20, and £10 *per annum*, tenable for two years, to gentlemen who are about to commence their first winter's attendance. The examination will take place on September 28th and 29th.*—The Atkinson-Morley Surgical Scholarship, amount £45, tenable for three years, for proficiency in Surgery.—The Filliter Exhibition of £30, annually in July, for Pathological Anatomy.—Dr. Fellowes's Clinical Medals, one Gold and one Silver, with Certificates of Honour, at the end of each term for reports and observations on the Medical Cases in the Hospital.—The Liston Gold Medal, with Certificates of Honour, at the end of the Session, for reports and observations on the Surgical Cases in the Hospital.—Gold and Silver Medals, or other Prizes, as well as Certificates of Honour, after competitive examinations in the classes. Prizes to the value of £10 in the Class of Hygiene, in addition to the Medal.

Libraries and Museums.—The General Library, the Medical Library, the Museums of Anatomy and Pathology, of Comparative Anatomy, of *Materia Medica* and Chemistry, of Geology, and of Natural Philosophy, are open daily.

Arrangements are made for practical instruction in Vaccination.

Private Instruction.—Gentlemen may obtain assistance in their studies within the College, on application to the respective Professors.

Residence of Students.—Several gentlemen connected with the College receive students to reside with them; and in the Office of the College there is kept a register of persons who receive boarders. Information as to terms and other particulars may be obtained at the Office.

Offices.—Physicians' Assistants, House Surgeons, Midwifery Assistants, Physicians' Clerks, Surgeons' Dressers, and Ophthalmic Surgeons' Assistants, are selected from among the pupils, who are also students of the College and of unexceptionable moral character, without additional fees. The Physicians' Assistants, the Obstetric Assistant, and the House-Surgeons reside in the Hospital, paying for their board.

WESTMINSTER HOSPITAL.—Aggregate Fee, £70; or in instalments of £30 at commencement of First Year, £30 at commencement of Second Year, and £10 at commencement of Third Year.—Perpetual

* The subjects of Examination are the following. Latin and Greek—Translation into English of passages from Cæsar and Xenophon; Translation of short English sentences into Latin. French or German—Translation into English of passages from Bossuet's *Discours sur l'Histoire Universelle*, or of passages from Schiller's *Geschichte des dreissigjährigen Krieges*. Arithmetic and Algebra—The ordinary Rules of Arithmetic; Vulgar and Decimal Fractions; Extraction of the Square Root; Addition, Subtraction, Multiplication, and Division of Algebraical Quantities; Proportion; Arithmetical and Geometrical Progression; Simple Equations. Geometry—The First Three Books of Euclid; or, the Principal Properties of Triangles and of Squares and other Parallelograms, treated Geometrically; the Principal Properties of the Circle, treated Geometrically. Natural Philosophy—Elementary Mechanics: Composition and Resolution of Statical Forces. The Simple Machines (Mechanical Powers), and the Ratio of the Power to the Weight in each. Centre of Gravity. The General Laws of Motion, and the chief experiments by which they may be illustrated. Laws of the Motion of Falling Bodies. Hydrostatics, Hydraulics, and Pneumatics: Pressure of Liquids and Gases; its equal diffusion, and variation with the depth. Specific Gravity, and the method of ascertaining the specific gravity of bodies. The Barometer, the Siphon, the Common Pump, the Forcing-Pump, and the Air-Pump. Acoustics: The Nature of Sound. Optics: Laws of Reflection and Refraction. Formation of Images by Simple Lenses.

Fee to all Lectures and Hospital Practice, £75 on entry, or in two equal instalments of £40 each at the commencement of first and second years.—Lectures and Hospital Practice for any single year, £35.—Separate Classes:—*a, b, d, e, f*, single, £5 5s.; perpetual, £7 7s.; *c*, single, £2 2s.; perpetual, £3 3s.*; *g, i, k*, single, £3 3s.; perpetual, £4 4s.; *h*, single, £4 4s.; perpetual, £5 5s.; *l, m*, single, £2 2s.; Natural Philosophy, single, £1 1s. (free to Students of Hospitals)—Vaccination, £1 1s.—Practical Pharmacy, 3 months, £3 3s.; 6 months, £6 6s.—H.P.—Period required by Colleges and Society of Apothecaries, £26; perpetual, £30. Medical or Surgical separately, each, 6 months, £8; 12 months, £12; 18 months, £15; perpetual, £20. For Dental Diploma of College of Surgeons, £30; or two instalments of £20 and £10.—Dental Practice, for gentlemen who are not pupils of the School, 3 months, £5; 8 months, £8. Students can attend, without additional fee, the Practice of the National Hospital for Paralysis, and of the Royal Westminster Ophthalmic Hospital.

The Anatomical Museum is constantly open to the student. There are also a Pathological Museum and a Materia Medica Museum.

The Reading Room is open to the students daily. A subscription of 7s. *per annum* entitles the subscriber to have one book at home at a time.

Arrangements have been made for the residence of Students.

Special Examinations on the subjects required by the Examining Boards will be held during the latter half of the Winter Session, and will be open to all Students of the Medical School without extra fee.

Appointments.—The offices of House-Physician and House-Surgeon are open to competition amongst gentlemen educated at the Hospital, who are qualified to practise. They are appointed without fee, and are provided with board and lodging free of expense.—An Assistant House Surgeon is appointed without fee from among the senior students by examination. He is provided with commons at the Hospital table.—Clinical Clerks and Dressers are appointed without fee, in rotation, from among the most diligent students.

Prizes.—A Prize of Books or Instruments and Certificates of Honour in each course.—Prize, value £5 5s., given by Mr. J. M. Clabon to First Year's Students, for General Proficiency.—Prize, value £2 2s., originally offered by the late Mr. Bruce, for Anatomy, to a Student of First Year.—Clinical Medicine and Clinical Surgery Prizes, each of the value of £5 5s.—Chadwick Prize for General Proficiency, £21, to the most meritorious student or students of the second or third year.

BIRMINGHAM.—QUEEN'S COLLEGE.—Aggregate Fee for all Lectures required £52 10s., payable in two instalments.—Separate Classes: *a, b, c, d, e, f, h*, single, £5; perpetual, £8; *g, i, k, l*, single, £4; perpetual, £6; *m, o, p*, single, £3 3s.; two courses, £5 5s.—Fees for rooms and board of resident students, £50 *per annum*, payable in three instalments.—H.P.—General Hospital: Medical Practice, 6 months, £7 7s.; 12 months, £10 10s.; 18 months, £12 12s. Surgical, 6 months, £10 10s.; 12 months, £12 12s.; 18 months, £17 17s.; 3 years, £26 5s. Both Medical and Surgical Practice, perpetual, £38 17s. Resident Pupils: 3 months, £15 15s.; 12 months, £63; 5 years, with apprenticeship to House Surgeon, £262 10s.—Queen's Hospital: Medical and Surgical Practice, 6 months, £7 7s.; a year, £11 11s.; 3 years, £26 5s.

The two Hospitals are equidistant from the College. The Clerkships, Dresserships, etc. are filled without extra fee.

Prizes.—Two Warneford Scholarships, annually after examination.—The Sands Cox Prize, Gold Medals or Prizes of the value of £20, annually.—Warden's Prize, of £5 5s., to the most proficient Student of the first year.—The Percy Prize, Books of the value of £5 5s., for the best examination in German.—Class Prizes, Silver Medals and Certificates of Honour, annually, in each class after examination.—Two free Resident Pupilships, tenable 6 months, are given twice yearly to pupils of the General Hospital, after competition.

BRISTOL MEDICAL SCHOOL.—Perpetual Fees to Lectures, £52 10s. Separate Classes: *a, b*, single, £5 5s., perpetual, £9 9s.; *d*, single, £5 5s., perpetual, £7 7s.; *e, f, g, h*, single, £4 4s.; perpetual, £6 6s.; *i, k, l*, single, £3 3s., perpetual, £5 5s.—H.P.—Bristol Royal Infirmary. Surgeon's pupil, 1 year, £12 12s.; 2 years, £21; 3 years, £26 5s.; Dresser (extra fee), 1 year, £12 12s.; 2 years, £21; 3 years, £26 5s. Physician's pupil, 6 months, £8; 1 year, £15; 18 months, £20; perpetual, £25. Entrance Fee, £5. Subscription to Library, £1 *per annum*. Apprenticeship to House-Surgeon, including five years' residence, and attendance on Hospital Practice, £315.—Bristol General Hospital. Medical or Surgical Practice, 6 months, £6; 1 year, £10; perpetual, £20. Extra Fee for Clinical Clerk or Dresser, £5 5s. for 6

months. Library Fee, £1 1s. *per annum*. Resident pupils, £100 for the first year; £60 for each subsequent year; or 5 years, with apprenticeship, £260.

Prizes.—Prizes and Certificates of Honour will be distributed at the end of the Winter Session, after examination in all the subjects of each year.—Prize and Certificates of Honour for Practical Anatomy.—The interest of £500, under the will of the late Henry Clark, Esq., to the prizeman of the third year, educated at the Royal Infirmary.—£21 to the prizeman of the third year, educated at the General Hospital.—Two *Supple's Prizes* at the Royal Infirmary (Medical and Surgical): each a Gold Medal, value £5 5s., and about £7 7s. in money.—At the General Hospital, a *Medical Scholarship* of £15, founded by the late Rev. Canon Guthrie; and a *Surgical Scholarship* of £15, founded by H. M. Clarke, Esq., of London, annually to the most diligent Students attending the medical and surgical practice respectively.

The Royal Infirmary contains a Library of about 2,700 volumes. The Museum, which has been much enlarged, is open to Students. There is a Library, with a commodious Reading-room, at the General Hospital.

HULL AND EAST RIDING SCHOOL OF MEDICINE.—Aggregate Perpetual Fee to Lectures, except Practical Chemistry, £42. Separate Classes: *a*, single, £5 5s.; perpetual, £8 8s.; *b*, single, £4 4s.; perpetual, £7 7s.; *d*, single, £5 5s.; *e*, single, £5 5s.; perpetual, £5 5s.; *f, i, k*, single, £3 3s.; *g*, single, £5 5s.; perpetual, £7 7s.; *h*, single, £4 4s.; perpetual, £6 6s.; *l*, single, £2 2s.—H.P., Medical and Surgical, perpetual, £21. Clinical Lectures, £1 1s.

The Library of the Hospital is open to the Students by an annual payment of 10 shillings.

LEEDS SCHOOL OF MEDICINE.—Aggregate Fee to Lectures required by Examining Bodies, except Practical Chemistry and Comparative Anatomy, £42. Entrance Fee to Library and Reading-room, £1 1s. Separate Classes: *a, d, f*, 1st session, £4 4s.; 2nd session, £3 3s.; *b*, 1st session, £6 6s.; 2nd session, £5 5s.; *e*, 1st session, £5 5s.; 2nd session, £3 3s.; *h*, 1st session, £4 4s.; 2nd session, £2 2s.; *i, k*, 1st session, £3 3s.; 2nd session, £1 11s. 6d.; *l, m*, each course, £2 2s.—H.P. Leeds Infirmary, Medical or Surgical, each—a Winter Session, £7 7s.; a Summer Session, £6 6s.; 12 months, £12 12s.; 18 months, £15 15s.; 3 years, £21; perpetual, £26 5s.

Prizes.—At the close of each Session, Silver and Bronze Medals, Books, and Certificates of Honour, are presented according to merit.—*The Hardwick Clinical Prize*, value not less than £10, is given annually for the best set of reports of medical cases in the Hospital during the Winter Session.—*The Surgeons' Clinical Prize* of £10 in money is given annually by the Surgeons of the Hospital for the best set of reports of surgical cases during the Winter Session.—*The Thorp Scholarship in Forensic Medicine* (£10) at the close of each Summer Session.—Two *Chemical Scholarships* are offered annually for proficiency in Chemistry.

Hospital Appointments.—Every Student in turn must pass through the offices of Clinical Clerk and Dresser.—Four House-Surgeons are elected from among the senior Students who have shown industry and skill as Dressers and Clinical Clerks.

The school-buildings comprise Lecture-Rooms; Anatomical, Physiological, Pathological, Chemical, and Materia Medica Museums; Laboratories; Library; etc.

The West Riding Lunatic Asylum at Wakefield is open to Students for the study of Mental Diseases. Students can also attend the practice of the Leeds Public Dispensary, the Fever Hospital, and the Eye and Ear Infirmary. There are several Resident Appointments at these Institutions.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.—Aggregate Fee for Lectures (not including hospital practice), £42. Separate classes: *a, b, e, f, g, h*, each course £4 4s.; *c*, £2 2s. to Students who have not a composition ticket; *d*, each course £5 5s.; *i, k*, each course £3 3s.; *l, m, p*, each course £2 2s. Vaccination, £1 1s. Practical Pharmacy, £2 2s. For Dental Diploma: Dental Surgery, Mechanics, Anatomy and Physiology, and Metallurgy, each subject £2 2s.—H.P. Royal Infirmary, Medical or Surgical, each—6 months, £5 5s.; 12 months, £6 6s.; perpetual to both, £31 10s. Lock Hospital attached to the Infirmary: 6 months, £2 2s.; 12 months, £3 3s. Northern Hospital: perpetual, £31 10s.; a year, £12 12s.; 6 months, £9 9s.; 3 months, £6 6s. For either the Medical or the Surgical Practice separately, half the above Fees.

The Museum is open daily. The Library contains a good collection of standard works; there is a fee of 10s. 6d. for one year, or £1 1s. *perpetual*.

* For gentlemen who are not regular pupils of the School, the admission to the Dissections and Demonstrations is—3 months, £2 2s.; 6 months, £3 3s.; perpetual, £5 5s.

Exhibitions and Prizes.—*Royal Infirmary Medical Scholarship*, value £42, consisting of a Gold Medal, value £10 10s, and six months' free Board and Residence, with Dressership and Clerkship, in the Royal Infirmary.—*Four Exhibitions*, value £31 10s. each, consisting of free Board and Residence in the Royal Infirmary for six months, with Dressership.—Silver Medals, Book Prizes, and Certificates of Honour, in the various classes.—Clinical Prize in May 1870, £5 for the best report of twelve surgical cases in the Infirmary.

Four Apprentices are admitted to reside and board in the Infirmary for one, two, and three years, on payment of 70, 130, or 190 guineas, including library and lecture fees, but not hospital practice.—Six Dressers and six Clinical Clerks are elected quarterly from the Students of the Infirmary. Clinical Clerkships and Dresserships at the Northern Hospital are open to all the Students.

MANCHESTER ROYAL SCHOOL OF MEDICINE.—Aggregate Fee for Lectures, £42 (not including hospital practice). Separate classes, for one course, *a, b, d, e, f, g, h, k, l, n*, £4 4s.; *c, i*, £3 3s.; *p*, £2 2s. [In Practical Chemistry, there is an additional charge of 10s. 6d. for chemicals.]—H. P., Royal Infirmary, Composition Fee, £42.

Prizes.—In addition to three Scholarships, value £20, £15, and £10, for Perpetual Students, Prizes for General Proficiency, Certificates of Honour for regularity of attendance and general good conduct, will be given at the end of each session.

NEWCASTLE-ON-TYNE COLLEGE OF MEDICINE.—Fee for all the Lectures: one payment, £46 4s.; two payments, each £25 4s.; three payments, £18 18s. Single courses, £4 4s. each. Vaccination, £1 1s.—H. P., Newcastle Infirmary: 3 months, £4 4s.; 6 months, £5 5s.; 12 months, £7 7s. Perpetual Fee, £17 17s., or by instalments, 1st year, £7 7s.; 2nd year, £6 6s.; 3rd year, £5 5s.

Two Resident Clerks, and four Resident Dressers and four Non-resident Dressers are elected half-yearly. They are provided with Board and Apartments free.

Midwifery can be attended at the Newcastle Lying-in Hospital, and Diseases of the Eye at the Eye Infirmary.—Lectures on Psychological Medicine will be given at the Borough Asylum.—The Chemical Laboratories are open daily throughout the year, from 10 to 5 o'clock.—The Libraries and Museums are open daily.

Prizes.—A *Medical Scholarship*, annual value £25, for four years, in October 1869, to Students who have been registered at Durham.—The *Dickinson Memorial Scholarship*, value £15 annually, after the first Examination of a Licensing Board.*—A Silver Medal and Certificates of Honour in each Class.

SHEFFIELD MEDICAL SCHOOL.—Aggregate Fee for Lectures, £40. Separate classes: *a* and *b*, 1st course, £6 6s., second course, £4 4s.; *d*, each course £4 4s.; *c, f*, 1st course, £4 4s.; 2nd course, £2 2s.; *g, h, i, k, l*, each course £3 3s.—H. P. at the Sheffield General Infirmary, 12 months, £12 12s.: Perpetual—Medical, £15 15s.; Surgical, £21.

Further opportunities for practice may be obtained at the Sheffield Public Hospital and Dispensary, and at the Sheffield Hospital for Diseases of Women.

UNIVERSITY OF ABERDEEN.—The Fee to each Class in the Faculty of Medicine is £3 3s., except Practical Anatomy and Demonstrations, for which the Fee in each Session is £2 2s. [This is additional to the Lectures on Anatomy.]

ROYAL INFIRMARY, ABERDEEN.—Perpetual Fee, £6; or 1st year, £3 10s.; 2nd year, £3. Clinical Medicine and Clinical Surgery, each £3 3s.—The General Dispensary and the Lying-in and Vaccine Institution are open daily; the Eye Institution, three days in the week.—Clinical Instruction is given in the Royal Lunatic Asylum for three months in the year.

UNIVERSITY OF EDINBURGH.—The Annual Fee for each subject required in the ordinary Curricula is £4 4s., except Anatomical Demonstrations, £1 1s.; Practical Pharmacy and Dispensing, each £2 2s.; Practical Anatomy and Practical Chemistry, each £3 3s. The Fee for Histology is £3 3s.; and that for Medical Psychology and Insanity £2 2s. (both courses being delivered in the Summer Session).—Every Student, before entering with any Professor, must produce a matriculation ticket for the ensuing session. Tickets will be issued at the Matriculation Office at the College, every lawful day, on and after October 5th, from ten till four o'clock.—Enrolment in the general album is the

only legal record of attendance in the University.—The Library will be open for the purpose of giving out books to students, either on loan or for reference, every lawful day during the Winter Session, from 10 A.M. till 4 P.M.; on Saturdays, till 1 o'clock.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH.—The courses qualify for Examination for various diplomas and licences, and for degrees in those years in which University residence is not required.

Practical Instruction.—Royal Infirmary, 12 Noon; perpetual ticket, at one payment, £10; annual, £5 5s.; half-yearly, £3 3s.; quarterly, £1 11s. 6d. Separate payments for two years entitle the student to a perpetual ticket.—Sick Children's Hospital: three months, £1 1s.; perpetual, £2 2s.—Dispensary: Royal Public Dispensary and New Town Dispensary, each, six months, £3 3s.—Practical Midwifery: Royal Maternity Hospital, Royal Public Dispensary, New Town Dispensary, £1 3s.—Diseases of the Eye, Ear, and Teeth: Dispensaries, and the Edinburgh Eye Infirmary.—Practical Pharmacy: Royal Public Dispensary, New Town Dispensary, six months, £3 3s.

Fees.—For the first of each Winter Course of Lectures, £3 5s.; second, £2 4s.; perpetual, £5 5s. To those who have already attended a first course in Edinburgh, the perpetual fee for that class is £2 4s. Second Course of Midwifery, £1 3s. The fees for the following courses are: Practical Chemistry and Practical Anatomy, £3 3s. Anatomical Demonstrations, £2 2s.; when taken along with Practical Anatomy, £1 1s.; perpetual, £4 4s. Analytical Chemistry, £2 a month, £5 for three months, or £10 for the session of six months. Vaccination, £1 1s. Summer Courses of Clinical Surgery, £2 2s.; Clinical Medicine, £2 2s.; Practical Anatomy, £2 2s.; Operative Surgery, £2 2s.; and Diseases of the Eye, £2 2s. The fees in each course are, in general, £3 5s. for the first year, £2 4s. for the second year, and £5 5s. for a perpetual ticket.—The minimum fee for the education for the double qualification of Physician and Surgeon from the Royal Colleges of Physicians and Surgeons of Edinburgh, including the examination fee, is £90 4s., payable by yearly instalments; for the single diploma of either Physician or Surgeon, including the examination fee, £80.

EDINBURGH ROYAL INFIRMARY.—Fees: 6 months, £3 3s.; 1 year, £5 5s.; perpetual, £10 10s. Clinical Medicine and Clinical Surgery, each £4 4s. for the Course.—No fees for any medical or surgical appointment. Four Resident Physicians and four Resident Surgeons are appointed; they live in the house for six months free of charge. Candidates must be legally qualified to practise. Non-resident Clinical Clerks are appointed. Each Surgeon appoints from four to nine Dressers for six months. Assistants in the Pathological Department are appointed by the Pathologist.—Instruction is given in special departments.

UNIVERSITY OF GLASGOW.—Fees, each course, £3 3s.; except Lectures on the Eye, £1 1s.

GLASGOW—ANDERSON'S UNIVERSITY.—Fees for all the Lectures and Hospital Practice required for the Diplomas of Physician and Surgeon, £40. Class Fees for each Course of Lectures: 1st session, £2 2s.; 2nd session, £1 1s.; afterwards free. Anatomy Class Fees, for Lectures and Demonstrations: 1st session, £4 4s.; 2nd session, £4 4s.; perpetual, £8 8s. The Dissecting-room is free for two sessions to those who attend both courses of Anatomy. After the second year, the fee for admission to the Dissecting-room is £1 1s. per session.

GLASGOW ROYAL INFIRMARY.—Fees, admitting to all departments of the Hospital and the Clinical Lectures, perpetual, £10 10s.; 1 year, £5 5s.; for 2nd year, £5 5s.; for 3rd, £1 1s.; afterwards free. There are four Physicians' Assistants and four Surgeons' Assistants. The office, held for one year, is open to Students of the fourth year. Dressers and Clerks are appointed without fee.—[For other Medical Institutions in Glasgow, see Advertisement of Anderson's University.]

FARADAY ON HUMAN CREDULITY.—I have not been at work except in turning the tables upon the table turners. Nor should I have done that, but that so many inquiries poured in upon me that I thought it better to stop the inpouring flood by letting all know at once what my views and feelings were. What a weak, credulous, incredulous, unbelieving, superstitious, bold, frightened—what a ridiculous world ours is as far as concerns the mind of man! How full of inconsistencies, contradictions, and absurdities it is! I declare that, taking the average of many minds that have recently come before me (and apart from that spirit which God has placed in each), and accepting for a moment that average as a standard, I should far prefer the obedience, affections, and instinct of a dog before it. Do not whisper this, however, to others. There is One above who worketh in all things, and who governs even in the midst of that misrule to which the tendencies and powers of men are so easily perverted.—*From a letter to Schönbein, June 1853.*

* The Subjects of Examination for July 1870 are—Principles and Practice of Medicine, Surgery, and Midwifery, with Pathology and Pathological Anatomy.

EDUCATIONAL VACCINATING-STATIONS.

IN order to provide for the granting of those Special Certificates of Proficiency in Vaccination, which, under the Regulations of the Privy Council, are required to be part of the Medical Qualification for entering into contracts for the performance of Public Vaccination, or for acting as Deputy to a Contractor, the following arrangements are made.

1. The Vaccinating-Stations, enumerated in the subjoined list, are open, under conditions appointed by the Privy Council, for the purposes of teaching and examination.

2. The Public Vaccinators officiating at these Stations are authorised by the Privy Council to give the required Certificates of Proficiency in Vaccination to persons whom they have sufficiently instructed therein.

3. The Public Vaccinators, whose names in the subjoined list are printed in *italic letters*, are also authorised to give such Certificates, after satisfactory examination, to persons whom they have not themselves instructed.

Cities and Towns.	Places used as Educational Vaccinating-Stations.	Public Vaccinators authorised to give Certificates of Proficiency.	Days and Hours of attendance.
London	PRINCIPAL STATION: Surrey Chapel, Blackfriars Road.	<i>Mr. J. F. Marson.</i>	Tuesday, Thursday; 1.
—	NORTH-W. STATION: 13, Lisson Grove.	Mr. J. G. Gerrans.	Monday; 10.
—	WEST STATION: 9, St. George's Road, Pimlico, S.W.	Dr. E. L. Webb.	Monday; 10.
—	EAST STATION: 1, Well Street, Wellclose Square.	Mr. W. J. Lewis.	Tuesday; 10.
—	NORTH STATION: Tottenham Court Chapel, Tottenham Court Road.	Mr. W. E. G. Pearse.	Monday, Wednesday; 1.
—	SOUTH-W. STATION: 2, Regent Place, Horseferry Road.	Mr. W. E. G. Pearse.	Tuesday; 2.
—	STRAND STATION: Charing Cross Hospital.	Mr. R. W. Dunn.	Monday; 10.
Birmingham	General Dispensary.	<i>Dr. George F. De La Cour.</i>	Monday; 10.
Bristol	The Public Vaccination Station, Peter St.	<i>Dr. H. A. P. Robertson.</i>	Wednesday; 11.
Exeter	Odd Fellows' Hall, Bamfylde Street.	<i>Mr. C. H. Roper.</i>	Thursday; 3.
Leeds	23, Burmantofts Street.	<i>Mr. F. Holmes.</i>	Tuesday; 3.
Liverpool	The Ladies' Charity, Parr Street.	<i>Mr. A. B. Steele, Mr. J. H. Wilson, and Mr. J. Fenton, acting conjointly, or at least two of them together.</i>	Friday; 2.
Manchester	159, Rochdale Road.	<i>Mr. E. S. Guest.</i>	Monday; 2.
Newcastle-upon-Tyne	11, Pilgrim Street.	<i>Mr. G. C. Gilchrist.</i>	Tuesday; 2.
Edinburgh	The Royal Dispensary.	<i>Dr. W. Husband.</i>	Wednesday, Saturday; 12.
Glasgow	The Hall of the Faculty of Physicians and Surgeons.	<i>Dr. J. Dunlop.</i>	Monday; 12.
—	The Royal Infirmary.	Dr. R. D. Tannahill.	Monday, Thursday; 12.

OPENING OF THE MEDICAL SCHOOLS.

THE subjoined is a list of the Medical Schools in England and Scotland, with the date of their opening, and the names of the gentlemen appointed to deliver introductory addresses. Where no name is inserted, it is to be understood that there is no special introductory lecture.

St. Bartholomew's Hospital—October 1st, 2 P.M.
 Charing Cross Hospital—Dr. Silver, M.A.—October 4th, 8 P.M.
 St. George's Hospital—Dr. Wadham—October 1st, 2 P.M.
 Guy's Hospital—Dr. C. Hilton Fagge—October 1st, 2 P.M.
 King's College—Dr. Guy, F.R.S.—October 1st, 3 P.M.
 London Hospital—Dr. C. M. Tidy—October 1st, 4 P.M.
 St. Mary's Hospital—Dr. Cheadle—October 1st, 8 P.M.
 Middlesex Hospital—Dr. R. Liveing, M.A.—October 1st, 3 P.M.
 St. Thomas's Hospital—Dr. Stone—October 1st, 3 P.M.
 University College—Sir Henry Thompson—October 4th, 4 P.M.

Westminster Hospital—Mr. Walker—October 1st, 8 P.M.

Bristol Medical School—October 1st.

Birmingham (Queen's College)—October 4th.

Hull and East Riding School of Medicine—October 1st.

Leeds School of Medicine—Mr. J. Seaton—October 4th.

Liverpool Royal Infirmary School of Medicine—Dr. Davidson—October 1st, 3 P.M.

Manchester Royal School of Medicine—Mr. S. M. Bradley—October 1st.

Newcastle College of Medicine—Dr. W. Murray—October 4th, 2 P.M.

Sheffield School of Medicine—October 1st.

Aberdeen University—October 27th.

Edinburgh University—November 2nd.

„ Royal Colleges of Physicians and Surgeons—Dr. Argyll Robertson—November 2nd, 11 A.M.

Glasgow University—Dr. Anderson—October 26th.

„ Anderson's University—October 26th.

The Dublin Medical Schools open their Dissecting-Rooms on October 1st, but lectures do not begin until the end of the month.

DR. CONSTANTINE HOLMAN, the President of the South-Eastern Branch of the Association, has been appointed a magistrate for the borough of Reigate.

DR. SYMONDS, of Clifton, will preside in the Public Health Department of the Social Science Association, at the meeting which is about to be held in Bristol.

A PRIZE of £50 recently offered for an essay "On the Comparative Longevity of different Species of Lower Animals and the Longevity of Man in different States of Civilisation," the writers to be members of the University of Oxford who had attended the courses of instruction in the physiological department in the Museum, has been adjudged to Mr. E. Ray Lankester, B.A., junior student of Christ Church.

REMUNERATION OF MEDICAL OFFICERS TO PUBLIC INSTITUTIONS. AT a recent meeting of the Managers of the Chester Penitentiary, a discussion arose as to whether the surgeon should be compulsorily a married man, and, secondly, whether he should receive an *honorarium*. The Dean urged that he ought to have no salary, and be compelled to have a wife; and urged that the more repulsive his duties in connexion with this class of patients, the more derogatory to him it would be to offer a pecuniary recompense. The medical profession of Chester spoke out at once for the dignity and honour of our calling and for common-sense. Mr. Churton, Dr. Waters, and others, alleged that it was an insult to pretend that there was any risk in having an unmarried medical man, and that it would hurt no one's feelings to pay him for constant work. The asylum is at some little distance out of Chester. The meeting finally decided that their surgeon might exercise his own discretion in the matter of a wife; and that, whether married or single, he should receive £15 a year for his services.

THE INTERNATIONAL MEDICAL CONGRESS.

WE have reviewed a letter from Professor Brugnoli of Bologna, Chairman of the Executive Committee of the International Medical Congress which is about to meet at Florence, stating that, on the application of Professor Palasciano and other members of the Committee, the Minister of Public Works has consented to allow a reduction of fifty per cent. on the fares by railway and steamer. Members attending the Congress must pay the full single fare in going to Florence; and on their return, on presenting a certificate signed by the President of the Association, they will receive a ticket entitling them to travel homewards gratis. We learn also, from the *L'Imparziale*, that arrangements have been made by which members of the profession in Florence will attend in turn daily from the 16th instant to two days after the end of the meeting, in an apartment provided for the purpose, for the purpose of placing themselves at the disposal of visitors in any way that may be useful or agreeable.

THE NEW BRANCH IN SOUTH WALES.

EVERY one who feels an interest in the prosperity of the Association will rejoice to hear that a new Branch is in process of formation in South Wales and Monmouthshire. Fifteen years ago, at the time when the Association held its annual meeting in Swansea, there was an apparently prosperous Branch in the locality, of which Mr. W. H. Michael, until his departure from Swansea, was the able and energetic secretary. When Mr. Michael left Swansea to enter on the pursuit of another profession, the branch gradually fell into decadence; and for many years has not even had a name. The formation of a new Branch, embracing the same area as the old one, is an event from which we derive great hope as to the progress of the Association in the district. The Association is no where so prosperous as where active Branches exist; and it may reasonably be expected that the permanent accession of strength which the new Branch will bring to the Association will surpass that afforded by its predecessor, as much as the Association of the present day surpasses that of fifteen or twenty years ago as an influence in the profession.

FREE MEDICAL SCHOLARSHIPS AND THE EPSOM COLLEGE.

Two of the London Medical Schools offer free scholarships to pupils of the Royal Medical Benevolent College at Epsom: the conditions, however, are rather different. At the Charing Cross Hospital, two free scholarships are placed annually at the disposal of the authorities of the Epsom College, for foundation scholars who shall have passed in the first class at the Matriculation Examination of the University of London. The advantage thus presented is one of value; but its value would be increased by the endowment of the scholarships with such a sum as would aid the holders by affording them, not only mental food, but the means of living. This is done at University College; where, by the efforts of the authorities of the College, and Dr. Carr of Blackheath, one scholarship, with an endowment of £50 *per annum* for four years, has been founded, with the approval of the Council of the Epsom College, for pupils of that College who have matriculated at the University of London; and it is proposed to found three other similar scholarships in the College. Additional funds are, however, needed to complete this really excellent effort, which has our heartiest approval. The trustees of the fund are Dr. Carr, Dr. Ringer, and Mr. John L. Probert. Already large subscriptions have been given by Sir Jas. Clark, Sir Thomas Watson, Sir Charles Locock, Sir W. Jenner, Mr. Jas. Paget, Mr. John Simon, and others. We commend the Free Medical Scholarship Fund to the support of all who would aid in carrying out the valuable intentions of the Royal Medical Benevolent College, and in procuring for deserving youths, whose means are limited, the advantage of a sound education in the principles of an honourable profession.

THREATENED DEATH FROM CHLOROFORM.

On Saturday, at King's College Hospital, there was a very narrow escape from death by chloroform. The patient was a healthy man, aged 30, who was to undergo the operation of removal of a tumour from the front of the leg by Mr. Henry Smith. As the inhalation proceeded, the patient began to struggle so violently, that it required the assistance of several dressers to prevent him from throwing himself from the table. He, however, became insensible to pain; and Mr. Smith proceeded with the dissection, but was compelled to desist, in consequence of the violent movements of the patient. The chloroform was now entirely suspended; but, notwithstanding this, the man's face became suddenly livid, then changed to a deep purple colour, respiration and pulse completely stopped, and death had apparently taken place. Mr. Smith at once thrust his finger to the top of the windpipe, got forward the tongue, and assistants commenced artificial respiration by the movements recommended by Dr. Silvester. The naked chest was vigorously flipped with a wet towel. For a brief period these measures seemed to produce no effect; but after a short time there was a slight improvement in the complexion, when the efforts were redoubled, and all were delighted to find the apparently dead man slowly respiring.

In two or three minutes more, the man had so far recovered that Mr. Smith was able to complete the operation, although, of course, no more chloroform was exhibited. In some remarks after the operation, Mr. Smith referred to the narrow escape of the patient, and said it illustrated the danger which will occasionally attend chloroform, however carefully given, more especially in those cases where its exhibition is followed by a great amount of struggling. It was necessary to be particularly careful with it when this occurred; he had seen other narrow escapes exactly under the same circumstances.

THE WELSH FASTING GIRL.

THIS now celebrated character has once more appeared on the *tapis*. Dr. Robert Fowler, of Bishopsgate Street, during his "outing" in Wales, has taken the opportunity of visiting the girl, and has communicated the result of his visit in a letter to the *Times*. He says that he found her lying on her bed dressed as a bride, with a goodly collection of English and Welsh books, mostly the presents of visitors. "Her face," he says, "was plump, and her cheeks and lips of a beautiful rosy colour. Her eyes were bright and sparkling, and the pupils were very dilated"—in a measure, from her head being shaded from light. "There was that restless movement and frequent looking out of the corners of the eyes so characteristic of simulative disease. Considering the lengthened inactivity of the girl, her muscular development was very good, and the amount of fat layer not inconsiderable." There was a slight perspiration; the pulse, and, as far as could be ascertained, the sounds of the lungs and heart, were healthy. During the examination, she had what was called a "fainting fit"; but which, according to Dr. Fowler, consisted of a little hysterical crying and sobbing. The walls of the abdomen were tense and tympanitic. The nails—which were said not to have grown for two years—presented no indications whatever of disease. Dr. Fowler expresses his opinion that "the whole case is one of simulative hysteria in a young girl, having the propensity to deceive very strongly developed. Therewith may be probably associated the power or habit of prolonged fasting. Both patient and her mother admitted the occasional occurrence of the *globus hystericus*. He believes that the girl deceives her own parents as regards the obtaining of food; and he points out that the construction of the bed and the cupboards in the room is calculated to favour the deception. We recommend all our readers who are interested in this curious case, to peruse Dr. Fowler's letter in the *Times* of the 7th instant, as it gives what seems to be a very common-sense view derived from careful observation.

SCOTLAND.

CHAIR OF TECHNICAL CHEMISTRY IN ANDERSON'S UNIVERSITY, GLASGOW.

MR. JAMES YOUNG, of Kelly, has invested 10,000 guineas in the names of six trustees and himself, for the purpose of founding a Chair of Technical Chemistry in Anderson's University. The trustees, who must be trustees of Anderson's University, are empowered to establish bursaries, scholarships, etc. Mr. W. H. Perkins, F.R.S., has been appointed to the lectureship by Mr. Young, with the consent of his fellow-trustees.

THE WATSON'S HOSPITAL SITE.

THE Governors of Watson's Hospital have agreed, subject to the approval of the Merchant Company, to sell to the managers of the Infirmary the hospital and grounds, with the house in Wharton Lane, for £43,000.

THE OVERCROWDING IN GLASGOW.

THE members of the City Improvement Trust, who now possess property in which nearly 12,000 poor families are accommodated, have resolved on enforcing, as far they can, stringent regulations to prevent overcrowding.

ASSOCIATION INTELLIGENCE.

SOUTH MIDLAND BRANCH.

THE thirteenth autumnal meeting of the above Branch will be held on Wednesday, October 6th, in the Board Room of the Stamford and Rutland Infirmary, at 2 P.M.: WILLIAM NEWMAN, M.D., President, in the Chair.

Gentlemen intending to read papers or cases, are requested to send the titles forthwith to Dr. Bryan, Northampton.

J. M. BRYAN, M.D., Northampton } *Hon. Secs.*
G. P. GOLDSMITH, Esq., Bedford }

Northampton, September 1869.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, September 2nd, 1869.

Gibbings, Alfred Thomas, Chichester (Guy's Hospital)
McClosky, James Hugh, Madras Medical College and Edinburgh

MEDICAL VACANCIES.

THE following vacancies are declared:—

ABERGAVERNYY UNION, Medical Officer for the Abergavenny District and the Workhouse.
BOURNEMOUTH GENERAL DISPENSARY—Resident Surgeon; applications, 9th September; duties, 18th October.
ECCLESALL BIERLOW UNION—Medical Officer for District No. 3: applications, Sept. 14th; election, Sept. 15th.
EDINBURGH ROYAL INFIRMARY—Surgeon.
EPPING UNION, Essex—Six District Medical Officers: applications, 23rd Sept.; election, 24th Sept.
GLOUCESTER GENERAL INFIRMARY—Assistant-Physician: applications, 30th Sept.
LEXDEN AND WINSTREE UNION, Essex—Medical Officer for District No. 9: applications, 21st Sept.; election, 22nd Sept.
LIVERPOOL UNION—District Medical Officer.
LONDON HOSPITAL—Assistant-Surgeon: election, 28th Sept.; Junior Assistant-Surgeon: applications, 20th Sept.
MANCHESTER, ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN—Resident Medical and Surgical Officer: applications, 23rd Sept.
NEWHAVEN UNION, Sussex—Medical Officer and Public Vaccinator for District No. 4: applications, 23rd Sept.; election, 24th Sept.
QUEEN'S HOSPITAL, Birmingham—Physician.
RATHDRUM UNION, co. Wicklow—Medical Officer for the Dunganstown Dispensary District.
ROYAL ISLE OF WIGHT INFIRMARY, Ryde—House-Surgeon: applications, 5th October.
SPALDING UNION, Lincolnshire—Medical Officer and Public Vaccinator for the Gorberton District: 27th Sept.
UNIVERSITY OF ABERDEEN—Three Examiners for Graduation in Medicine; election, October.
WATERFORD UNION—Medical Officer for the Kilmeaden Dispensary District.
WOODSTOCK UNION, Oxfordshire—Medical Officer for the Deddington No. 2 District: 14th Sept.
WORCESTER DISPENSARY—House-Surgeon and Secretary.

DEATHS.

BULLAR, Wm., M.D., at Basset Wood, near Southampton, aged 59, on August 28th.
*GIBSON, F. W., M.B., late Resident Medical Officer of the St. Pancras Infirmary, on June 24th, aged 33, at sea, on his voyage to Australia for the benefit of his health.
GIRAUD.—On September 4th, at Faversham, aged 57, Mary, widow of Frederick F. Giraud, Esq., Surgeon.
GROVES.—On September 4th, at Lincoln, aged 3 weeks, Edward Kent, infant son of Edward Groves, Esq., Surgeon.
GÜNTHER.—On September 2nd, at Surbiton, Roberta, wife of Albert Günther, M.D.
JONES.—On August 22nd, at Dalston, aged 22, Ellen Frederica, daughter of the late John D. Jones, M.D.
LEE, J., Esq., Surgeon, at Talbot Road, Westbourne Park, aged 38, on August 20th.
*MACKMURDO, Gilbert W., Esq., F.R.S., of New Broad Street, at Chigwell Row, Essex, aged 70, on August 26th.
MALING.—On August 31st, at Bishopwearmouth, Sunderland, Henry Normanby, third son of *Edwd. Haygarth Maling, Esq., Surgeon, aged 6 years and 8 months.
PRIDHAM.—On August 27th, at Bedford, aged 73, Anne, widow of the late E. P. Pridham, Esq., Surgeon, of Exeter.
PURCELL, Charles G., M.D., at Scarborough, aged 23, on August 27th.
RYDER, Thomas James, Esq., Surgeon, of Greenwich, on August 24th.
SHERIDAN.—On July 24th, at Soorey Beerbroom, aged 20, Joseph Francis, second son of Dr. Sheridan, Civil Surgeon, Beerbroom.
WOOLLEY.—On August 26th, at 143, Camden Road, Frederica Maria Meredith, wife of George Woolley, M.D.

BEQUESTS.—The late Mrs. Elizabeth Ann Rackham, of Pelham Crescent, Brompton, has bequeathed to the Cancer Hospital, the Consumption Hospital, Brompton, and the Ophthalmic Hospital, each £1,000; and to the Hospital for Incurables, at Putney, £500.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.
WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
FRIDAYWestminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
SATURDAYSt. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

MEDICAL OFFICER (Dover).—The fee should certainly be three guineas.

WE have received important communications from Dr. Beattie, in reference to proceedings at the Dialectical Society; and from Dr. Keith, on the Antiseptic Treatment, which we defer to next week, solely because the present is an Educational Number.

ERRATUM.—At p. 274, col. i, last line but one from bottom, for "The lungs, etc.," read "The glands displayed great increase of lymphoid cells, etc."

BEQUESTS.

SIR,—As an executor under the will of the late Mrs. Rackham, of Pelham Crescent, Brompton, you will oblige me by correcting a statement, published without authority, by the *Illustrated London News*, in reference to the charitable bequests made by that lady. The legacies, free of duty, are really as follows:—To the Consumption and Cancer Hospitals at Brompton, £1000 each; to the Incurable Hospital at Putney, £1000; and to the Westminster Ophthalmic Hospital, £500. Maida Vale, September 1869. I am, etc., W. F. CLEVELAND.

RATHER LATE NEWS.—A French contemporary informed its readers on the 24th August, that "the annual meeting of the British Association for the Advancement of Science will be held in Exeter on the 18th of next month" (i.e., September), and that "Professor Stokes of Dublin will preside".

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Sept. 1st; The New York Medical Gazette, August 21st; The Parochial Critic, Sept. 1st; The New York Medical Record, August 21st; The Boston Medical and Surgical Journal, August 19th; The Aberdeen Free Press, August 31st; The Madras Mail, June 30th; The Chester Chronicle, Sept. 4th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. T. W. Grimshaw, Dublin; Dr. Radclyffe Hall, Torquay; Mr. W. F. Morgan, Bristol; L.R.C.P.; Mr. E. H. Maling, Bishopwearmouth; Mr. W. Rigden, London; Professor Jean Brugnoli, Bologna; H. P. W., Lichfield; Messrs. Hedges and Butler, London; Messrs. F. C. Calvert and Co., Manchester; Dr. W. H. Parsons, London; An Associate, Southampton; One of Lister's Students; Dr. J. W. F. Smith, Aderdeen; X. Y. B., Dover; A Medical Officer, London; Dr. J. Struthers, Aberdeen; Dr. Atkins, London; Dr. T. Keith, Edinburgh; Dr. W. F. Cleveland, London; The Honorary Librarian of the Western Medical and Surgical Society of London; Mr. A. Beadles, Forest Hill; and Mr. Shapland, Croydon.

LETTERS, ETC. (with enclosures) from:—

Mr. F. Le Gros Clark, London; Dr. Shrimpton, Paris; Dr. F. Branson, Chesterfield; Mr. Husband, York; Dr. Beatty, Dublin; Dr. Ransome, Bowden; The Secretary of the Medico-Chirurgical Society of Glasgow; Dr. Paget, Cambridge; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Lomas, London; Dr. Treutler, Kew; The Director-General of the Army Medical Department; Dr. H. Mac Cormac, Belfast; Dr. Platt Wilks, Swansea; Mr. G. Street, London; Dr. Bryan, Northampton; Dr. W. H. Day, London; Dr. F. P. Atkinson, London; The Secretary of St. Mary's Hospital for Women and Children, Manchester; Mr. J. Dearden, Accrington; Mr. Rendle, London; Mr. F. T. Coates, London; Mr. Trestrail, Luton; Mr. T. B. Sprague, London; Mr. Clarke, Leicester; and Mr. F. T. Coates, London.

WE are obliged for the prospectuses of the Adelaide Hospital, Steevens' Hospital, Mercer's Hospital, and the Richmond, Whitworth, and Hardwicke Hospitals, Dublin; and of the Queen's Colleges in Cork and Galway.

LECTURES

ON THE

PRINCIPLES OF SURGICAL DIAGNOSIS:

ESPECIALLY IN RELATION TO SHOCK AND
VISCERAL LESIONS.*Delivered at the Royal College of Surgeons of England.*

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LECTURE V.—LESIONS OF THE ABDOMEN (CONTINUED).

*Injuries Involving the Abdominal Viscera Generally.—Symptoms: Col-
lapse; Tympanites; Vomiting; Suppression or Retention of Urine;
Temperature; Hemorrhage; Pain; Peritonitis.—Rupture of Particular
Viscera, Membranous and Solid.—Penetrating Wounds Involving
Different Viscera.—Traumatic Cyst in Abdomen.—Fluctuation.—Con-
sequences of Injury to Chest and Abdomen Compared.*

MR. PRESIDENT AND GENTLEMEN,—The diagnosis of wounds penetrating the peritoneum is rarely a matter of difficulty or doubt. The protrusion of any portion of the visceral contents is conclusive. But, even apart from this demonstrative evidence, the nature of the wound and the mode of its infliction generally indicate whether the abdominal wall has been entirely penetrated. Yet, in some instances this circumstance is doubtful; and, if so, the welfare of the patient forbids any inquisitive attempt to solve the doubt; unless, indeed, the suspected presence of any foreign body prompt the surgeon to seek for, with a view of removing, it. Such doubt existed in the case of gun-shot wound which I mentioned in my last Lecture; and a similar difficulty existed in an instance of self-inflicted mutilation which was under my care. The patient to whom I refer had stabbed or cut himself across the abdomen, and remained for some time in a precarious state, but ultimately recovered. The far more important inquiry, and one which it is often both necessary and judicious to leave in abeyance is, whether any viscus is implicated in the injury. As the consideration of wounds, attended by simple protrusion of the abdominal contents, is unnecessary so far as diagnosis is concerned, I will now proceed to make some remarks on traumatic lesions, from various causes, of individual viscera.

Every organ within the abdomen may be the subject of wound or laceration; and these injuries may result from compression, by which they are ruptured, or they may be caused by cutting or pointed instruments, or penetrating missiles. Thus, these lesions resolve themselves into such as occur without external wound, and those which are the sequence of an injury implicating some part of the abdominal wall. It may be convenient to consider those separately; although, as regards the diagnostic symptoms by which they may be identified, they belong essentially to the same category.

I have already remarked that no dependence is to be placed on shock as an index of visceral lesion: and I may here observe further, that depressed temperature at an early period is no reliable guide; but it is to be interpreted simply as a measure of the severity of the shock, without reference to the complication of organic lesion. The shock, indeed, in abdominal injury is proportioned entirely to the impression made on the ganglionic nerve-centres; simple visceral lesion, unaccompanied by any great violence, is not necessarily attended by symptoms of collapse, primarily; and the absence of the usual indications which manifest this state, may thus be very deceptive during the early stage of such cases. But the subsequent and sudden supervention of these symptoms derives a significance from the delay, and, in most instances, admits but one interpretation, viz: that extravasation of foreign matter of an irritating quality has occurred, and carried, through the sensitive serous membrane, that deleterious effect and consequent impression on the ganglionic nerves, which the simple laceration of the viscus had failed to produce.

I may take this opportunity of remarking, also, that the temperature in abdominal lesions appears to be more uniformly low than in head injuries; and the chief feature seems to be the steady fall in the temperature after the injury, lasting for a greater length of time in the former than in the latter, before reaction ensues. So far as the cases examined justify the conclusion, the temperature varies directly with the amount of injury received; primarily indicating the intensity of the

shock, and subsequently the severity and fatal character of the visceral injury.

In many respects, for purposes of diagnosis, organic injury of the abdominal viscera, whether as the consequence of a penetrating wound or of rupture, may be regarded as identical. The usually fatal character of these lesions, and the causes of that fatality, are the same in both cases, though occurring under different circumstances. But it is the circumstances in question which render it desirable to notice these several forms of injury separately; inasmuch as the manner of their infliction is, in the one case, often presumptive proof of the nature of the lesion; whereas, in the other, no such conclusion can be drawn from the same source of evidence. It is often a matter of pure speculation, when the abdomen has been forcibly compressed or violently struck, what viscus is injured, even when the symptoms are of a nature which leaves little or no doubt of the existence of some organic lesion. Certainly the mode in which the force was applied, and the spot which chiefly experienced its violence, rarely suffice to clear up this doubt, if unaided by any local sign of mischief. The remarkable variety of injury that is met with, under apparently similar circumstances, is often difficult to account for, especially in regard to the solid viscera. The actual state of the membranous viscera, as regards repletion, often determines their rupture, and thus affords a clue to a probable diagnosis, which other symptoms may serve to confirm. This remark applies especially to the stomach, duodenum, and urinary bladder; and in a minor degree to other parts of the intestinal canal.

It is probable that many structural lesions of the solid organs of the abdomen are healed, without our being able to form more than a conjectural conclusion that such a serious injury had been inflicted; but this is very rarely the case with the membranous viscera: speedy fatality in these cases is the rule, and recovery the rare exception.

Yet, it is not to be inferred, as I have already observed, that the breach in the texture of the organ is, in itself, mortal or irrecoverable. We know, indeed, that the colon, and even the stomach, may be opened, without producing any marked constitutional or general disturbance; but, immediately the contents of any membranous viscus are diffused in the peritoneum, the symptoms of mortal shock succeed, and the patient sinks at once under its prostrating influence, or survives just long enough for peritonitis to have a share in determining the fatal issue.

The difference, as regards fatality, between penetrating wounds and rupture of a membranous viscus, is certainly in favour of the former; for the lesion may be of a character—say a puncture—which admits of repair, without extravasation of the contained matter; and we know that the construction and organisation of a musculo-membranous sac or canal is by no means unfavourable to repair; but that, under propitious circumstances, a ready activity and varied resource is manifested; and that security is thus often acquired in an unexpectedly brief period: even the products of inflammation which autopsies betray are proof of the unavailing and wasted effort to heal a hopeless breach. But in rupture, from pressure however exerted, the rent, from its nature and extent, is usually of a character that does not admit of repair; and, moreover, the frequent determining cause, as regards locality, viz: repletion, ensures a speedy extravasation of the matters contained within the torn viscus.

For obvious reasons, the Hospital Surgeon, in civil practice, meets more frequently with visceral lesions from rupture than from penetrating wounds; and he is, therefore, more often called upon to form his diagnosis, where he has but little to guide him beyond the general symptoms of his patient. Fortunately his decision can have but little influence on the result, in that it is impossible for him, in most instances, to affirm at an early period, whether such lesion exist or not; and his practice should, in doubtful cases, be conducted on the assumption that some organic injury may be present.

In illustration of the difficulties attending the diagnosis of these injuries, I will narrate a hospital case which came under my care, whilst engaged in writing these remarks: it is simply typical of a class which is of frequent occurrence in hospital practice.

A boy, nine years of age, was knocked down and run over by a butcher's cart, the horse, it was said, treading upon his belly. I saw him about an hour after his admission, and found him in a state of profound collapse. The surface was cold, the temperature being little more than 97 deg.; pulse rapid, and scarcely perceptible; tendency to sickness; respiration rapid and jerking; intense thirst. By this time, the abdomen had become tympanitic all over, the parietes being tense from the epigastrium downwards; there was much tenderness, especially just below the umbilicus and in the right hypochondrium. The boy had taken his breakfast of bread and milk a short time previously to the accident. I should remark that the back was also contused by the wheel of the cart.

I did not attach importance to the collapse in this case, as an isolated

symptom; but, in association with the manner in which the accident occurred, the distended stomach, the rapidly tympanitic state of the belly, the thirst and nausea, and the pain, I was disposed to regard the case with anxiety, and suspected that I had to deal with a ruptured stomach or duodenum. The introduction of a catheter proved that the bladder was not implicated, as limpid urine was readily drawn off. Reaction was gradual. The boy was starved for two or three days, and then allowed only a little bread and milk. The tympanites subsided, but the bowels remained perfectly inactive, and there was no power to evacuate the bladder. The same points in the abdomen continued very tender on the sixth day. The bowels were permitted to remain unmoved for a week, and were then relieved by an injection; after which he was allowed more food. About this time, also, he began to recover voluntary power over the bladder. This boy continued in the hospital for a little time subsequently, during which he still complained of tenderness in the parts first especially affected.

In the early stage, then, of injury to the abdomen of the character which I have described, it may be affirmed that, in most instances, it is unsafe to venture on a diagnosis of the nature of the hurt, or to predict its probable issue. The absence of shock immediately succeeding a mortal lesion may, as I have already remarked, lull suspicion, as its presence may, in simple contusion, excite alarm; for, if the violence have been insufficient to impress the ganglionic centres, and yet, from special circumstances of a mechanical nature, visceral rupture have been produced, the symptoms of prostration may be deferred until extravasation of the visceral contents has taken place. And it must be always borne in mind that laceration may be of such limited extent or so placed, that, under favourable circumstances, a patient may be on the way to recovery; and any relaxation of the requisite watchful and expectant treatment may be fatal. I shall have the opportunity of exemplifying this remark presently, in a case of penetrating wound. It was this impulse to exercise caution, which induced me to persist in the treatment by abstinence and rest of bowel for so long in the foregoing case.

But, usually, the lapse of a few hours enables the surgeon to speak more positively, where actual lesion of a membranous viscus is present. The suffering of the patient becomes intensified as some vascular reaction takes place; this may be localised, but more often extends over the whole abdomen; the features and general aspect, instead of presenting the comparatively passive expression of simple collapse, are pinched, anxious, and distorted with pain; vomiting and tympanites ensue, if not already present; and the patient may then pass into a state of secondary collapse more profound than at first, or linger on for an uncertain interval in anguish more or less acute, until exhaustion closes the scene by death.

It is commonly said that patients, under these circumstances, die of peritonitis: yet this is scarcely correct. Inflammation here, as in other traumatic lesions, is simply an effort in the direction of repair; and the products of this action are a measure of the activity of the effort, which is not in itself destructive. The patient dies during this stage, it is true; but he succumbs to the shock that is perpetuated by the presence of irritating matter in contact with the peritoneum, and which thus acts upon the ganglionic nerve-centres.

I have generally regarded the period at which *tympanites* occurs as a valuable, though by no means a decisive, guide, in the diagnosis of membranous visceral lesion, as distinguished from simple contusion. In the latter injury, accompanied by shock, tympanites is generally deferred for twenty-four hours; in organic lesion, it is earlier in its appearance. But this is by no means invariable, and is, therefore, not to be trusted by itself as a diagnostic sign; indeed, its early appearance is sometimes simply significant of the intensity of the shock, as exemplified in the instance just now recorded.

What is this tympanites, and how is it produced? In wound of stomach or intestine air may, no doubt, be extravasated into the peritoneum, of which I have some recorded cases; or its presence in the same position may be subsequently accounted for by the disengagement of gas from decomposition. In shock, I regard it as chiefly intra-intestinal, and dependent on the atonic or paralysed condition of the bowel, by which both the generation and accumulation of gas are favoured; for the secreting function and motor power of the intestinal canal are both under the control of the cyclo-ganglionic system: and the failing control of these nerve-centres is witnessed in the tumid belly which denotes progressive organic death in many diseases. The rapid generation and speedy subsidence of tympanites, under some circumstances, are remarkable facts, and are suggestive of the gas being derived from the circulation, and accumulating in the peritoneum—containing, probably, in solution, a considerable portion of watery vapour produced at a heightened temperature; and the fact that a rigid contraction of the abdominal muscles, sometimes noticed in these cases, controls or prevents tympanites, would seem to favour this conjecture.

I have certainly noticed the subsidence of tympanites without, so far as the patient's testimony could be relied on, the escape of gas from the bowel. In abdominal shock, indeed, entire inaction of the intestine is usual for a considerable period—a condition which it is injudicious to disturb. And how often is the converse condition noticed in other affections, viz.: frequent diarrhoea, with persistent tympanites. Whether this capability of exhaling gas be not, under certain conditions, a normal attribute of serous membranes admits of experimental inquiry; and I hope to pursue this subject, in which I have already been engaged, now that more leisure time will be at my disposal. I am not indisposed to think that such a property may subserve important physiological purposes.

Vomiting, as I have already noticed, is by no means an invariable or even ordinary concomitant of contusion, though a sense of nausea is common. But, in ruptured stomach or intestine, the effort of retching is usual, and blood may be thrown up or passed by the bowel.

Suppressed or scanty secretion of *urine* is usual in organic lesion of the abdominal viscera. But I have already remarked that this sign is present in simple shock, and its continuance may, therefore, be regarded as indicative of the persistence of collapse. *Retention* of urine is not, by itself, demonstrative of anything but disturbed nerve-influence; for it is met with under various circumstances in which the voluntary motor power is implicated, either directly or by sympathy, in an injury; it may be present alike in severe shock and in organic lesion.

As regards *temperature*, I cannot say I have been fortunate enough to obtain any results which satisfy me of its value in determining the presence of visceral lesion, and still less the locality of that lesion. Of the fact that the temperature is depressed in these injuries, as well as in contusion, there can be no doubt; but I have not succeeded in verifying, from my own observation, the remarks of the writer of an article on "*Animal Heat in Surgical Diseases*," in the *Nouveau Dictionnaire de Médecine et de Chirurgie pratiques*, viz.: that the depression of temperature is in proportion to the proximity of the lesion, be it from internal strangulation or other cause, to the stomach. Certainly the intensity of the shock seems to bear a direct ratio to this relation; and, inasmuch as depressed vitality is accompanied by a proportionate degradation of temperature, in this way the observation referred to may be explained. I shall, probably, notice this subject again in my next lecture, where it will find more appropriate illustration.

The manner in which rupture of an abdominal viscus is produced is insufficient, as I have already remarked, to determine the locality of the injury, or even its extent. It may be the result of direct pressure, as between the buffers of two railway carriages; or it may be consequent on some peculiar twist of the body, when it is doubled up, as in falling from a height. In looking through and collating many hospital cases, I am unable to associate the special lesion with any particular form of accident. The violence or pressure seems to be uniformly distributed through the viscera, and some accidental circumstance determinates the seat of injury. Even the kidney is not an exception to this remark; for I have found it lacerated under various circumstances, and from different accidents; though, probably, more frequently from a doubling of the body, than the other abdominal viscera.

A singular exception to this remark occurred in a case of which I preserved a record at the time. A large fibro-osseous tumour was shown at the Royal Medical and Chirurgical Society, many years since, by Mr. Arnott, the aged patient from whom it was taken having been killed in a curious way. She was thrown down in the street by a dog, and a fold of small intestine, crossing in front of this tumour, was found ruptured by compression against the abdominal wall.

The occurrence of copious *hæmorrhage* is, for obvious reasons, more likely in rupture of the solid than of the membranous viscera. Usually, indeed, this is the cause of death, where the injury is speedily fatal. In one instance of complicated injury, in a lad, involving liver, spleen, and kidney, I find a record in my note-book that the abdomen was so distended with blood as seriously to compress one lung. The diagnosis of internal hæmorrhage, *plus* shock, is by no means easy. When, to the ordinary symptoms of collapse, great restlessness and distressing thirst are added, with suspension of, or confusion in, the functional activity of the senses, the presence of internal hæmorrhage may be suspected; and this suspicion may be supported by the existence of fulness or dullness over some region of the abdomen, which is likewise the seat of tenderness. The concurrent operation of these two causes may, and does occasionally, prove fatal at an early period, without mortal visceral lesion, or even without any discoverable breach of texture. Thus, I have the record of a *post mortem* examination of a patient who fell from a considerable height, and did not long survive the accident. There was no appearance of external violence, and no visceral lesion; but the right half and transverse meso-colon were distended with blood, as was also a considerable portion of the mesentery; but there was no blood

loose in the peritoneum. Hæmorrhage, combined with shock, proved fatal.

Pain is an uncertain sign by which the nature of an abdominal injury can be judged of: at least, experience has taught me to attach less importance to it than I formerly did. The pain immediately attendant on rupture of a membranous or solid viscus is not necessarily or generally marked or severe, so long as the injury is unaccompanied by the escape of foreign matter into the peritoneal cavity. It has not infrequently happened that patients, on whom this mortal injury has been inflicted, have complained but little at first: but the intense localised suffering which accompanies the subsequent accession of collapse is very suggestive under the circumstances, if not absolutely conclusive, of organic lesion. On the other hand, the most acute pain and tenderness at some particular spot are not infrequently present, where the subsequent history of the case does not admit the supposition that any visceral injury existed. Thus, a mail-cart driver was admitted into hospital under my care, who, in consequence of his horse falling, had been thrown violently on his left side in a bent position. He was in a state of collapse, with a blanched face expressive of great suffering. He writhed in apparent agony, and referred the pain exclusively to the left hypochondrium. His suffering continued, with scarcely any abatement, for two days, and the abdomen became tympanitic. The application of leeches gave relief, and he soon recovered. Another patient under my care had fallen from a high scaffold. In the course of a few hours, when reaction after collapse came on, he began to complain of pain deep in the splenic region, which increased till he rolled about in agony. Opium was given freely and repeatedly; and, after the lapse of about thirty-six hours, the pain had entirely subsided, and he made a quick and good recovery. I should add that this patient passed bloody urine during the continuance of the pain, but not afterwards; and the pain was not aggravated, but considerably relieved, by firm pressure on the part complained of.

I do not pretend to explain the phenomena in such cases as the above, further than to suggest that there may be some analogy between the immediate consequences of mechanical violence to serous and synovial membranes; and that the severe pain of a wrenched joint may have its parallel in the forcible tension, and, possibly, laceration, of the peritoneum.

The continuance of localised pain and tenderness for a considerable period after convalescence has commenced, as in the boy whose case I narrated at an earlier part of this lecture, renders it probable that some trifling organic lesion has existed, which is progressively undergoing repair. I have seen many instances suggesting this explanation.

It must, however, be admitted that acute pain is usually the immediate accompaniment of lesion of a distended membranous viscus, whether stomach or intestine. I have witnessed this condition in many instances where the breach has resulted from violence as well as disease: it is rarely limited to any particular spot, but is rapidly diffused over the whole abdomen. Occasionally I have noticed a lethargic condition, not natural to the patient, succeeding these obscure injuries. It is not an encouraging symptom, but is not associated, apparently, with any special lesion.

In survival for a sufficiently long period, after ruptured stomach or intestine, the reparative effort is indicated by the presence of *peritonitis*. Yet the accession of this condition is rarely attended by any marked change in the condition of the patient, either general or local. The collapse continues, the pain is unabated, though scarcely aggravated, and the force or frequency of the pulse is not materially altered. I may add, the quality and amount of the inflammatory product found after death cannot be measured, so far as I have observed, by the symptoms and signs during life. But the proofs thus afforded of fruitless activity are an encouragement to the surgeon not to relax his efforts, or rather his precautions, even under such adverse circumstances.

The occurrence of a small perforating wound of intestine may, under favouring conditions, be closed by plastic deposit, if the injured part be kept at rest. It is well known that eversion of the mucous membrane, in these circumstances, aids mechanically in the occlusion of the aperture thus made. This preparation (No. 1,179) from the Hunterian Collection exemplifies the condition alluded to. The patient from whom it was taken had fought a duel in Hyde Park, and was shot, on the third exchange of fire, in the abdomen: and Mr. Hunter, who attended him, remarked, with his usual accuracy of observation, that the languidness in the eye made him suspect something more than an ordinary wound. The subject of the injury survived it twenty-four hours. The jejunum was found perforated by a bullet; but this large opening is partially closed by the thickening and eversion of the mucous membrane, and the deposit of plastic lymph. A similar case occurred under my observation in St. Thomas's Hospital, to which I shall have to refer as exemplifying the value of continuous rest under these circumstances.

This preparation (No. 1,180) also illustrates a similar condition of the intestine to that which I have just shown. The injury in this instance was caused by the kick of a horse in the epigastrium, the result of which was a rupture of the jejunum.

When the laceration is extensive, this eversion, accompanied by retraction of the edges, facilitates the escape of feculent matter from the bowel—which I have witnessed in instances both of single and double rupture of the jejunum, of which I have a record.

I have remarked that organic injury of the solid viscera of the abdomen is by no means so fatal as that of the membranous. If the first effects of shock and hæmorrhage are survived, recovery from limited lesion of the liver or kidney are probably not infrequent. I say probably, because, in such cases, the nature of the injury can be only conjectural. Whether the spleen may be placed in the same category I think doubtful, on account of its peculiar texture and vascularity. Such a laceration as is here shown in the *liver* must, from its extent, be necessarily fatal (No. 1,391); it is wonderful, indeed, that the patient, who was crushed, should have survived two days, with a rupture extending completely through the organ. In such cases, profound collapse, with abdominal extravasation, indicates the serious nature of the lesion, without, however, pointing accurately to its site. Many such, though rarely to this extent, have come under my notice. The most extensive injury of the liver which I have on record among my cases, is that of an adult who survived his admittance into the hospital, and in whom a large mass of the crushed right lobe was torn away and thrust to the left side of the abdomen. The right kidney was also broken into several fragments. I may remark that, in superficial lacerations, I have found almost invariably that it is the under surface of the organ that is torn.

Although the time at my disposal does not permit of my illustrating the diagnosis of these injuries so amply as my case-books would permit, I am tempted to relate one instance of hepatic lesion, which is interesting from the protraction of life, and the fluctuation of the symptoms which were presented during the progress of the case.

A drayman, aged 22, was admitted into hospital under my care, having been jammed between the shafts of his dray and the wheel of a van. There was no external appearance of injury; but the collapse, thirst, constant sickness, and severe pain across the epigastrium, suggested the possibility of some serious organic lesion. The urine was drawn off, free from blood. On the third day the symptoms had, for the most part, abated, with the exception of thirst and abdominal pain. On the sixth day he was more feverish and restless; and increased abdominal pain was accompanied by tenderness. The face was jaundiced and anxious. It was evident that diffused peritonitis was commencing. On the eighth day there was abdominal effusion to a moderate extent, but the general condition was improved. During the succeeding week the patient's condition varied, and the effusion into the abdomen was diminished in quantity, and the jaundice had abated. Afterwards increased tenderness ensued, with tympanites; and he at last sank rapidly, and died on the eighteenth day after the accident. On examination, the peritoneal cavity was found to contain a considerable amount of somewhat turbid fluid, coloured with bile. There was a large quantity of soft lymph effused about the surface of the liver, and the serous covering of the intestines was thickened by similar deposit. The peritoneal lining of the anterior wall was rough and congested. The abdominal contents were remarkably free from putridity. The liver, which was large, presented a laceration on its lower surface, passing from the anterior margin backwards, close to and parallel with the gall-bladder. In the posterior part of this wound the right hepatic duct was seen to be torn nearly across at its commencement from the common duct, the left branch being uninjured. The gall-bladder and cystic duct were also entire, but the latter was much contracted. Some pale coagulum lay beneath the serous covering of the right kidney. There was no attempt at repair in the lacerated wound of the liver.

The protraction of life and temporary amendment in many of the symptoms, succeeding so serious a lesion, are unique in my experience, and exemplify the difficulty attending the diagnosis of these injuries.

General peritonitis is not a necessary—I may say, so far as my observation enables me to judge, not even a general—consequence of rupture of the liver. In the record of several of my cases, where the patients have survived some days, I find a memorandum to that effect. Such an injury may be succeeded by abscess, as occurred in a lad under my care who survived his injury nearly three weeks, and then died with symptoms of acute pleuro-pneumony and meningitis. In this instance there was a cavity, containing several ounces of pus, between the diaphragm and liver, and bounded partly by the ascending colon. There was evidence that the right lobe had been ruptured; but even in this case there was no appearance of general peritonitis.

A recurrence of the early symptoms in these suspected lesions, after

convalescence, indicates probably mechanical interference with repair, attended by hæmorrhage. I have met with a few such cases as the following. A patient was the subject of a severe contusion of the side, followed by acute pain in the right hypochondrium, with collapse. On the third day he rallied, and these symptoms subsided, leaving him with a jaundiced skin; when he imprudently got up and made some effort, and suddenly had a recurrence of collapse, accompanied with great tenderness in the hypochondrium. From this relapse he rallied more slowly, and retained his sallow hue for a long time.

Extravasation of blood in the subserous areolar tissue around the kidney, is by no means uncommon, without laceration of the organ; but I apprehend there can be little doubt that lesion of the kidney itself does often occur without proving fatal. Limited bleeding from the kidney is a frequent consequence of contusion or pressure; and, when a transient symptom, proves nothing more than rupture of some vessels which pour their blood into the pelvis of the organ. But when the hæmorrhage is copious and persistent, or recurrent, accompanied by pain, and especially if followed by suppuration, there can be little doubt that a more serious injury has been inflicted. Of this class of cases I have many recorded; but I will refer briefly to only one or two. Thus, a painter, aged 37, was admitted into the hospital under my care, having been struck down and run over by an omnibus, the wheel of which passed across the abdomen in a direction obliquely upwards from the right groin. He was in profound collapse, without pulse, and his eyes were glassy. A catheter was passed, and a small quantity of bloody urine was drawn off. With slight reaction, constant sickness ensued, and much abdominal tenderness. On the fourth day the symptoms were somewhat improved, and blood was no longer mixed with the urine; but, on the following day, blood again appeared; the sickness continued, with intermittent abdominal pain, some distension, and great tenderness. These symptoms remained unabated for two or three days, the tension of the abdomen increasing with perceptible fluctuation; and he was delirious. But a clean, moist tongue encouraged me in adopting a more sustaining plan of treatment, and the patient slowly rallied, the symptoms gradually subsiding, but with occasional relapses; and he was convalescent in six weeks, though still pale and feeble.

In some instances, the blood is in sufficient abundance to clot, after it is withdrawn from the bladder. Sickness is always more or less persistently present in these injuries, and the lumbar pain survives the bleeding. Another symptom which I have noticed in some cases of kidney lesion I cannot account for satisfactorily: it is the presence of dulness on percussion, extending from the hypochondrium to the iliac fossa, and accompanied by tenderness, apparently, in the track of the ureter. It may possibly be due to subserous extravasation of blood.

The following is another case of the same type, but of a more complex character. I was summoned to see a gentleman whose horse had fallen with him in the hunting-field, and had crushed by partly rolling over him. He was carried home in a state of collapse: his suffering, which was severe, was referred to the left hypochondrium and loin. The contents of the bladder, when first withdrawn, appeared to be pure blood; and copious hæmorrhage continued for some days. At the expiration of about a fortnight, pus was substituted for blood, and continued to be mixed with the urine, in gradually diminishing quantities, for more than two months. This patient continued invalided for a long time, but ultimately recovered. One remarkable symptom in his case, and which lasted for some time, was the acute pain occasioned by eating, evidently attributable to the pressure or traction of the distended stomach; for it subsided as digestion was completed.

The appearance of blood in the urine, in suspected injury of the kidney, does not always follow the infliction of the injury immediately, but on the following day. I have not learned to attach any particular importance to this circumstance. Recurrent hæmorrhage, especially if the blood be fresh and bright in colour, is a more serious sign, as indicating the probable dislodgment of fibrinous plugs in the lacerated vessels; yet these cases may recover. Mr. Hilton has made some interesting and valuable comments, in the volume of the *Guy's Hospital Reports* for last year, on the form which clots assume, as diagnostic of the part from which they are derived. By floating them out in water, he has pointed out that they may be identified as to their source, coagula formed in the bladder being "somewhat irregular in outline, mostly circular flattened masses, bevelled off and fimbriated": they may thus be distinguished from those which form in the pelvis of the kidney, and such as take the tubular cast of the ureter. I think the character of the urine in some of these cases can be explained only by the supposition that clot deposited in the bladder is gradually dissolved in and passed with this excretion.

Rupture of the *spleen*, from contusion or pressure, is not infrequent; and, if extensive, is probably usually fatal from hæmorrhage. Yet, copious bleeding is not a necessary consequence of this injury; for, in

a patient recently under my care, who sustained this and other injuries, and survived for some hours, there was not more than two ounces of blood in the abdomen, though there was an extensive rent in the spleen. In one of my cases, a deep linear cicatrix on the convex surface of the spleen seemed to indicate the position of a former wound, but the patient died of a more recent injury.

I have on record but of one instance of laceration of the *pancreas*, which occurred in a lad who was the subject of other severe internal injuries, which speedily proved fatal. I am not acquainted with any special signs by which these two organic lesions can be identified; unless, indeed, the situation of the pain or the presence of dulness to an abnormal extent in the left hypochondrium, be regarded as suggestive of injury to the spleen.

The rapidity with which the adhesive form of inflammation occurs in injuries of the abdominal viscera, I have seen exemplified in many instances—plastic lymph glueing neighbouring portions of the peritoneum together, when the patients have not survived more than thirty-six, or even more than twenty-four, hours. But this result is very uncertain; and, so far as I have been able to observe, it bears no constant proportion to the acuteness of the symptoms or signs which are evinced during the period which elapses between the receipt of the injury and the death of the patient.

[To be concluded.]

ON THE TREATMENT OF ORGANIC STRICTURE OF THE URETHRA BY RUPTURE.*

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IN the following short paper, it is not my intention to enter at any length into the general subject of stricture of the urethra, its pathology, its various forms, and its numerous modes of treatment. My desire is simply to relate my own most recent experience of the use of Holt's dilator, in the management of organic stricture in the various degrees of intensity which are presented to one in hospital and private practice in a great city, such as Glasgow.

It may be said, in a sentence, that few if any affections met with by the surgeon are more distressing than that to which I now allude, and probably none which, in the great majority of instances, is more capable of being relieved, and for which we receive more gratitude when we succeed in putting them right. It is not alone the constant annoyance and anxiety the patient suffers, which render these cases so pressing on the surgeon's attention, but the knowledge that he possesses of their progressive character, and of the disease in bladder, ureters, and kidneys, which will surely in time follow.

I have for years had very ample opportunities of treating stricture in all its forms and phases; and I confess that I have been astonished at its extreme frequency in our large communities, and also how little this frequency is recognised by the profession. Very many of those numerous patients who go from surgeon to surgeon to be treated for "gleet" are examples of more or less decided stricture; and, in its lesser degrees, we constantly encounter it in practice.

I have, in the course of the last few years, tried most of the methods of treating stricture which have been brought before the profession; but of late my experience has been so wholly favourable to Holt's method of rapid dilatation, that it is with a view of adding my mite to its due appreciation and more general adoption, that I have obtruded myself on your notice at this time.

I may, perhaps, at the outset, remark that the few observations I have to make have exclusive reference to organic stricture; and that, while believing firmly in the occasional existence of pure spasmodic stricture, and also of necessity in inflammatory or congestive stricture, yet with these I have at present no concern. Nor do I wish to discuss the various forms in which organic stricture may present itself, nor the necessary precautions required to make certain of its recognition. To consider these points would lead me away from the main subject of my communication; yet I would strongly insist on the importance of using chloroform in examining all difficult cases, and the propriety of commencing with a large sized bougie, and diminishing its calibre till the gauge of the stricture is obtained; as, if we begin with a small size, we may be greatly deceived in our investigation.

I have had no experience of the use of the endoscope for the diagno-

* Read before the Surgical Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

sis of these cases; nor do I think it can be of any great service for that purpose. Of the method of treatment by gradual dilatation, I have had a fair amount of experience, and have, like, I suppose, all others, been disgusted with its slowness and uncertainty. The fear and pain which the renewed introduction of instruments occasions to the nervous and excitable is a grave objection to it; and the impossibility occasionally experienced of persevering with this mode of treatment, from the extreme irritability of some patients, as well as the difficulty of gaining more than a certain limited progress in not a few cases, must have been observed by all.

Of caustic I have, I may say, no experience; and of external urethrotomy my practice has not included many cases. I am, however, persuaded that, for certain cases of old cartilaginous stricture, accompanied by many fistulous openings and much change of structure, with narrow tortuous passage, external urethrotomy is a legitimate and hopeful procedure. For elastic strictures and very irritable ones, I do not believe that it is now called for. I have had to employ internal incision repeatedly before I was fully aware of what could be done by the dilator of Holt; and I may say, in passing, that the simple little instrument of Charrière of Paris, with a fine probe-end that passes into the contracted part, has, to my mind, all the requisites of a good and safe urethrotome. Civiale's and Maisonneuve's instruments are also very good ones.

As regards rapid dilatation, my first experience began years ago with the tubes recommended by my valued friend Professor Andrew Buchanan of Glasgow; but these I soon discarded, from finding how difficult they were to guide safely along the canal, and also that they ruptured the stricture by what appears to me a wrong direction of the force—viz., from before backwards. The indurated portion of the passage is very apt to be carried before the tube, and the canal to be thus torn. Afterwards, I tried a modification of my own of these instruments; but these were inferior to the very useful and well known appliance of Mr. Wakley. Here, again, the rupturing force is exerted, as I take it, in the wrong way. Of Sir H. Thompson's adaptation of Laxmoor's instrument I have had, as yet, no experience. It, as is well known, over-distends, as it were, the strictured portion of the canal (up to No. 16 or 18 of the ordinary scale), and that portion alone; and thus that distinguished surgeon has found that the stricture is overcome, and prevented from returning. It is my intention shortly to give this principle and instrument a fair trial.

With Perrève's instrument, as improved and used by Mr. Holt, I am most familiar; and the more I use it, the more I am satisfied that it really meets all the requirements of the case, and that there are very few cases of stricture which it is incapable of setting right. When Mr. Holt concludes his remarks by saying that his method of treatment is "facile, speedy, prompt in its effects, and free from danger, immediate and remote," I do not think he has overstated his case.

I have, since the 1st of January, treated twenty-eight cases of organic stricture by Holt's instrument, seventeen of them in the Glasgow Royal Infirmary; and many of them were of long standing and great severity. All of them, with two exceptions, had existed for over two years; and one had been present for nearly thirty years. Many of these patients were, as such persons often are, much broken down in general health, their digestive and urinary functions seriously deranged, and their nutrition and nervous condition much impaired. Several of them were as unpromising cases as could well be imagined, and I was almost hopeless in undertaking their management. With long, hard, and often multiple contractions, perineal fistulæ, feeble and irritable, so that almost any interference at once produced the most violent "urethral fever", followed by the most intense prostration, it was only by perseverance and caution that any real progress could be sought for. This leads me to remark that, while many cases of stricture come to us in private practice, in which we can at once, and almost without any preliminary preparation, introduce the dilator, yet, in very many hospital cases, the patients have been neglected, and only apply for relief when their condition has become altogether insupportable; so that we must, if we are to expect success, very carefully prepare our patient, and not attempt any manipulative procedure till we get their general health improved as much as possible. It is always my habit, in these bad cases, to confine the patients to bed for some days; to get their bowels into order; to examine their urine, in case of albumen or pus being present; to feed them carefully, and give them simple mucilaginous drinks, in order to dilute their urine; to make them use hot hip-baths at night; and, finally, having cleared out the bowels the morning of the operation, to inject half a grain of acetate of morphia into the perineum, and put them under chloroform. I have in this way most easily succeeded in passing the dilator through old strictures, which had been repeatedly assailed without any effect except occasioning the most violent constitutional disturbance. I put great stress upon such preparation of bad cases; and, if quinine is administered for some days in *anticipation* of

the operation, and an opiate repeated a few hours afterwards, with some hot brandy and water, the rigors, which are so much to be apprehended on account of their prostrating effects, will in very many cases be prevented. If they do threaten, chloroform will almost surely check them.

Of the twenty-eight cases to which I allude, one died a few days after an instrument had been put through his stricture (and that very easily, and without violence); and it was found that his right kidney had been quite disorganised by old disease. No sign of such affection was detected on admission, and he appeared a strong healthy man. His age was but thirty-two. In another case, in which perineal section had been twice performed before he came under my care, I was able to pass an instrument; but this was followed by such terribly severe constitutional disturbance, which for a time assumed all the characters of purulent infection, that I was glad to dismiss him "slightly improved", after a residence of some weeks in the hospital.

As regards the mode of using the dilator, it has been said that, as the urethra must be as large as a No. 3 bougie before it can be introduced, the instrument does not meet the real difficulties of such cases; but, with chloroform and careful preparation, the dilator can very often be passed at once through strictures that are otherwise impassable; and, even though we must use ordinary metallic or cat-gut or rat-tailed bougies of small size to enable us to introduce the dilator, it is no very great hardship, seeing that, the moment we can pass it, the case is, to all intents and purposes, at an end. Further, it is said that we cannot burst up a gristly hard stricture with Holt's instrument; and that resilient strictures are in no way benefited by it. These cases, it is said, demand perineal section. Well, I can only say I have never yet met with any stricture so hard that, if the dilator were passed through it, and the wedge pushed *quickly* and *firmly* home, it did not at once yield; and, in fact, as a rule, they give way most satisfactorily of all. But, if such a case were to present itself, as that a nodule so hard existed as not to be capable of being burst, I would either incise it with an urethrotome, and then burst it; or, if the pressure from a mass of hard organised structures outside of the mucous membrane were so great as to close the canal as if in a vice, why should these structures not be divided subcutaneously or otherwise, without opening the canal? And then, when the tension was thus relieved, the dilator would accomplish the rest.

In passing the dilator through a close hard stricture, I am in the habit of grasping the contracted part firmly with the forefinger and thumb of the left hand, when, as is frequently the case, it can be felt in the perineum. In this way, the canal is steadied, the passage of the instrument aided, and less risk of harm occasioned. I have never seen any good from filling the canal with oil. The pressure with the dilator must be firm, yet gentle; and, while the instrument is kept fully under command, great care must be taken to direct it aright as regards the line of the canal.

Further, for cases of very tight stricture, there is no reason why a much finer dilator than that now in use should not be constructed, and a smaller wedge used; and, when it had done its work, let it be replaced by the ordinary size. In my own practice, I have never used any dilator larger than a No. 12; but there is no reason why, in some canals, a larger one should not be passed.

In cases of multiple stricture, I have been in the habit of bursting them up in succession—not always at one time, if the patient were very irritable; and I have thought I got, on the whole, better results when I did *not* try to pass any catheter, either after the operation, as Mr. Holt does, or for twenty-four hours afterwards. I am very strongly of belief that, under ordinary circumstances, the mucous membrane is not torn in this mode of treatment; but that it is simply stretched, and that what gives way is the plastic deposit on which the stricture usually depends, and which lies in the submucous areolar tissue, or possibly in the substance of the spongy body; and, if this be so, then the passage of a catheter, to draw off the urine after the operation, becomes a matter of no moment. I have never heard much complaint made by any patient after the use of Holt's instrument. Some scalding for a day or so, and a few drops of blood, usually constitute all the annoyance; and I have never known any evil consequences beyond rigors follow it. I have never had an instance of extravasation of urine, abscess, or fistula, or even swelled testicle; so that I regard the operation as altogether harmless.

In one case of very resilient stricture, in which, undoubtedly, the ordinary instrument, twice used, only obtained a temporary improvement, I employed with perfect success a modification known, I believe, by the name of Voillemier, in which a much larger wedge is slid outside of the rod, and thus the rupture of the stricture is much more decided.

It is undoubtedly better always to lodge the end of the perforated rod in the bladder before the dilator is passed between the blades; but it is by no means *necessary* to do so, if an accurate knowledge of the direc-

tion of the canal is had, and its course carefully followed. In cases of multiple stricture, it is often impossible to pass it at once into the bladder.

False passages must be sedulously avoided, especially those leading down below the prostate. By placing the finger in the rectum, the existence of such passages and the wrong direction of the instrument can be readily discovered.

Three other points demand remark.

The usual *seat* of organic stricture I believe, with Civiale, Guthrie, Leroy, and Thompson, to be at or about the point of union of the spongy and membranous portions of the canal; but it is with great deference that I suggest my suspicion that it is placed more frequently both before and behind that spot—*i. e.*, both in the spongy and membranous parts of the passage—than is commonly supposed, notwithstanding the museum statistics to the contrary.

As regards the *causes* of organic stricture, my experience points most strongly to badly treated gonorrhœa as being far and away the most frequent. Either nitrate of silver injections have been used to arrest the inflammation, or, what is far more common, no injections have been used, but cubebs, etc., given internally; *i. e.*, the gonorrhœa has been allowed to cure itself. Of the twenty-eight cases mentioned in this paper, twenty-four followed gonorrhœa treated by internal remedies alone; two were traumatic; and one arose from the use of a strong "revulsive" injection of lunar caustic, and one from violence in a man trying to pass a catheter when drunk. Traumatic strictures are in every way the worst to deal with, from the non-elastic cicatricial material of which they are composed.

Lastly, I may remark that I have had three opportunities of examining after death cases of organic stricture of the urethra. One man was brought to my operative class, in whose urethra an old and close stricture was found. In a hospital case of head-injury, a catheter was with difficulty introduced, and, after death, the canal was opened; and the third case was that whose death I before recorded. In none of these was there any change discoverable in the mucous membrane. It was solely in the submucous areolar tissue that the induration and contracting agency was found. In two of the cases, it had nearly surrounded the passage, but was most dense and decided on the under surface; and in the third case it was considerably prolonged underneath the lining membrane, and somewhat implicated the substance of the spongy body.

It is requisite that a patient upon whom this operation has been performed should be taught to pass a bougie for himself, and that once in eight days for a time. This precaution is, I consider, essential, after *all* methods of treating organic stricture, and is even less required, so far as I have been able to observe, after Holt's method of treatment than after that by gradual dilatation.

A CASE OF SUICIDE BY STRYCHNIA:

DISCOVERY OF A LARGE RENAL CALCULUS AT THE POST MORTEM EXAMINATION: WITH SPECIMEN.*

By J. M. HEWARD, Esq., Stamford.

ON May 8th, when paying my official visit to the Borough Gaol, at 12.45 P.M., I went into the reception-cell, and found Esther Osborne, aged 56 years, dead. At 12 noon, she left the justices' room. At 12.25, dinner, with a pint of water, was taken to her. Only twenty minutes, therefore, elapsed from her being seen alive well, and my finding her dead.

She was lying face downward, at full length, upon her shawl, which she had spread out upon the floor. None of the solid food was eaten. Part of the water was thrown upon the floor; with the remainder she had mixed a packet of Battle's Vermin Killer, which subsequent evidence proved that she had secreted in the lining of her petticoat. The drinking-vessel had been well wiped out with her pocket-handkerchief. The pot was replaced upon the shelf, and the paper which had contained the poison was carefully hidden in the petticoat-lining. She had not vomited. Her linen was wet with urine.

At 4.30 of the same afternoon, I made a *post mortem* examination. The body was well nourished, and free from marks of violence. It was very rigid; the head was thrown back, the under jaw closely clenched to the upper. The arms were rigidly flexed on the chest; the fingers bent into the palms of the hands. The feet were extended. I opened the thorax and abdomen, and first removed the stomach. This, for two-thirds of its middle extent, was firmly contracted upon its contents. The cardiac and pyloric extremities being normal made the

stomach appear in the form of a dumb-bell. I opened it. In the contracted portion, the mucous membrane was deeply corrugated and congested. The stomach contained nothing but a glairy fluid, loaded with the Battle's Vermin Killer; and this was chiefly in the pyloric end, and thus, as it were, locked in by the central contraction. There was scarcely at all a blue stain in the cardiac end. None of the poison had passed into the duodenum. The intestines were void of flatus; the bladder was quite empty and hard. In the chest, the lungs were congested. The heart was contracted so firmly as to appear like a cricket-ball. On cutting into each ventricle, the left was completely empty; every drop of blood had been squeezed out. The right contained a slight moisture of blood. The blood of the body generally was fluid and dark. In the cranium, the membranes of the brain were greatly congested; the brain-substance was normal and healthy. Whilst examining the abdomen, the following conditions with respect to the kidneys were discovered. The pelvis of the right kidney contained a large calculus, chiefly made up of uric acid, and weighing 285 grains. In consequence of the obstruction to the flow of urine through the ureter, the kidney had become dilated, and appeared like a cyst. It measured ten inches long, five inches across, and four inches from front to back. In some parts, its walls were so thinned out that scarcely anything but peritoneum remained. It contained a dirty, flaky, uriferous fluid. The left kidney was hypertrophied; otherwise healthy.

Other evidence at the inquest proved that the woman went into the gaol with a threepenny packet of Battle's Vermin Killer. A chemist informs me that such a packet contains about eight grains of strychnia. Assuming that all the powder was taken, the dose was large; and death was most rapid. You will bear in mind that only twenty minutes elapsed between the woman being seen alive and dead. In this time she had taken poison from her petticoat-lining; had mixed it with some of the water; and, after drinking it, had carefully wiped out the vessel with her pocket-handkerchief, replaced the pot on the shelf of the cell, and had again hidden the paper which had contained the poison in her petticoat.

I find that Professor Maschka of Prague (*vide* the New Sydenham Society's *Biennial Retrospect* for years 1865-66, p. 42) "insists on the fact that it frequently happens that animals, to which large doses of strychnia have been given, remain quiet for a time, and are then suddenly attacked by a spasm in which they instantaneously die." I think that death in this case was as sudden as Professor Maschka describes. Once let the heart be contracted as firmly as I have stated, and I cannot imagine life continuing another moment.

Now, with respect to the renal calculus, I drove over to the village where the woman had lived, to inquire about her medical history. I learned for certain that she had never complained of illness for twenty years preceding her death, but that she enjoyed most excellent health. She drank much ale daily, and often went to bed intoxicated. The only point that I could learn was that, during the last two years of her life, she had had an enormous appetite—always hungry, and craving for food. I think most probably the irritation in the kidney caused this morbid appetite. As an analogue, I may refer to the greatly increased appetite of many women during the first few weeks of pregnancy, the uterine irritation being doubtless the cause; or to the more general fact that irritation in any viscus supplied by the great sympathetic mostly excites some morbid sensation in the stomach.

AMPUTATION OF THE RIGHT ARM AT THE SHOULDER-JOINT: WITH EXCISION OF THE SCAPULA.

By VINCENT JACKSON, Esq.,

Surgeon to the South Staffordshire General Hospital, Wolverhampton: Fellow of the Royal Medical and Chirurgical Society.

SAMUEL C., aged 35, was admitted into the Wolverhampton General Hospital in December 1864. He was employed on the Great Western Railway as a labourer; and whilst so employed, was knocked down, being struck on the back by the buffer of an engine, the wheel of which passed over and crushed his right arm. As quickly as possible, I believe, he was conveyed to the Hospital; but not before a considerable quantity of blood was lost. At half-past six in the evening, shortly after his admission, I saw the patient. He was an unusually well developed and strong man; his face was pale, but not blanched; the countenance expressive of suffering great pain. He was perfectly sensible, and anxious for something to be done to his arm. His habits were intemperate.

On a careful examination, it was ascertained that a compound comminuted fracture of the right arm and forearm existed, and also that the shoulder-blade was broken in more than one place, although the skin

* Read before the South Midland Branch.

covering it was entire, but seemingly much contused. The chest and the other portions of the body were thoroughly examined, but no lesion was detected. A consultation of the surgical staff of the Hospital was held; and it was determined to remove the limb at the shoulder-joint, and to deal with the scapula afterwards, as its condition might require. I as quickly as possible amputated the arm at the shoulder-joint; and, the vessels being secured, an examination with the finger induced me immediately to proceed to the removal of the scapula. It was extensively comminuted and the muscles around it torn, bruised, in fact, almost pulpy; yet the skin, as previously mentioned, was entire. An incision was first made from the upper part of the flap behind to a little beyond the posterior border of the shoulder-blade in a transverse direction and on a level with the spine, and another at right angles to it along the whole extent of the same border. The flaps thus marked out were dissected back, the fractured portions carefully raised from below upwards by division of the muscular attachments, the edge of the knife being kept well upon the bones; the upper and the largest fragment, consisting of the spine and supraspinous fossa, was finally detached after the acromial process had been sawn through, a portion of it being left in attachment to the clavicle. Four vessels were ligatured; the precaution being taken to tie each artery immediately it was cut. The wound was dressed, after the edges had been approximated with wire sutures, with water-dressing. The patient was placed in bed, but he died the next morning, sinking apparently from exhaustion. The *post mortem* examination revealed no further injuries than those detected during life.

REMARKS.—It seems to me almost unnecessary to make any prolonged remarks. The narration of the case simply records an effort made by the surgeon to save the life of his patient; and although it was unsuccessful, yet one is comforted by knowing that the result of an operation is no measure of the extent of the perfection of its performance. In my own case, I had no difficulty in making up my mind; and I had determined that, if an opportunity should be afforded me, if possible, I would perform the operation in the manner described. I especially refer to the removal of the scapula except its acromion process, preserving, in fact, the point of the shoulder. Up to the date of my operation, December 1864, all previous operators had excised the whole scapula. Sir William Fergusson, on June 4th in the following year, in removing the scapula on account of a large tumour connected with it saved a portion of the acromion, "partly because it was not diseased, but chiefly because the shoulder would thereby be left more perfect both as to appearance and use." Up to the present time there are, I believe, on record only two other cases in which, for gun-shot injuries, the arm was amputated at the shoulder-joint, the blade bone being also removed. Mr. Cumming in this country, in 1808, in consequence of a crush by a gun-shot wound, removed after amputation at the shoulder-joint the whole of the clavicle and scapula; and in 1841, Gaetani Bey, "in the case of a boy 14 years old, who had been severely wounded in the shoulder by the discharge of an old piece of artillery which exploded whilst remelting, amputated at the shoulder-joint, removed the blade-bone which had been broken into several pieces, and cut off the acromial end of the collar-bone." In about two months the wounds healed. Besides these three cases, in which for injury of the upper extremity the whole member has been surgically removed, a similar operation has been performed, for various diseases, six times; in 1837, by Mussey of Cincinnati; in 1838, by Dr. George McClellan of Philadelphia; in 1842, by Rigaud of Strasbourg; and three times by Sir W. Fergusson, in the years 1847, 1865, and 1867. I have not included the case of Dr. Gilbert (of Philadelphia) in this list, as he is said to have removed only the neck of the scapula with the arm. We thus have a total of nine recorded cases in which, either for injury or disease, the arm has been removed, and the scapula either at the same time or afterwards excised. Of these nine cases, six permanently recovered; two out of the number of those operated upon for traumatic causes; and four out of the number of those operated upon for pathological causes.

[Since the above was written, Dr. Patrick Heron Watson, of Edinburgh, has recorded a successful case of amputation of the scapula along with two-thirds of the clavicle and the remains of the arm, for injury of the limb.]

MEDICO-CHIRURGICAL SOCIETY OF GLASGOW.—At the meeting of this Society, held on Friday, September 3rd, in the Hall of the Faculty of Physicians and Surgeons, the following gentlemen were elected office-bearers for the present session. *President*: J. G. Fleming, M.D. *Vice-Presidents*: E. Watson, M.D.; J. Steven, M.D. *Council*: G. H. B. Macleod, M.D.; A. R. Simpson, M.D.; D. Richmond, M.D. (Paisley); F. Thomson, M.D.; T. Torrance, Esq. (Airdrie); H. Tomson, M.D.; James Gray, M.D.; Robert Grieve, Esq. *Secretaries*: James Adams, M.D.; R. Perry, M.D. *Treasurer*: H. R. Howatt, M.D.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

RARE FORMS OF URTICARIA.

WE group together to-day three examples of very unusual forms of urticaria. The first is peculiar in that the eruption has been persistent for nearly two years, and began at the early age of three months. A remarkable feature also is, that the wheals leave brown stains. The appearance produced is very singular; and, the child being of beautifully fair skin, the brown patches are the more conspicuous. At first sight, the diagnosis of chloasma would occur to most; but the entire absence of branniness and the early age of the patient are fatal to this suspicion. It has also been set at rest by the microscope. The urticarious irritability of the child's skin is proved at once on scratching it.

HOSPITAL FOR DISEASES OF SKIN, BLACKFRIARS.

I.—CHRONIC URTICARIA, LEAVING BROWN STAINS: NEARLY TWO YEARS' DURATION.

(Reported by Mr. NETTLESHIP.)

EMILIE P., aged 2 years, living at Blackheath Hill, was admitted at the Hospital for Skin Diseases on July 27th, 1869. She was the subject of chronic urticaria; and the eruption was peculiar, in leaving stains of a light brown colour, their tint being very like that of chloasma, for which the disease might easily have been mistaken at first glance. She had light hair and a very fair complexion. The mother says that the child "has never suffered from any illness since her birth"; and she is in excellent health. There was no history of urticaria in other members of the family. The present eruption began when she was three months old, and she has never been free from it since. The mother's account is, that the spots began as "white lumps like the sting of a nettle"; these itch severely, and, on subsiding, leave the curious brownish stains above noticed. The rash, on admission, thickly covered the neck and trunk, the extremities being more sparsely affected. There were no spots on the face, but a few brown stains of former wheals at the margin of the scalp on the forehead. There were no red wheals, but some slightly raised patches of light brown colour with slight congestion, and some stains of former wheals. The true nature of the raised patches was proved by their centres turning nearly white when the skin was stretched. The wheals are of uniform size, and about as large as threepenny-pieces. It was noticed that a scratch with the finger-nail produced, in a few minutes, an ordinary urticaria wheal, with white centre and red edges; and, at a subsequent occasion, a number of recent patches of elevated and erythematous skin were observed; these had not yet become brown. When the child first came, there was little or no evidence of scratching; but, several weeks afterwards, it is noted that, "in addition to the urticaria, there are scratched papules, like those of prurigo; no lice can, however, be found." At her last attendance, five weeks from admission, she was in much the same condition as at first, excepting the pruriginous spots.

We do not find any mention of a similar condition in our standard works. The patient is still attending, and can be seen by any one interested in it.

THE LONDON HOSPITAL.

II.—URTICARIA IN IMMENSE WHEELS SPREADING OVER THE WHOLE BODY.

THE following example of acute transitory urticaria is peculiar in the circumstance of the gigantic size of the wheals. The latter spread at their edges until they were larger than plates, and became confluent. They spread also with unusual rapidity, so that the patient had his entire surface overrun in the course of twenty-four hours, and the next day was almost well. Subjoined are the notes, as taken at the time.

One morning, during a visit to the Hospital, Mr. Vials, the assistant medical officer, directed our attention to a very interesting case of urticaria, which had been admitted the previous night into the medical wards. The patient was a boy of light brown complexion, who had been brought to the Hospital on account of idiopathic erysipelas of the face. No eruption was observed, except the erysipelas of the face, on admission. In the morning, his skin was found to be covered with immense patches of erythema or urticaria. The patches commenced at

the root of his neck, covered his chest and trunk, extended on the arms as low as the wrists, and on the legs down to the ankles. Neither of the feet was involved; and, excepting that one patch extended as far as the cleft between his thumb and forefinger, there were none on his hands. The chief peculiarity of the eruption was the immense size of the patches. Some of the smallest were about the size of shillings, others as large as crown-pieces; whilst others, consisting of many single ones coalesced, covered a large part of the trunk or thigh. These large patches had, of course, irregular edges; and in some places the appearance of gyration had been produced. The general aspect of his surface was that of a map with well defined red borders marking the land from the water. The smallest patches showed best the characters of the disease. They were all round, or nearly so, with a flat pale surface and a bright red raised edge. Around this edge, for half an inch or more, the skin showed bright florid congestion, but was not raised. Where the patches were small, their whole extent, as well as their edges, was very manifestly thickened; but, where very large, this thickening had entirely passed off, and only the parts near to the edge were perceptibly raised. Everywhere, the skin which had been deserted was left very pale, its dead white colour contrasting strongly with the tint of that not as yet invaded. If the patch were stretched, the edge previously red became white, excepting on its outer border. On its outer border, and on the adjacent congested skin, it was impossible, by any amount of stretching, entirely to remove the colour. Chloroform was tried, but had no effect in causing the patches to disappear. Irritation of the skin by scratching did not produce even erythema; nor had patches been developed on the parts where the bedclothes had pressed. The boy, who was very stupid, complained of pricking and tingling, and was often scratching himself. He said he had never had any rash like this before. It appeared that his erysipelas had commenced the day before admission; that he had had a sort of rigor, but no sickness. He had not taken any medicine before he came, nor any afterwards, till after the urticaria had shown itself. His febrile excitement was not great; but his tongue was furred, and red at the point.

On the next day, the rash had faded; and, a few days later, the boy was well.

III.—ACUTE URTICARIA (THIRD ATTACK): VERY LARGE WHEELS.

(Under the care of Mr. WARREN TAY.)

A CASE very analogous to the preceding came under care on Sept. 2nd amongst the out-patients at the London Hospital. The patient was a man aged 44, of stout build. His face was much swollen, and pitted on pressure, but had not the appearance of ordinary idiopathic erysipelas. In one or two places, oedema of the scalp could be felt; but no swelling could be seen, owing to the presence of the hairs. On the neck and shoulders were numerous small wheals, looking just like those of urticaria, the centre becoming very pale on stretching the skin. There was no eruption on the trunk; but the upper and lower extremities were covered with various sized patches, consisting of a centre of nearly normal skin, and a raised border becoming pale on pressure. These patches covered both the backs and fronts of the extremities. On the backs of the hands, the skin was merely congested. There were no papules, as in erythema; nor wheals, as in urticaria. The largest patches were located about the hips, one patch occupying the outer surface of each buttock. On the dorsum of each foot was a single wheal of small size. The striking peculiarity of the eruption consisted in the large patches, with a well marked raised border of bright colour, most of them being of a circular or figure-of-eight shape.

In both cases, the eruption attacked the face and neck. The lad had never had a previous attack. The second patient, however, had had two previous ones, in the spring of this year and twelve months before. He could give us no clue to the cause of the outbreak in either instance. He had noticed this present eruption only the day before applying at the hospital.

MOORFIELDS OPHTHALMIC HOSPITAL.

ALBINISM IN A CHILD BORN OF DARK COMPLEXIONED PARENTS.

AN example of complete albinism in a baby came recently under our observation in Mr. Streatfeild's *clinique*. The hair was quite white, and the skin very fair. The child looked vigorous. It was constantly winking when in the light, but could open its eyes when they were shaded. The lesser circle of the iris was opaque and whitish-grey; but all the rest was transparent, and transmitted the red glare of the fundus. The pupils were small, and not quite round. The child was the first-born of parents, both of whom were reported to be very dark. No case of albinism had occurred in any predecessor, as far as known.

UNIVERSITY COLLEGE HOSPITAL.

A CASE OF EXTRAUTERINE PREGNANCY.

(Under the care of GRAILY HEWITT, M.D., F.R.C.P.)

THE patient was Mrs. J., aged 40, married, the mother of five children, the last born three years ago. The catamenia had been regular till May 1868; then they ceased till last May, when they occurred again for fourteen days, then ceased for one week, then came on again for a week. Also, for the last fortnight before admission, there had been a constant dark red discharge, without any clots, with no pain, and inoffensive. Abdominal enlargement was first felt about June 1868; and, at the end of July, a substance came away, of the size of an egg (an undoubted ovum). The abdomen then gradually enlarged again; and, from December 1868 till April 1869, the patient said, she felt what she thought was a child. At the end of March and to the 10th of April, for fourteen days, the patient had labour-like pains, but none of a forcing character. These used to last for two hours at a time, coming on about every ten minutes. Since this, the catamenia had to a certain extent been re-established, as before mentioned; and her abdomen had become less in size. Her breasts gradually enlarged till April last; and, from February, milk occasionally exuded from the nipple. By the middle of May, a small milk-abscess had formed, which was opened. The bowels acted freely by the use of castor-oil. The patient said that she had lost flesh lately, but appeared in good condition.

July 28th. The abdomen presented well marked brown discoloration at the umbilicus; also an abdominal mesial line of brownness. There was a large tumour to be felt in the abdomen, extending up to the margin of the false ribs on the right side, and clearly not belonging to the liver. This tumour extended also to the left side of the abdomen, but was quite an inch and a half lower in the abdomen on the left side than on the right. The part on the left side was separated from that on the right by a deep groove, but the two were apparently continuous. A third tumour was to be felt immediately above the pubes on the right side, having an oval shape, and lying on the tumour behind it, as it were. By the use of the sound, it was shown that this third tumour was the uterus, the second passing into it to the depth of two inches and three-quarters. The first two tumours were not uniformly smooth, but presented at different parts eminences, such as might be due to the two projecting parts of the body or limbs of a foetus, but which also might be ovarian cysts. This latter character particularly applied to the tumour on the left side of the abdomen—the smaller of the two.

On examination *per vaginam*, the pelvis was found to be occupied by a tumour having exactly the shape and size of the foetal head at term, on the surface of which were depressions appearing to correspond with the sutures and fontanelles of the foetal head. The tumour lay immediately behind the vagina, the upper extremity of which was dislocated forwards and upwards in such a manner that the os uteri corresponded with the upper surface of the pubic symphysis, and was reached with great difficulty by the finger. The tissues intervening between the finger and the tumour had a thickness of perhaps one-eighth of an inch only. The os uteri admitted the point of the forefinger; it was soft, and admitted the sound readily (the patient being under chloroform) to a depth of two inches and three-quarters. The sound passed to the left side, and forwards in the position of the third tumour previously described. The tumour in the abdomen and the tumour in the vagina appeared to form parts of one tumour, one being moveable from the other.

VICTORIA HOSPITAL FOR CHILDREN.

PRIMARY TUBERCLE OF LEFT KIDNEY: PYONEPHRITIS.

(Under the care of EDWARD ELLIS, M.D.)

S. J., a little girl, aged 5 years, of thoroughly tubercular parents, was admitted from Guildford, in a state of great exhaustion and extreme emaciation, on June 25th. The child had been ailing for twelve months. She had had slimy motions, loss of appetite, some vomiting, and latterly incontinence of urine. The urine occasionally contained pus, but no blood. The skin was usually hot, but moist; and the bowels irregular. The case had been pronounced one of *tabes mesenterica*.

On admission, the abdomen was found to be retracted and atrophied. No tumour could be detected, though some abnormal dulness was noticed over the left lumbar region. The eyes were bright; pulse 136; respirations 32; pupils dilated; cheeks flushed. Some bed-sores existed. The lungs were resonant. The heart-sounds were normal. The tongue was clear and moist. No enlarged abdominal glands could be felt. She took milk freely. The temperature in the rectum (11 A.M.) was 102° Fahr. At 11.30 P.M. on the same evening, Dr. Pierce, house-surgeon to the hospital, observed that the temperature had risen

to 103.30° Fahr. The child continued in much the same state until June 30th, when the temperature in the axilla at 2 A.M. was 103.25° Fahr. At 8 P.M., Dr. Pierce noted the pulse 144, very weak; respirations 34. The temperature in the rectum had fallen to 99° Fahr.

The child was put upon nourishing diet, and allowed from two to three ounces of port wine daily, from the time of its admission. It also took, three times a day, twenty minims of cod-liver oil, with half a drachm of compound syrup of phosphate of iron and two drachms of lime-water. This agreed very well; the bowels continuing regular, the tongue clean, and the general condition slightly improving. After the 30th, however, matters rapidly grew worse; the bowels became relaxed; much light yellow stools were passed; the pulse was 142, flickering; and the child died on July 4th.

At the autopsy, the heart was normal. The upper and middle lobes of the right lung contained isolated nodules of tubercle, of rather firm consistence. There were a few spots in the left apex. The bronchial glands were slightly enlarged. The liver was normal in structure, but atrophied. The small intestines were healthy, and distended with flatus. The colon was much atrophied, of a dull white appearance; the descending portion was held down and slightly compressed by the left kidney. The right kidney was normal, and contained no tubercle. The left was distended and enlarged; the length, four inches and three-quarters; the breadth, three inches. On cutting the ureter, about three ounces of pus escaped. The peritoneal tunic was thickened and opaque. The entire medullary portion was broken down into pus, leaving the cortical portion infiltrated, and of diminished size, to form a series of saccular cavities containing pus. The excavated appearance of the section bore some resemblance to the honeycombing of a soft piece of rock by the action of the sea. Some parts of the cortical substance were streaked with blood, indicating recent congestion and inflammatory action. The pelvis of the kidney and the ureter were soaked with pus, but contained no spots of tubercle. The remaining organs were healthy.

This case is interesting from its rarity, from the comparative freedom of the organs, other than the specially implicated kidney, from tubercular infiltration; further, by reason of the absence of pain, even on pressure, on the affected side; and from the very high and yet variable temperature noted. At the same time, we are cautioned against the very common error of attributing cases of apparently causeless wasting, or "wasting from neglect", to tabes mesenterica, which is, in reality, a much rarer disease than is commonly supposed.

TUNBRIDGE WELLS INFIRMARY.

POISONING BY SULPHURIC ACID.

(Under the care of Dr. WARDELL.)

A. B., single, a domestic servant, aged 40, was brought into the Infirmary at three o'clock in the afternoon of November 26th, 1868. It was reported that, about half an hour previously, she had been found by one of her fellow-servants screaming with pain; and it was at once ascertained that she had, accidentally or otherwise, taken poison. Her stained and discoloured dress showed the poison to be one of the mineral acids. Mr. Satchell, the medical attendant of the family, was first sent for; and this gentleman administered the antidote immediately. When she came to the Infirmary, she was very sick, and vomited repeatedly. The countenance was pale and sunken, the skin clammy and cold, and the pulse barely perceptible. Antidotes were again administered; but there was some difficulty in making the patient swallow them. She lay on the floor, and at short intervals screamed in dreadful agony. She referred her greatest tortures to the stomach and abdomen. The eyes were mostly closed; when she opened them, which she occasionally did when interrogated, the pupils were seen small and piercing. The mouth, lips, and throat, on being examined, showed the mucous membrane to be of pearly white. She was put into bed, covered up with blankets; hot bottles were applied to the feet (which had become cold); and stimulant enemata administered. The sickness and vomiting became less urgent, but there was no remission of her agony. The feet and legs, and the surface generally, became still colder. She frequently placed her hands on the stomach, and screamed in a piteous manner. She complained of thirst, and some tough mucus formed in her mouth. She gradually sank, three hours after taking the poison; and the mental faculties were clear to within a few minutes of her decease.

Mr. Manser, the house-surgeon, made a *post mortem* examination thirty-eight hours after death. There was no emaciation, nor any superficial mark, with the exception of a rusty drab-coloured patch, of the size of the palm of the hand, under the left mamma, which had evidently been produced by the acid, as the dress corresponding with the patch was stained and discoloured with the poison. The texture of this stained mark on the dress was rendered more lacerable, and its lines of

extent were clearly delineated. The thoracic organs were healthy, with the exception of the heart, which was large and flabby, and, when removed, it did not maintain the normal configuration. Its cavities and the large vessels were filled with dark fluid gore. On carrying a free incision down the mesial line, and fully opening the abdomen, all the organs brought into view were of a darkish brown charred appearance. A considerable quantity of black-brown grumous fluid, which contained bloody coagula, was found in the abdominal cavity; this fluid, on being tested, was intensely acid. The omentum was shrivelled and contracted, and in some parts a pulpy mass. The entire surface of the parietal peritoneum was of a burnt brownish-black colour. On removing the liver, its surface, more especially its convex surface, was of a dirtyish drab; and, on making sections of the organ, the parenchyma was discovered to have been acted upon by the acid to the depth of two or three lines, which extent of its substance was rendered quite pale, and clearly defined; and this chemically altered part of its structure resembled a cortical covering or a thick pyogenic membrane. The general hepatic tissue was less resistant to pressure than normal. At the large curvature of the stomach was observed a long ragged opening three inches in length, through which a great portion of the contents of the organ had been poured into the peritoneal cavity. It seemed as if some of the gastric wall had been absolutely dissolved. The edges of this opening were thinned, corroded, and extremely tender to the touch. The mucous coat was dark blackish-brown, of the same colour as the small quantity of grumous fluid which it still contained, and which, in large amount, had been poured out amongst the abdominal organs. The duodenum was small and contracted; and its internal surface was black and charred, and resembled the mucous lining of the stomach. The oesophagus was diminished in diameter, its passage much narrowed; and the organ felt leathery and indurated. Its internal surface was greyish-white, and the membrane readily rubbed off under the fingers. In some parts of its course, it looked as if it had been par-boiled. The spleen was small. The pancreas was shrivelled up to half its size. The ileum and colon, on being carefully washed, were vascular and ramified. The kidneys, uterus, and other organs, presented no notable characteristics.

From testimony elicited at the inquest, it was ascertained that the deceased had drank five ounces of a fluid, one half of which was the oil of vitriol of commerce, the other half water. Being thus diluted, it is probable that a larger quantity of the poison passed into the stomach than would have been the case if the concentrated acid had been taken. The pure acid instantly produces such destruction and corrugation of the passage, that a large quantity does not readily pass down the gullet.

A great majority of the cases of poisoning by the mineral acids are by vitriolic acid, because it can be obtained without suspicion, because it is cheap, and because it is used for a variety of domestic and manufacturing purposes. From 1852 to 1856, of seventy-seven cases of poisoning by these acids, no fewer than seventy-three were by sulphuric acid. The more prominent symptoms in the case now recorded were such as are commonly seen in examples of poisoning by this agent. The effect had doubtless been momentary. Orfila gives the case of a man whose death was almost immediate. The great splanchnic nerves are at once impressed by the poison. Vomiting, agonising pain, pale face, cold skin, and small feeble pulse, indicated the terrible and speedy effect upon the system. The stainings of the dress and the yellowish-brown patch on the skin were important medico-legal facts to be noted. The prostrate manner in which she lay on the floor, and the evident loss of locomotive power, are characteristic of the effects of this deadly fluid. The heart's action had at once become subdued; and such diminished force of the circulatory system was followed by manifest and sudden decline of temperature. The fatal issue is more frequently at the expiration of fifteen or twenty hours; but this will depend very much on the quantity of acid which passes into the stomach, and on the vital powers of the patient. In an instance like the one recorded, in which the parietes of the stomach were dissolved, and the agent effused into the abdominal cavity, the great shock could not fail of soon being fatal. Pereira and other writers mention the fact of the mental faculties remaining uninfluenced almost to the close. The end is proximately cardiac; hence the clearness of the mind.

BEQUESTS.—Miss Mary Ann Horton, late of Highbury and Brighton, and of Middleton Cheney, Northampton, has left the following bequests:—To the London Fever Hospital, £500; the Small Pox Hospital, £200; the Islington Dispensary, Leicester Infirmary, Brompton Hospital, Free Hospital, Gray's Inn Road; Orphan Asylum, Wanstead; Brighton County Hospital, Deaf and Dumb Asylum, Asylum for Idiots, each £300; Convalescent Fund, Hove Dispensary, Brighton, King's College Hospital, £100 each; and to Mr. Tait, her surgeon, £300.

COMPARATIVE PATHOLOGY:

BEING

REPORTS ON THE DISEASES OF THE LOWER ANIMALS IN RELATION TO THOSE OF MAN.

THE FOOT-AND-MOUTH EXANTHEM.

THE malady known as "the foot-and-mouth disease" is a specific fever or exanthem, the eruption of which shows itself chiefly in the localities designated in its name. Like all other diseases of this class, it is propagated solely by transmission from one animal to another, and is incapable of being spontaneously produced. Like them, further, it has stages of definite length, and passes off when they are completed, leaving its subject insusceptible of a second attack. As with its congeners, so with it, the eruption which gives it its name is only one part of the malady—a state of general fever and constitutional disturbance making it quite certain that a blood-disorder precedes and attends the local symptoms.

In some of its principal features, this exanthem may be compared with chicken-pox. It is a mild disease, rarely proving fatal, except from unusual complications (pyæmia, etc.). Its stages are very short; its eruption is vesicular; and the exemption which it gives from second attacks appears to be absolute. It is, however, much more infectious than varicella appears to be. It is contagious, as well as infectious, which chicken-pox is not; and, whilst the latter is reported never to cause death, it certainly does so now and then. It may be suspected, however, that there is less exception as regards the last point than might be at first believed; for there undoubtedly are rare cases in which the spots of varicella ulcerate, form troublesome sores, and are followed by abscesses like those of pyæmia.

The foot-and-mouth exanthem spreads amongst horned cattle, sheep, and pigs. Horses are exempt, as also cats and dogs. It is believed to be contagious to man, but almost certainly not infectious.

There seems reason to believe that it was not known in this country until 1841, when it was introduced by foreign cattle into many parts of the country, and prevailed as an epidemic widely. Since that time, we have rarely been free from it. There can be no doubt whatever that it is re-imported constantly, its comparative mildness having induced carelessness as to its prevention on the part of both farmers and dealers. The evidence as to its introduction is overwhelming, and is admitted on all hands. On the continent, it has been long known.

Course of the Disease, Symptoms, etc.—The course of the disease may be very briefly stated. After an incubation period of from one to three days, the animal shows symptoms of discomfort, and, in bad cases, rigors occur. The eruption comes out almost immediately, and attains its height in two or three days. It consists of large vesicles or bullæ on the feet between the hoofs, etc., and in the mouth on the lips and tongue. In milch cows, vesicles form on the teats and udder; but there are none on these parts in heifers, nor any on the scrotum of males. The animal has much difficulty in eating; its lips swell, and a thick saliva dribbles from the mouth. The sores in the mouth heal quickly. After the third day, the disease is on its decline; and about the tenth day the animal is convalescent. Considerable loss of flesh has usually occurred, but it is quickly regained, and in a short time the state of health appears excellent. In some cases, recovery is retarded by persistent lameness; but, unless severe applications are made to it, the mouth scarcely ever remains long sore. The mildest treatment appears to be the best. In addition to the symptoms mentioned, there is always a rough staring coat, and frequently a watery irritable eye. The pulse is quickened, and the horns and ears alternate from heat to cold. In cows in milk, the secretion is diminished, but not suspended; and, after recovery, it rarely returns to its full quantity.

The foot-and-mouth exanthem possesses great interest for the physician in several different directions.

1. It affords instructive illustrations of some of the general laws of specific fevers.

a. It affects all ages alike. Since one attack confers immunity, it is manifest that after a while, if the disease were constantly to prevail in any given district, the older animals would become exempt, and it would rank as a disease of the young, precisely for the same reason as some of our own exanthems are popularly styled "children's diseases." For the present all the inhabitants of an English farm-yard are liable, and experience shews that all suffer, without the slightest regard to age.

b. It affects all who come within reach of contagion, without the least regard to the state of health. Evidence goes to show that there is but little difference in the severity of the disease in connexion with differ-

ence in state of the animal, with the exception that there is special danger to parturient animals, and to their progeny.

c. It is usually more severe and more fatal in the beginning of an epidemic. In this feature, it fits exactly with what has been often noticed in the epidemics of exanthems in man. The evidence is curiously interesting. Veterinary surgeons mention repeatedly that the only cases they lost were at the beginning of the disease, and congratulate themselves that the greater success afterwards was due to greater care in treatment. How often this has happened to ourselves! The remedies tried last in an epidemic gain most reputation. The same observers, however, invalidate their inferences by informing us, in many instances, that the latest cases were so mild that the farmers did not care even to procure advice for them.

d. Specific fever, which spreads actively by infection and contagion in one class of animals, may spread by contagion only to another. This happens in the transference of the disease to man. There is no reason to think that it is infectious to man, whilst it seems certain that it is inoculable. Some authorities believe that cattle cannot infect pigs, and that the latter get the disease only by drinking the milk of diseased animals, or eating food tainted by their secretions. When once a pig has got it, however, he can transmit it to other pigs by infection.

e. Specific fever may be transmitted by swallowing the secretions of a diseased animal. Thus pigs are believed to get it by drinking milk from diseased cows, eating food smeared with their saliva, etc. It is believed, also, that milk may produce the disease in man.

2. It is important that medical men should obtain all the information they can on the following points.

Is it safe to use the milk of animals suffering from this disease?

Is it safe to eat their flesh?

In cases in which the disease has been accidentally conveyed to man by inoculation, is there any fear of its spreading by infection? and ought preventive measures to be adopted?

It offers a splendid field for the experimental investigation of the efficiency of disinfectants.

We have collected from various sources (chiefly from essays in the *Veterinarian*, some of them excellent) information on the following points.

Ratio of Mortality.—"Less than two per cent." (Lepper of Aylesbury). "Two deaths in three hundred" (Wallis). These facts do not apply to very young animals. All authorities admit that young pigs and calves, taking the milk of diseased mothers, often die.

Causes of Death.—There was bronchitis in a few, and ascites in very few.—Several authorities mention the occurrence of numerous abscesses both in the joints and in the cellular tissue (Pyæmia). These appear to follow chiefly unusually severe local affections (feet, etc.) Mr. Lepper especially mentions cases in which abscesses occurred.—The cause of deaths in very young animals does not seem to have been clearly made out. They die quickly.

Second attacks do not occur. Mr. Tombs knew of no instance, and mentions a case in which a bull, which had had the disease a year before, did not take it again, although he was fed on hay which had been refused by animals suffering from it, and had often actually been in their mouths. "Not in any case" (Wallis). A cow, which had had it a year before, was much exposed to contagion, and did not take it (Wallis). Several observers state that they had never witnessed a second attack, and add that they had repeatedly been told of such occurrences, but that invariably, on investigation, the evidence broke down. This is very important, showing how easily, for want of sceptical investigation, erroneous statements might become current.

State of the Milk from Diseased Animals.—"I have seen the milk of a cow that had the epidemic curdle when boiled; in others, not the slightest difference was observable." (Holmes.) "The milk, although diminished in quantity to an alarming extent as concerns the dairyman, is certainly not deteriorated in quality. We might almost say that it is improved. It has a richer taste, and yields more cream and butter." (Lepper.) "The milk is generally diminished in quantity and quality, frequently ropy, and like curds and whey. Too often the secretion is of a dark brown colour, and foetid." (Messrs. Hawthorn.) "In some, it was quite putrid; others have yielded nothing but a whey-like fluid; and in a few it has been mixed with blood." (Darby, p. 133.)

Meat of Diseased Animals supplied to the Market.—Mr. Lepper ordered one to be killed which was very lame, because "it was in condition for the butcher." "I have been informed," writes Mr. Parks, "that pigs, when killed and eaten, as all fat ones are as soon as they are perceived to have this complaint—I certainly could not relish the bacon—have patches of inflammation on the skin of the belly, and on the outer coat of the stomach and intestines; likewise in the villous coats of each." "As to the beef, it appears quite sound; and, except the blis-

tered parts about the mouth, there will be no other marked appearances observed." (Dick, 184.)

Effects of the Milk on Man and other Animals.—"I have heard of a few individuals who evinced symptoms something similar to what animals in the epidemic showed from partaking of the milk; and I know of others that partook of the same with impunity." (Holmes.) "My own family, including a child twelve months old, partook of milk and cream of my own infected animal . . . without perceiving any injurious effects." (Holmes, p. 139.) At Pershore, seven cows had the disease; the milk was all sold to, and used by, the inhabitants, with no untoward event. (Tombs.) Professor Dick of Edinburgh found the milk of good quality, and wholesome. No ill effect on dogs or cats; none on a foal. (Holmes.) Pigs may show the disease ten hours after taking infected milk. (Holmes.) Mr. Tombs of Pershore records facts favouring the belief that pigs, although exposed to infection, do not take the disease from cattle, unless they are fed with milk.

Contagion to Man.—"One or two individuals in this neighbourhood having had their hands abraded in salting the mouths of the animals, small pustules have formed on the mouth or face." (Wallis of Halstead.) Mr. Karkeek of Truro states that he knew of three cases, and records one in detail. A young farmer scratched his hand in giving a drench. The wound was unhealthy "for some time" before the specific disease appeared. He had several shiverings; then difficulty in swallowing, itching of nose and dry mouth, much constitutional disturbance, and prostration of strength. During the next night, he could not sleep; and next morning he had discharge from the nostrils, and vesicles on the gums and tongue. With the exception of the tip and sides of the nose, no vesicles on the skin are mentioned. In ten days, he was well. "It has always been freely communicated, either by contact or inoculation, not only to animals of the same class, but also to those of a different order, and even to the human subject, by the use of the milk and flesh of the infected animals." (Emes, 673.) "It appears, in its present form, to be confined to the cloven-footed animals; yet we have well authenticated facts of the attendants on these diseased cattle being similarly affected from having a sore on some external part of the body, with which some of the matter had come into contact, and produced similar eruptions or sore throat, and considerable constitutional disturbance." (190.)

NOTES OF THE PRESENT EPIDEMIC OF THE FOOT AND MOUTH DISEASE, NEAR GUILDFORD.

THIS exanthem has for some weeks past been extensively prevalent in the neighbourhood of Guildford and Godalming.

On September 12th, the writer made a visit to the district, in company with Mr. Evershed, the Government Inspector, to whose courtesy and intelligence he was indebted for much valuable information.

Many of the cattle sick did not seem very ill. They might be recognised by their rough coats, swollen and dribbling lips, their unwillingness to rise, and slight lameness when up. One only was ill enough to remain lying down and allow an inspection of the mouth. Several had their tongues lolling out, and the vesicles on them visible. The vesicles appear to be few in number, and often of large size. When broken, they show a grey surface, and become covered with a thick pultaceous secretion called "slough," but probably not really gangrenous tissue. The sores in the mouth, on the tongue and lips, reminded one much of those seen in follicular stomatitis, but were, of course, on a much larger scale. In progress, they differ from those of stomatitis in that they never degenerate into chronic sores, but always heal quickly. Mr. Evershed confirmed, on the whole, the general account of the disease which has been given above. It had affected the entire stock in many instances, or at least all coming within the sphere of its contagion. Horses had been quite exempt, and had shown no other malady which could be supposed to be connected with it. Poultry had not been observed to suffer, with the possible exception that, in one large establishment, many turkeys had died with inflamed mouths. In this instance, it had seemed certain that the disease was brought by some foreign turkeys which had been bought. It occurred prior to the outburst of foot-and-mouth disease in the cattle of the establishment, which afterwards occurred severely. The mortality had been more than usual. Mr. Evershed had known of twenty or thirty deaths in horned cattle, and many more amongst young pigs and calves. Many of the deaths he attributed to rough measures of treatment. He was strongly of opinion that the milk was injurious to animals fed on it. All the farmers had become convinced that it made pigs ill, and had ceased to use it for their food. The "making them ill" meant, for the most part, giving them the specific disease; but the large mortality in young pigs and calves, and the fact that those who fed exclusively on the milk of diseased mothers often died very rapidly and before the disease had shown itself in them, suggested the possibility that it was injurious in other

ways than merely as a vehicle of contagion. Mr. Evershed believed that the farmers whose herds had suffered had continued throughout to send their milk up to London. He had often inspected the milk, and had usually found it unaltered in general appearance; but occasionally it had a decidedly red appearance, as if from admixture of blood. In one instance, several members of a farmer's family had suffered from sore mouths, which they attributed to having drunk the milk, and which had induced them to decline using it further. Mr. Evershed had never heard of direct contagion to the human subject, nor of any ill consequences, except those attributed to drinking the milk. Many animals have suffered from inflamed udders after the disease.

The disease at present is prevalent over a wide area around Guildford, and Mr. Evershed has himself attended more than a thousand cases.

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SATURDAY, SEPTEMBER 18TH, 1869.

ST. BARTHOLOMEW'S HOSPITAL AND ITS OUT-PATIENTS.

THE issue at present raised at St. Bartholomew's Hospital between part of the staff (as represented by Dr. Mayo) and the Governors of the Institution, is one about the results of which there can be but little doubt; and as to its rights, none at all. Dr. Mayo, on undertaking the office of House-Physician, finds that, in addition to his ward duties, he is required also to see casualty out-patients; to take, indeed, a third-share of from 400 to 500 every morning, and to see them at the rate of 100 per hour. His work in this department must be over by one o'clock, for at that hour it is his duty to attend the physician of the day in his ward visit. Against this state of things Dr. Mayo protests.

We will not stop to ask whether Dr. Mayo's protest has been the most conciliatory possible, nor whether he might not, in some respects, have managed the matter more judiciously; but this we will say, that, taking the facts as he puts them, and we believe quite accurately, the blame rests with those who left such a protest possible. The students of St. Bartholomew's Hospital, the staff, the profession at large, and, most of all, the poor patients, are indebted to Dr. Mayo for the course he has taken.

We have said that the issue cannot be doubtful. The benevolent Governors have undertaken to do a large work of charity, and have forgotten to provide the most essential part of the means. They have built a large hall, and very properly invited the poor to come freely; but they have neglected to secure an adequate professional staff, and quietly left the increased duty to be performed by those who already had too much on their hands. Our medical press has of late been unanimous as to the farcical charity which was formerly enacted in some of our over-grown out-patient departments. We are glad to know that in many institutions the evil has been met, and the staff so far increased that the poor clients have now a fair chance of being properly attended to, and those who discharge the duty have also a fair chance of profiting by it. We trust that at St. Bartholomew's Hospital the staff will be so unanimous and firm that the Governors will have no option but to effect the necessary improvements. Apart from the direct duty to the patients, such reforms will be to the advantage of their time-honoured school, for we believe that few conditions are more prejudicial to the interests of students than that of a scanty staff. It involves hurry and over-work, and is fatal to those opportunities for quiet clinical investigation which students so much need.

As to how best a Hospital staff may be increased up to the required strength, opinions will differ; and we are far from wishing to offer any advice on the present occasion. It is felt on all hands that to confer the dignity of a permanent position on the staff of any Hospital in a broadcast manner would be very inexpedient, and would tend inevitably to lower the office. Hence we believe the repugnance which many, fully alive to the needs of out-patients' practice, yet feel to large plans for multiplying appointments. Hence, also, the scheme (we believe a lamentable failure) adopted at one institution, of electing assistant officers with the title, but with only temporary tenure of office. If you appoint permanently as many as are really needed, and give to all the right of gradual ascension to the highest offices, you run great risk that some young and half-tried man may get his foot on the ladder, and, in spite of incompetency, afterwards keep his place. Now it seems to us that the first interest of our large institutions, so far as their medical officers are concerned, is to keep about them their more promising alumni until the latter have had fair opportunity to show their quality. Many first-rate men have gone into the country, to a limited sphere in private practice, simply because the means of waiting for a London opening were not forthcoming. The converse of the picture is also in part true, but upon it we will not insist. Here, however, is the opportunity for remedying both evils at once. Let our Hospitals secure the services of their best juniors in appointments in connection with the out-patients' department; let them not offer any position on the staff; but, in lieu of that honour, let them give what is often more valuable to young men, fair remuneration. Let them, in fact, appoint *paid clinical assistants*, without giving them any claim to election on the staff. If meritorious, and in other ways well qualified, such election would probably follow; if otherwise, the holders of these offices would be drafted off to other spheres, none the worse for a few years' additional training in connection with a London school. All would be gainers—the patients, the students, and the permanent staff. The plan is not untried, and it has worked exceedingly well. As to the duty of Hospitals to pay their officers, we can entertain no doubt; and it is the youngest part of the staff to whom this recognition of services is most essential. St. Bartholomew's Hospital, with its splendid endowments, has no excuse for parsimony in this direction; and the profession will certainly look to her, the acknowledged head of our metropolitan institutions, for a liberal example.

CORONERS' CASES.

It is a trite remark, that there is much waste of scientific material in medical practice. It is evidently true of all fields of medical work, but it is strikingly, and as it were obtrusively, true of one field of work. We allude to certain medico-legal cases, or, as we may conveniently name them, "coroners' cases." Practitioners are called—some frequently, some rarely—to cases of sudden death, as to the cause of which there is at least enough doubt to render it necessary that a *post mortem* examination should be made, and an inquest held.

In a metropolis like this—and to the metropolis and to towns we for the present confine our observations—there occur yearly large numbers of cases in which *post mortem* examinations have cleared up difficulties of a grave character. But, as matters now stand, these cases do not serve to help other practitioners in future difficulties. Each practitioner acquires, case by case, an experience of increasing value, but the body medical acquires next to nothing from the precious facts which careful

legal and medical investigations disclose. Such a waste should cease. It is not only in the interest of medical science that a more methodical plan should be adopted; but it is in the interest of the public itself that facts of so great importance should be utilised. It is high time that we had diffused in the profession a better means and method in making a diagnosis in such cases of emergency as apoplexy, poisoning, drunkenness, and injury occurring under circumstances which render the most skilful often at a loss to tell from what the patient really is suffering. Coroners' cases would, by giving in vast number records of life symptoms, circumstance of seizure, etc., in juxtaposition with well-observed pathological appearances, supply a good basis for clearer views. What we urge is not the publication of single cases of striking interest, but a responsible and methodical statement of all cases with which the coroner has to deal.

It seems to us that there is a plan which would serve this purpose, whilst it would not lead to any interference with the liberty of action of the medical practitioner concerned in particular cases. Our plan presumes the desirability of establishing public mortuaries for the bodies of those found dead whose homes cannot be discovered; for the bodies of those whose friends cannot, with regard to health, retain their dead until the time for burial; and for those whose mode of death seems to the coroner to justify the *prima facie* suspicion of foul play. There would be in readiness instruments and all other facilities for making the *post mortem* examination easily and satisfactorily; and the medical man would not be left to perform the scarcely medical duty of sewing up the body, and to perform the decidedly non-medical duties of washing and dressing it—things which could be done much better by porters. The further suggestion which we have to make is, that there should be *paid* pathologists, who should be responsible for the complete performance of autopsies, and for their careful record with what could be obtained of the life-history of the case from medical and lay witnesses. As already implied, the position of such officers would not interfere with the action of those who wished to make *post mortem* examinations on cases which in life were under their own care. On the contrary, we hold that it is not a scientific method to separate medical practice from pathology even on the plea that a skilled pathologist would, from frequent practice, do the special work in a more elaborate manner. Granting that a pathologist would do the work better, it is not desirable that the practitioner—in the interest of the public as well as in the interest of his own mental culture—should be freed from the scientific responsibilities which he now has. Centralisation is bad, but the centralisation of scientific duties is very bad. But, where the practitioner's duties end, those of the paid pathologist should begin. He should not be responsible for the opinions formed as to the cause of death, but for a record of what the *post mortem* examinations disclose, and especially for a thorough examination of the body beyond what was required to detect the fatal lesion. It would be his duty to make periodical statements on the causes of death which occur from violence, poisoning, drunkenness, apoplexy, etc., and to show how the symptoms of these cases resemble and differ. By this means a mass of facts of great scientific and social value would be utilised for the common good. As it is, beyond adding to the experience of individuals, they are almost wasted.

PROFESSOR SCANZONI has declined an invitation to the Chair of Obstetrics in the University of Baden-Baden, being unwilling to leave his position in Würzburg.

ON Tuesday last, Mr. John Couper was elected Surgeon to the London Hospital, in place of Mr. Curling, who has resigned under the limitation rule. There are now two vacancies for Assistant-Surgeons. The elections will take place on the same day, in about a fortnight. The Candidates at present in the field are, we believe, Mr. J. Macarthy, Mr. Sheffield, Mr. Richard Davy, and Mr. Reeves.

THERE have lately died, Dr. A. Quadri of Naples, a distinguished ophthalmic surgeon; and Dr. Zanini, general director of hospitals in Pavia, formerly member of the Italian Parliament, and professor of legal medicine.

It is proposed to erect a small hospital for the sick poor at Royston. Lord Dacre has given a site; and the Hon. Mrs. Vernon Harcourt heads the subscription list with £200. There are several subscribers of £100 each.

A LETTER has been received by the Islington Board of Guardians from the Poor-law Board, directing an inquiry into the conduct of Dr. Slater for certain charges which have been brought against him. Mr. Longley, the Inspector of the Poor-law Board, has been appointed to conduct the inquiry.

THE DRINKING CUSTOMS AND LICENSING DAYS.

WE observe with much pleasure that, during the past week, in several places efforts have been made by earnest-minded individuals to induce magistrates to limit the number of licences granted for public-houses. There is no class of the community so well acquainted as medical men with the untold evils of the drinking customs. To those who have leisure for conscientious thought and action in the matter, we would specially commend this mode of procedure. It is one which involves no extreme opinion. It is impossible to doubt that, if public-houses were diminished one-half, the community would gain greatly in physical and moral health. We hope that members of our profession, many of whom have great influence, will do what they can to assist deputations in this matter.

THE PRUDHOE CONVALESCENT HOME.

THE building recently erected at Whitley in Northumberland, under the name of the Prudhoe Convalescent Home, was formally opened on Tuesday last, by the Duchess Dowager of Northumberland. It is built after the pavilion plan, of stone; the greater part being in a simple style of Gothic architecture, and the central portion containing some architectural embellishment in commemoration of the munificence of Algernon, fourth Duke of Northumberland. There is at present accommodation for between fifty and sixty patients; but it is intended to ultimately receive a hundred. The foundation-stone of the House was laid on June 4th, 1867; and from the Report of the Building Committee, read by Dr. Philipson, the Honorary Secretary, it appeared that the total amount of subscriptions has been £18,000, together with interest amounting to £900. The services of Dr. Philipson and of his colleague the Rev. J. Lintott, to which much of the success now recorded has been due, were appropriately acknowledged by a vote of thanks.

REMUNERATION OF OUTLAY FOR AUGMENTING HEALTH.

THE following circular has been recently issued from the War Office:

"*Hospital Accommodation, Home Service.*—In consideration of the improved sanitary condition of the army, the Secretary of State has decided that in the future building or re-appropriation of hospitals, as well as in the arrangement of equipment for hospital service, the hospital accommodation for troops on home service shall be calculated at the reduced rate of six per cent. on the barrack accommodation."

The financial saving indicated by the orders conveyed in this announcement can be best appreciated by those who are familiar with the cost of hospital construction, equipment, and administration. Military regulations have hitherto directed hospital space to be provided in the proportion of ten per cent. of the number of troops, and the existing military hospitals have been constructed and fitted on this basis. There is, therefore, for the future, a saving of four per cent. in all the particulars of cost above enumerated. The more influential position accorded of late years to the medical profession in the army, and the expenditure of money in improving the sanitary knowledge of medical officers, and in outlay on hygienic means and appliances, are now showing their results. At the same time, it is necessary to be cautious that reduction in hospital accommodation is not carried too far. There should always

be hospital space available in military establishments to meet the sudden exigencies which may arise from war and other emergencies; or a fresh outlay may suddenly be called for which may sweep away, at one stroke, the accumulated savings of years.

INJUDICIOUS PUBLICITY.

THE daily papers a few days ago were copying from *Galignani* an account of a paper published in the *Bulletin de Thérapeutique* by Dr. Clersey, in which the author praises arsenic as a remedy in pulmonary disease, and especially in hæmoptysis. We notice the fact, for the purpose of expressing our regret that so injudicious an act should be committed by the well informed men who conduct our daily periodical literature. If there is a remedy the administration of which requires careful watching on the part of the medical man, it is arsenic; and it is, to our view, very dangerous to lay before the public—prone as they are to doctor themselves—a virtual recommendation of the use of what is in many cases an useful, but may be also a treacherous, drug.

EXHIBITION OF HOSPITAL EQUIPMENT AT THE HAGUE.

LETTERS from Holland state that the collection of "objects" bearing on the subjects of lodgment, treatment, and nourishment, of sick and wounded soldiers, which has been brought together by the military aid-societies in Holland—or, according to the popular name in that country, by the red-cross societies—and which is now being exhibited at the Hague, is one of great extent, and that it has excited much interest from its excellence. The King has paid three long visits to the Exhibition. The collection has been formed on the occasion of a general meeting at the Hague of the committees of the societies formed in Holland for aiding sick and wounded soldiers in time of war, as well as for assisting in epidemics of disease, and such national calamities in time of peace. In addition to the Central Netherlands Society at the Hague, there are now fourteen of these societies, including a very large number of members, distributed over the different provinces of Holland.

THE "WILLIAM CARR EXHIBITION" OF EPSOM COLLEGE.

THIS Exhibition for Foundationers of Epsom College, of the annual value of £50, and tenable for four years, has been awarded by the Council of Epsom College to Mr. Theophilus G. Vawdrey of St. Austell, Cornwall, who will proceed to University College, London, as the first free medical scholar nominated by the latter institution. Mr. Vawdrey took a first-class in the recent matriculation of the University of London, and previously a classical prize and the first English prize at Epsom.

FREE MEDICAL SCHOLARSHIPS.

IN our notice of Free Medical Scholarships last week, we omitted to mention that one is given by St. Bartholomew's Hospital as well as by the institutions alluded to. It is open to the whole school of the Royal Medical Benevolent College, subject to the condition that the candidate shall gain two-thirds of the marks fixed by the examiners. It has no money value. It has been awarded for two years. We hope that those of our medical schools which have not as yet adopted this method of assisting the benevolent supporters of the College in their work will, before long, follow the example which has been so liberally set.

THE CATTLE MURRAIN AND THE MILK SUPPLY.

THE murrain, or foot-and-mouth disease, of cattle is now extensively prevalent in many parts of England. We have no wish to be alarmists, but the facts which we record respecting this malady at another page will, we think, be held to fully justify our asking the attention of the profession to the question whether the milk from diseased animals ought to be used as food. It is quite certain that at the present time in the neighbourhood of Guildford, and probably in other places, where the disease prevails, there is a strong prejudice against this milk—a belief that it causes sore mouth in adults and seriously disagrees with young

children. It is found to be very hurtful to pigs, so much so that the farmers are careful to prevent their having it. Yet we believe that this milk, the use of which is refused on the spot, is regularly sent up to the London market. It is possible that its injurious effects are not often manifested, and only under peculiar circumstances, still the idea is not pleasant. Those who have seen it, report very differently as to its qualities, some asserting that it is unaltered, others that it curdles when boiled; that it looks brown or red, and even that it is sometimes fetid. Probably it differs much in different cases. We purpose a further investigation of the subject, and meanwhile suggest to our readers that they should caution their patients against the use of an article at best very suspicious. Other steps may possibly be necessary. We shall be glad to receive facts from any who may possess them.

ERRONEOUSLY REPORTED FATAL CASE FROM ETHER-INHALATION. AN alleged death from etherisation has been exciting some discussion in the American medical journals. It is satisfactorily proved that the patient, who was, in the first instance, stated to have died directly from the effects of the inhalation, did not in reality sink till twenty days subsequently. Dr. Parks adds: "We presume the matter is now finally disposed of, and believe that we have yet to record the first case of death from etherisation by sulphuric ether."

PYÆMIA IN THE BOSTON HOSPITAL, UNITED STATES. IT would appear that, in the Boston hospitals, pyæmia is at least as prevalent as in our own metropolitan ones. In the *Medical and Surgical Journal* for August 19th, Dr. Derby records four cases of important operations, and in three out of the four his patients died of pyæmia. In the first, a man aged 35 had his thigh amputated for injury; he did well for some time, had a severe rigor on the twenty-fifth day, and died ten days later. In the next, a labourer, aged 38, had his thigh amputated for disease of the knee-joint. He died nine days later, after severe rigors. In the third case, a man, aged 24, admitted with a fracture of the lower jaw, had wires introduced, to fasten the fragments together, on the twelfth day, and he died of pyæmia twelve days after the operation. In the fourth case, a primary amputation of the thigh, the patient recovered. The three fatal cases occurred within a month of each other. We hope to hear soon of trials of carbolic acid.

DR. MAYO'S DISMISSAL FROM OFFICE. AT a meeting of the House-Committee of St. Bartholomew's Hospital, on Tuesday last, Dr. Mayo, who had previously been suspended from duty, was finally dismissed from his office as Resident Physician. The technical ground for this procedure was his alleged refusal to obey the orders of the executive in reference to attendance at certain special times on the casual out-patients. We have heard but one side of the matter, and must, therefore, express no opinion as to this decision. We cannot, however, avoid suggesting that the House-Committee owe it to the profession to make it clear that they did not exact from Dr. Mayo work of a kind and amount that it was impossible for any man to perform. The regretted fact of Dr. Mayo's dismissal does not in the least alter our opinion, already expressed, as to the good which his protest is likely to evoke.

THERAPEUTIC USE OF CHLORAL. PROFESSOR LANGENBECK of Berlin has made trial of this agent—the properties of which, as a producer of anæsthesia, have been brought before the profession by Liebreich in Germany, and afterwards investigated by Dr. Richardson at the meeting of the British Association in Exeter—in a case of delirium occurring in a woman, aged 40, of intemperate habits, who had received a comminuted fracture of the humerus while probably in a state of intoxication. The delirium set in during the night after the injury, and was so violent as to require the restraint of the patient by a strait jacket. Seven grains of opium and three-quarters of a grain of morphia were given without at all quieting the patient; and the fractured bone was much disturbed by her movements. At 1.30 P.M., four *grammes* (about a drachm) of hydrate of chloral were

given internally; and, shortly afterwards, two *grammes* were administered in three subcutaneous injections. In ten minutes after the chloral had been given internally, the patient was more quiet; and in a quarter of an hour she was asleep, and slept tranquilly till the following morning. She remained free from delirium till the evening, when it again began; two drachms of hydrate of chloral were given by mouth, after which the patient had a sound sleep, and had no further delirium. After some sloughing, and removal of fragments of bone, there was a good recovery. Professor Langenbeck gives also a few notes of a case under his care at the time of writing, where the internal administration of chloral appeared to relieve trismus occurring in a boy seven years old, in consequence of a wound of the face by a piece of stick.

TOO MUCH LIKE CHARLATANRY.

AT the meeting of the Academy of Medicine in Paris on August 31st, a letter from M. Auzias Turenne was read, in which he stated that he had found a means of eliminating the contents of suppurating buboes, without making a solution of continuity of any kind, or by any ordinarily known means. He applies with a brush a few drops of a solution, of which he gives the composition in a sealed letter which he has entrusted to the Academy as a proof of priority. The application is repeated several days in succession; and the bubo gradually disappears. M. Auzias Turenne says that the remedy, though secret, is not new, having been described by Pliny and Dioscorides; and that its application is new, but not secret, since he uses it publicly. Why cannot M. Auzias Turenne say at once, plainly and without any refined distinction between the thing and its use, what his remedy is? If he have really discovered a means of curing a troublesome affection, he should make it known, that other surgeons than himself may try it and know what they are trying, and that other patients, too far off to have the good fortune of being treated by him, may receive the benefit.

SCOTLAND.

THE NEW EDINBURGH INFIRMARY.

AT a meeting held on the 9th instant, the Edinburgh Merchant Company approved the resolution of the Governors of George Watson's Hospital to sell the hospital and grounds to the Managers of the Royal Infirmary for £43,000. The "previous question", having been moved, was defeated by forty-eight to forty-five votes. An amendment was also brought forward, in the form of an addition to the original motion, that the hospital should not be sold till a new one were built; but this was also lost, forty-two voting for it, and forty-three for the simple approval of the sale.

ABERDEEN ROYAL INFIRMARY.

THE Treasurer, at the last quarterly meeting, announced the receipt of a legacy of £450, left by the late Miss Strachan of Cortes; also of £500, left by Mrs. Scott of Stewartstown towards establishing a Convalescent Hospital. It was also stated that the Rev. Mr. Morgan, of Dordrecht and Stonehaven, had left a large legacy to the Infirmary, payment being contingent on the lives of two relatives.

THE NEW CHAIR OF TECHNICAL CHEMISTRY IN GLASGOW.

IT is said that Mr. Penny, the Professor of Chemistry in Anderson's University, Glasgow, has protested against the establishment of a new Chair of Chemistry, on the ground that it will interfere with his privileges, and be injurious to his interests.

IRELAND.

QUEEN'S UNIVERSITY.

THE annual examinations for the M.D. and M.Ch. will begin on the 28th inst. It is rumoured that examination of patients at the bedside will be added to the other practical tests. A meeting of Convocation will be held on the day preceding that for the conferring of degrees. The term of three years, for which Mr. Ross was appointed as member of Senate, will then expire; but one who has so zealously attended to the interests of the medical and other graduates is sure of re-election.

REPORT

ON

THE PREVENTABLE DISEASES OF THE INDUSTRIAL CLASSES.

IX.—COMPOSITORS AND THEIR WORK.

The Sanitary State of Printing Offices.—How Consumption is Developed.—The Effects of Bad Air and Posture on Respiration.—Ailments of Printers.—How to get a Constant Supply of Fresh Air.—Methods of Lighting.—Suggestions for a Model Room for Compositors.

THAT the official inquiries instituted by the Board of Health have resulted in some improvement in the condition of London milliners and tailors there can be no doubt, though these improvements cannot yet be chronicled in statistics. It is questionable, however, whether the printers, for whom an active sanitary crusade was also carried on by Dr. E. Smith, have benefited to the same extent as the two other classes. In the larger newspaper offices, efforts have been made to improve their sanitary condition: in smaller ones, however, and in most of the jobbing offices, little change has taken place. The *unreformed* ones have a melancholy appearance at night-time. There are many gas-jets in them, yet the workshops are dim, because the arrangements for replacing used-up air with fresh air are imperfect, and combustion is slow because oxygen is scarce. The windows are clouded by vapour, and water trickles down their panes: this occurs not in winter only, but during all seasons, and shows how persistently the vapours from the gas and from the workers' lungs hover about the room.

The development of consumption among printers is a subject of considerable interest, not only as it refers to them as a class, but as it bears on the diseased condition of those persons in whom consumption is produced spontaneously; *i.e.*, without transmission from parent to offspring. A man accustomed to work in a badly ventilated printing-office is compelled to breathe several varieties of atmosphere during a work-day. In the morning, if the windows and doors have been left open for some time before he enters the office, the air may be as pure as that in the streets; at mid-day it will be mixed with a large quantity of carbonic acid, and a small quantity of ammonia and watery vapour, which have passed off from his and his fellow-workmen's lungs, and the temperature of the room will be slightly raised; in the evening, when the office is lighted, the temperature of the room will not only be considerably heightened, but the air will be so loaded with impurities as to be nearly unbearable. The effect of this is that the lungs are partially *smothered*—we can find no better word for the condition—and an amount of asphyxia is produced, not enough to cause marked and acute distress, yet sufficient to induce chronic alteration in their structure, owing to the inability of these organs to excrete the whole of the water and carbonic acid they ought to throw into the air of the work-room, and to transmit through their blood-vessels the more material portions of worn-out tissue. Other excretory organs have, therefore, to do some of the work the lungs should perform, and so the skin pours out water, and the kidneys and the liver take on extra action; and, when they are much overtaxed, diarrhoea and diuresis occur. In passing through the streets from the unnecessarily warm workshop to his home, the compositor is exposed to great change of temperature. His lungs, which, owing to their forced partial inactivity, are gorged with insufficiently aerated blood, are roused to quickened and irregular action when he comes from the warm office to the colder air of the street, to be again rendered less active when he returns to his work. That their nutrition should be injuriously influenced, and that much used-up material of the body that ought to be excreted by them, or transmitted through them, should be retained, and that much new material for the supplanting of old tissue should reach the breathing organs in too crude a form to make healthy lung-tissue, is not to be wondered at. The imperfectly developed new material forms cells which wither like the imperfectly developed petals of a city-grown flower, and die quickly: the *débris* of old cells, too, is not entirely removed, so that old tissue unremoved, and new tissue ill-developed, form tubercular masses which, acting as foreign bodies, irritate, and produce cough, then soften and ulcerate, and leave cavities in the lungs. Such cases of consumption differ little in their origin to many of those which occur among the daughters of middle-class folks, who are “coddled” in warm insufficiently ventilated rooms, who take too little out-door exercise, and are rendered, therefore, the more susceptible to changes of temperature, to which in their rounds of party-going and visiting they are necessarily exposed.

Many compositors stand up during the greater part of the time they are at their work: the standing posture is much better than the sitting one, inasmuch as the men are able to breathe more freely. Were the type-cases differently constructed, and made so as to be nearly vertical, the erect posture might always be taken by the men when at work.

As regards the effects of posture on respiration, the following observations by Dr. E. Smith are of much interest. Dr. Smith experimented with the view of determining the effect of posture and exertion over the quantity of air inspired, and consequently over the movements of the chest; and he found that only in the lying posture was it less than in the sitting posture. In the following table the lying posture is taken as the standard:—

The effect in the lying posture	1.
“ “ sitting posture	1.18
“ “ standing posture.....	1.33

Useful as gymnastic exercises are to all young in-door workers when not indulged in to excess, they are particularly useful to young compositors. Indeed, masters who employ a large number of these young men, would, in many instances, be gainers if they were to fit up gymnasias, where, during the hours for meals and recreation, the apprentices might exercise their bodies. This exercise would prevent mischief likely to accrue from the nature of their employment; and the youngsters would be more vigorous, and consequently more fit to perform a good day's work.

The indigestion from which many printers suffer, and the “biliousness” of which they complain, but which in nine cases out of ten is indigestion only, are due more frequently to the impurity of the air the men breathe than to other causes. In some rare instances, excessive smoking, want of sufficient out-door exercise, hastily swallowed meals, and too many glasses of bitter ale daily, contribute to bring about these conditions, which, left unchecked for a long time, are followed by constitutional mischief.

We have met with few cases of wrist-drop among printers; and in such of the men as we have inspected, we have found no traces of constitutional lead-poisoning. The rarity of these cases, which at one time were not uncommon, is due to the more careful modes of drying and distributing the types, and to some improvements as regards the composition of the type itself, and to the method of making it. The Chinese metal with which tea-chests are lined is—we are told—much prized by type-founders, owing to the purity of the lead, and of the tin by which the leaden sheets are fastened. Ordinary type is composed of lead, tin, and antimony, in varying proportions. The smaller the type, the larger are the quantities of the hardening metals—antimony and tin. In the best small type, the proportion of antimony is one in four.

The giddiness, headache, nervousness, and prostration from which compositors suffer occasionally, are due almost entirely to external conditions subject to control, although the absorption of small quantities of antimony by the skin may in some few cases contribute in a small measure to the production of these effects. If the men lead regular lives, and take a moderate amount of out-door exercise daily; if the offices in which they work be properly ventilated, and if the compositors do not work irregularly or to excess, they ought not to be unhealthy. *The excessive deaths from consumption among printers are, therefore, preventable.*

Although plenty of cubic space is at all times desirable, yet too much importance must not be given to cubic space alone; for, if air be allowed to stagnate, ill-health may be produced even in a large work-room. Air should be kept in motion in printing-offices and all large workshops. This can be accomplished by means of large fans attached to rods placed near the ceiling—the power of motion being given to the rods by the steam-printing machine. All printing-offices should have, in the upper third of their sides, planks arranged like Venetian blinds. Free currents of air would, therefore, pass gently through the offices; and the admission of air would not depend on the opening of windows, which carelessness or caprice might prevent. Thermometers should be kept in all offices, and the temperature of the rooms should range from 60 deg. to 65 deg. Fahrenheit. Open fire-places are preferable to hot-water-pipes or stoves, since they assist materially in ventilating the room, and do not make the air unnaturally *dry*, a condition always to be avoided.

In laboratories, where others and explosive materials are manufactured, gas-burners are placed outside the rooms in which the manufacturing processes take place, the light from the gas being admitted through a glass screen. In the House of Commons, light is admitted through a glass ceiling. By such means the air in the rooms is kept free from the noxious products given off in the burning of gas. The same system of lighting rooms might be adopted in printing-offices, to the great benefit of the health of the inmates.

We would suggest the following arrangement of a model room for compositors. At the sides of the office there should be recesses for the workers, somewhat similar to the recesses in a library. Before each man a type-case, with boxes rather deeper than those at present in use, should be placed; above the case there should be a double thick glass screen, the plates being about two feet apart. Gas should be burnt within this screen, the air required for its combustion being drawn from *without the printing-office, and the products of combustion being prevented from entering the office.* By such means the air of compositors' rooms could be kept free from contamination by gas. In each recess there should be a window, and above it the Venetian arrangement of boards, which would allow the regular and gentle interchange of internal with external air, and prevent the air which passes from the workers' lungs from lingering about the room. Two men might work in each recess. This system might be adopted even in many old offices; and in those where there are architectural obstacles to this arrangement, the light of gas might be admitted through glass placed in the sides of the rooms, the light being distributed through the rooms by means of reflectors, the intensity of the light and its colour being regulated by gauze or silken screens.

At present, many workers in gas-lit rooms suffer from ophthalmia, owing to exposure of the eyes to the "glare" of the gas-jets, which are often placed within a very short distance of the workmen's and workwomen's faces. We believe that the foregoing suggestions might be carried out to the improvement of the health of many other classes of in-door workers.

THIRTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in LEEDS, July 27th, 28th, 29th, and 30th, 1869.

SECTION C.—MIDWIFERY. President, A. FARRE, M.D., F.R.S.

Wednesday, July 28th, 1869.

Eclampsia. By J. WALLACE, M.D., Liverpool.—The author advocated treatment by chloroform, manual dilatation of the os uteri, and speedy delivery; and gave the history of six cases so treated, with the result of six living mothers and four living children. The treatment, to be successful, must be adopted immediately; as the uræmic condition, or the retention of the solids of the urine in the blood, speedily proves fatal, first to the child and then to the mother. Dr. Wallace objected to Churchill quoting Ramsbotham's three unsuccessful cases of delivery by turning as an argument against this line of treatment, as Ramsbotham did so after bleeding and other treatment had failed.

Dr. THORBURN (Manchester) said that if they had to deal with a hard, rigid os uteri, and endeavoured to introduce the hand, the practice advocated by Dr. Wallace would be decidedly fraught with evil, as by that means they would cause more irritation than they were likely to allay. But there were simple ways of preventing this. If the os were excessively contracted or excessively rigid, then they must have recourse to other means; but if the os were not excessively contracted or rigid, there could not be a doubt that the best means possible for producing convulsion was that of dilating the os uteri; but he did not believe with Dr. Wallace, that this should be done by means of the hand, but rather with a fluid dilator. Dr. Barnes' instrument was most valuable for this purpose, but which had not attracted the attention it deserved.

The PRESIDENT thought that Dr. Wallace had raised a most important question. The old rule used to be to take care of the convulsions and let the labour take care of itself. They had now to take care of the labour, and, at the same time, assist the convulsions.

Sir JAMES SIMPSON alluded to the convulsions caused by poisoning with brucine and strychnine, for the purpose of suggesting that some gentleman, younger in the profession than himself or others around him, should investigate what was the poison in puerperal convulsion which caused a fly alighting on the face of a patient to be thrown off by a convulsion. He had no doubt that it would be found to be an animal alkaloid. It had been shown that, when two animals were poisoned with strychnine or brucine, and one was put under a bell-jar, it would gradually recover, while the other, put upon the table, would go into convulsions and die; but put the animal under chloroform for three or four days, and it would stop it from dying. He believed the same result would follow in the case of puerperal convulsions and children's convulsions. One of his colleagues in the University of Edinburgh had a

child ill of convulsions, and he used chloroform; but the effect of it was only to keep the child out of convulsions while under chloroform, and it was three or four weeks before it was cured by the treatment. He afterwards asked this gentleman how much chloroform he used, and he said nearly 10 lbs. He himself thought the fingers were a safer instrument in treating cases of convulsions than any dilator yet employed.

Mr. T. W. WILLIAMS (Birmingham) said he had seen the happiest results after the patient had been delivered, and the effect of the chloroform had passed away.

Dr. WALLACE said his paper was solely on the treatment, with results; and he would rather have it judged by them.

Certain Forms of Uterine Cancer. By C. F. F. ROUTH, M.D., London.—The author, after alluding to the hopeless misery to which these cases were formerly consigned, declared his belief that occasionally uterine cancer was curable. He affirmed—1st. Cancer was not necessarily a blood-disease—i.e., in all cases primarily—but was often due to local poisoning or the co-operation of another cause. 2nd. Even where it was a blood-disease, this did not necessarily exclude local treatment as curative, as in cases of scrofula, secondary and tertiary syphilis. 3rd. Hereditary taint did not preclude hope of cure, as in gout and several skin-affections; and in cases of spontaneous cancer cured by sloughing, or inflammatory seizures elsewhere. 4th. Recurrence was also not an argument for non-interference: here he quoted Messrs. Moore and De Morgan, and exemplified his position by recurrent fibroid. 5th. In these cases the temporary comfort derived from temporary removal of the cancer, even if not finally curative, and obliged to be repeated, was so great as to justify treatment. 6th. Uterine cancer was especially, as a rule, less rapid than cancer elsewhere. Dr. Routh then proceeded to speak of the action of remedies, stating that he derived *prima facie* encouragement from the known rule that some medicines singled out particular tissues in their action, and that these newly-formed products had less vitality than surrounding healthy parts. Dr. Routh next referred to the local destructive remedies. Iodine, carbolic acid, and bromine, were the three to which he gave the preference. Volatility, power, and a disinfectant quality were here the three necessary virtues required. Phosphorus and fluorine might hereafter be found useful; but when the mass was large, the red-hot iron or écraseur should be used first. The author then touched on the use of injections into the tumour, chiefly by citric, acetic, and carbolic acids. His experience led him to discountenance their employment in uterine cancer, as almost invariably doing harm. The compact nature of uterine tissue rendered injection very difficult of accomplishment. If he used injections at all, they were bromine injections, and purely as destructive agents. Dr. Routh then alluded to the plan he adopted in such cases. Referring to a former paper, published in the *Obstetrical Transactions*, he said more extensive experience had led him to be more cautious. Still, upon the whole, he could not but speak favourably of the bromine treatment. He would say—1st. It gave good prospect of cure in epithelioma, where the uterus was not fixed, nor vagina and rectum involved. But, 2nd, partial fixity of the uterus was not always a bar to interference. 3rd. It promised to do less good in cases where the fibroid element predominated in the cancer. 4th. It was only palliative in cases of fixity of uterus, and where the rectum and vagina were involved, although even in such cases it would give much comfort, and prolong life. The author then detailed the mode of its application, and the great caution necessary in so doing, and in the preparation of the solution. Internal remedies were then dwelt upon. These should fulfil four indications. 1st. To purify the blood. Arsenic and bromides internally were chiefly recommended to do this, while iodides were condemned. 2nd. To improve the quality of the blood. Tonics, and iron especially. 3rd. To allay pain. Conium and nepenthe were advised as useful, and the endermic method of giving morphia and atropine. Blisters, also, were much praised. 4th. To prevent local infection. Disinfectants were stated to be indispensable, used as diluted injections within the vagina. Lastly, Dr. Routh pointed out the importance of rest of mind, avoidance of sexual excitement, and cold, depressing, or feverish seizures, all of which were calculated to increase the local affections, and make the cancer acute, as was proved by the history of some of his cases. Twelve cases were given, some of which were very much advanced on beginning the treatment. Although all but two were greatly benefited, and life was prolonged with much comfort, six ultimately died. One of these was a case of corroding ulcer of the womb, and one of scirrhus. Six recovered, as far as could be learnt, and one, also a case of corroding ulcer, recovered completely, the patient having since had a child.

The PRESIDENT said that no one perhaps but obstetricians could tell how they clung to the hope that they might at last discover a means of dealing with this disease. Two important points were raised by the cases of cancer which came under their notice. One was that at an early period epitheliomata were frequently local affections, and before any

introduction of blood-contamination in the surrounding parts, and to these they looked with hopes of successful treatment; in other cases they had some hopes of discovering some form of remedy by which the disease might be destroyed. He was sure they must all consider this paper of great importance.

Dr. PROTHEROE SMITH (London) said these cases seemed to be divisible into two classes: one in which the uterus was perfectly manageable, and therefore permitted of treatment; the other of cases more advanced, where the disease produced such an effect upon the surrounding parts as to solidify the whole. In the first class of cases, he was quite sure that much might be done not only to relieve but to cure; and he might mention one instance which took place in the Hospital for Women, many years ago, of a case sent in by the late consulting physician, in which the disease was far advanced, but the surface manageable. He (Dr. Smith) operated upon it with the knife; and, although the woman very nearly lost her life by the immense hæmorrhage which followed, she not only recovered, but was now alive. Many other cases had come under his notice not only capable of removal, but of cure. With regard to the second class of cases, it became a question whether they could do more than ameliorate. He had found the application of a powerful caustic to a certain extent of use.

On a mode of applying the Midwifery Forceps. By JAMES BRAITHWAITE, M.D., Leeds.—[As there was no discussion on this paper, it is unnecessary to give an abstract. The paper will be published *in extenso*.]

SECTION D.—PHYSIOLOGY. *President*, J. HUGHES BENNETT, M.D., F.R.S.E.

Wednesday, July 28th, 1869.

The President delivered an address, which was given at page 237 of JOURNAL for August 28th.

Grants for Scientific Investigations.—Dr. EDWARD WATERS (Chester) said that he was one of those who were of opinion that the connection of original investigations of a scientific character with the Association was of the utmost importance as giving it a new character, not only in Great Britain and Ireland, but throughout Europe. He believed that, when it was found that year by year they had subjects for investigation allotted to men who were qualified thoroughly to carry them out, and when they had the results communicated, they would be attracting the attention of a far wider field than that found by the associates at the annual meetings, and their gatherings would be looked forward to by the scientific community of Europe and the whole world. Now there was only one really original investigation which did honour to the Association. He was not speaking of the efforts of individuals, but he was speaking of the Association as a body. In no way did he wish to depreciate the admirable communications which individual members of the Association made. On the contrary, he valued them as highly as any other member, but there were certain things which could not be done by individuals on account of their requiring combined labour, and on account of their requiring men of different qualifications. There must be the chemist, and the physiologist, and the pathologist; there must be men to work together in combined action for one object. The Association had had that done in connection with the investigation of the effects of mercury upon the secretion of bile. Nothing, he believed, had occurred of more importance in modern medicine than the refutation of the old error that mercury exerted some specific influence in increasing the secretion of bile. He did not doubt—no man doubted—that, when a dose of medicine was given, whatever bile there might be in the intestine was at once carried away; and so there was bile in the motions, but that in no way proved that the quantity of bile secreted was increased. That merely showed that, like any other purgative, the mercury had cleared the intestinal canal. He could give in his adhesion to the report on that head; but they had just had a very remarkable communication, and he had learned something that he had never dreamt of before. He could not now believe that the gall-bladder, as he imagined, contained a muscular coat. If there were muscular fibres in the gall-bladder, he did not believe that they would not contract under the influence of electricity. Under these circumstances, he wished to move a resolution, that this Section represent to the Association generally that grants should be made for similar purposes of investigation, and he should like to add that the Section viewed with regret that the workers on the committee appointed with regard to the mercury question—he was not speaking of Dr. Bennett, or Dr. Christison, or Dr. MacLagan, or Dr. Rogers, who gave their services as directors and suggestors, but he was speaking of the assistants, the working men, but for whose labours the work could not have been gone through—had not received that to which they were entitled. He thought these men deserved at the hands of the Association, not payment, because he did not think they were in a position

to seek that, but the acknowledgment to which they were encouraged to look for their services. At Dublin it was confided to the Council that they should take measures to remunerate; and at Oxford the same resolution was again carried, and he now wished to submit this as a distinct resolution to the Section.

Mr. THOMAS UNDERHILL (Great Bridge) seconded the resolution. It should be one of the great objects of the Association to promote scientific investigation, and in no way could the funds be better expended than by contributing towards necessary expenses of such inquiries.

Dr. ELLIOT (Carlisle) said that the subject did not admit of much comment, inasmuch as it related to matters of fact, which, to many of them, were no doubt very startling, as they went a very long way to upset their preconceived notions, and in no small degree to undo certain phases in their teaching during student days, and in their practice subsequently. The future bearing of such facts as had been opened out to them must be exceedingly important; and, in reference to the proposition that had been made and seconded, he thought they had a peculiar significance, because these very facts coming from obscure and unknown observers would not obtain the patient hearing and would not receive the confidence which they were sure to command, coming from such a source as they did. No means were at hand of correcting or refuting what had been stated, and at the present time all they could do was to wait patiently until either corroboration or refutation followed.

Dr. A. T. H. WATERS (Liverpool) had long felt and had long adopted the view and practice that, as a cholagogue, mercury was of little use; and he had adopted that view, not from having made actual experiments upon the lower animals, but from clinical observations. But there could not be a doubt as to the value of mercury as a purgative, and he thought in some cases it possessed a value which no other purgative did possess. At the same time, in a large number of cases, where mercury was given in combination with some other purgative, the mercury might be very beneficially omitted. He thought that the experiments conducted showed that in the animals experimented upon at all events there were no muscular fibres in the gall-bladder; but, supposing that they admitted that a dose of mercury given by the mouth would, by its action on the duodenum, produce a flow of bile into the small intestines, it did not at all prove to him that the mercury increased the secretion of bile from the liver. They might admit that the mercury given by the mouth itself had some effect in throwing mercury into the intestines, but it did not invalidate the circumstance that the bile-cells were not increased in their function.

The PRESIDENT said that the gentlemen who had assisted the Edinburgh Committee had gone through an extraordinary amount of hard work, which none could imagine without having conducted some similar process. There were the experimenting upon dogs, the collection of their feces, the collection of their urine, the analyses of these things; then the trouble, the smells, and the abominations to encounter, and *post mortem* examinations besides. All this was what nobody but an experimental physiologist could have any conception of; and the experiments were carried on for two years, and occupied the whole amount of the spare time of these gentlemen. Still he did not think that they regretted the labour that they had undertaken. One of them, as they knew, had been made Professor of Physiology in King's College, London; and he believed he had gone to that position in consequence, partly, of the well known skill and labour which he had brought to bear during the investigation which they were discussing. He, however, had endeavoured to show that such sacrifices could not be made always; but still he thought if they gave a vote of thanks to these gentlemen they would be very well satisfied, whilst the Association would not complicate itself with reference to the events of the past, and would obtain guidance for the future. Such was the result of his experience of the Committee, that he would not think of asking a young man to spend six or eight months of his time in analysing feces and urine, and thrusting mercury down dogs' mouths, without remuneration. The best course to take, however, was to remedy this for the future. He dared say the Council wished to recognise the labours of these gentlemen, but had not the power. Still he did hold that, in that great Association, consisting of 4,000 members, and which must receive £4,000 or £5,000 annually, the small sum of £200 might be set aside for the purpose of advancing their knowledge of medicine. Let them spend their thousands upon their JOURNAL and upon its contributors, and upon editors and secretaries; everything in that respect was useful, but out of the aggregate sum they must contrive to get £200 for the noble work of original investigation. The Mercurial Committee had expended in their investigations £116 in buying dogs and drugs, and paying for attendance upon the dogs, etc. He therefore thought at least £200 would be required for subsequent inquiries, as they could not offer to a man who undertook the work less, perhaps, than £50.

Dr. E. WATERS, on the suggestion of various members, declined to

mention so large a sum as £200 in the resolution, which was agreed to as follows: "That the Physiological Section unanimously desire that a grant be annually made by the British Medical Association in support of original investigations of a scientific character bearing on medicine."

Dr. A. T. H. WATERS said there ought to be a resolution expressing the thanks of the Section to the Committee for the labours they had gone through in connection with the mercurial investigation. He moved—"That this Section desire to express their best thanks to the Committee which was appointed for the investigation of the action of mercury on the secretion of bile, for the great labours which they have undergone in connection with the subject."

Dr. E. WATERS seconded the motion, which was adopted without discussion.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

1. *The Emperor's Health.*—2. *The Prince Imperial's Health.*—3. *Smith's System of Suspension in Fractures and Certain Affections of the Inferior Extremity.*

Paris, Monday, September 13th, 1869.

1. *The Emperor's Health.*—The Emperor has been very much of an invalid lately; but the sensation articles, the fall in the value of stocks, and the panics which have occurred on the Stock Exchanges of Europe, have not been justified by that circumstance. Though the recent, and even yet hardly allayed, alarm was not warranted by the Emperor's actual condition, it was not to be wondered at, nor were the innumerable unfavourable rumours in circulation more than natural consequences of the obstinate official reticence which existed as to the nature of his Majesty's illness. Had bulletins, signed by the physicians and surgeons in attendance, been regularly issued, the public mind would not have been painfully excited; indeed, had matters been very much worse than they were—had there been actual and imminent danger—the truth regularly and judiciously told in responsible bulletins would have had far less evil consequences than those which resulted from leaving the situation wholly in the hands of newsmongers, ever itching after sensation and novelty. An imperfect attempt to put on a better footing the news of the Emperor's health began last Thursday. On the evening of that day, and on every subsequent evening, an officially prepared, but unsigned paragraph was sent round to all the newspapers. These official paragraphs, for which no one is officially responsible, have small value in mercantile and medical circles. At first, when MM. Fauvel, Nélaton, Ricord, and Corvisart were in attendance twice a day, bulletins ought to have been issued with their signatures attached; and now, a bulletin every two or three days, signed by M. Corvisart, who is at present, I believe, the only professional attendant, would be sufficient.

The Emperor has no doubt lately suffered a great deal of pain, and has required careful medical and surgical aid for an old troublesome stricture, for hæmorrhoids, and for pains which are currently talked of as "rheumatic"; but I believe that no apprehensions of a serious character have been entertained as to the state of his health by his medical and surgical advisers during what may now almost be termed his late illness. It is indeed impossible to conceive that such apprehensions were entertained; for, when the Emperor was most suffering and most unfitted for his ordinary occupations, the Empress and the Prince Imperial started on their excursion to Corsica. Had the sufferings then being endured implied danger, the Empress and her son would assuredly not have been allowed to go so far away, and be absent for so long a period from St. Cloud.

I have heard it said in medical circles, but I cannot vouch for the accuracy of the statement, that, when a prisoner at Ham, the Emperor was treated by Dr. Marjolin for local affections of a character precisely similar to those which have lately excited so much discussion and alarm in the public mind.

As is well known, the Emperor has long been an occasional sufferer from severe "rheumatic" pains. There are so many discordant opinions in circulation as to the cause and character of these pains, that I am unwilling to hazard an opinion on the subject. I may remark, however, that I have repeatedly heard the question asked, when these pains were under discussion in medical circles:—Why does he not, as before, go to Vichy? A gentleman who saw the Emperor on foot one day last week—on Thursday, I think—tells me that he looked very pale, and walked awkwardly, with the legs far apart, stooping forward, the bend being at the hip-joints. There is nothing new in this attitude; I observed it more than sixteen months ago, when I had an opportunity of

being very close to the Emperor. Nothing was said as to his being in bad health at that time, though no one could look at him and say, without some reservation, that he was hale for his years. At present, weather permitting, the Emperor drives out for an hour every afternoon, usually alighting from his carriage and walking for a short time. He is generally accompanied by the Empress, Dr. Corvisart, and others, and does not shun publicity in his promenades.

2. *The Prince Imperial's Health.*—The health of the Prince Imperial is at present excellent, and has been so for a considerable time. Nevertheless, rumours are still afloat, though now generally discredited, that he is a scrofulous subject, and frequently afflicted with running sores. My information enables me positively to state, that he never has been afflicted in this manner, nor with any disease of any joint. About two years ago, he had a rather deep-seated abscess in the glutei muscles, from which healthy pus flowed, when it was opened by M. Nélaton. This abscess originated the rumours of scrofula and unsound constitution; they were at one time assiduously propagated for political purposes, and have not yet been quite silenced.

3. *Smith's System of Suspension in Fractures and in Certain Affections of the Inferior Extremities.*—Within the last few days, I have seen Professor Smith's method illustrated, in a very interesting and instructive manner, by two cases at present under Dr. Shrimpton's treatment in the Galignani Hospital. It seems remarkable that the ingenious and very simple apparatus of Professor Smith has not as yet taken its merited high place among useful medico-chirurgical contrivances. I recommend surgeons who are not acquainted with it, to read Dr. Shrimpton's paper (illustrated by woodcuts), which appeared in the *Gazette des Hôpitaux* for 4 July, 1867, entitled: *Système de la Suspension pour le Traitement des Fractures et des Maladies affectant les Membres Inférieurs*; also, an account of a case of comminuted fracture of the leg published by the same gentleman in the *Gazette Médicale* at a previous date. In this case, necrosis and gangrene occurred as consequences of the fracture. By the use of Smith's apparatus, the patient was brought up to Paris by railway from the banks of the Rhine in Switzerland, a distance of 200 leagues, without suffering any pain or any injury, and indeed without incurring any risk.

Smith's apparatus was first brought prominently under the notice of French surgeons by Dr. Gantillon of Paris, who brought it with him from the United States of America, and presented it to the Imperial Society of Surgery in 1864. As modified by Dr. Shrimpton, it can be obtained from Charrière, the Parisian surgical instrument maker. The modifications are essential to success.

ASSOCIATION INTELLIGENCE.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting of the above Branch will be held at the Harp Hotel, Dover, on Thursday, September 23rd, at 3 P.M.

Dinner will be provided at 5 o'clock precisely. Charge 5s., exclusive of wine.

ROBERT L. BOWLES, *Honorary Secretary.*
Folkestone, September 15th, 1869.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE next meeting of the above Branch is appointed to be held at St. Bartholomew's Hospital, Rochester, on Tuesday, September 28th, at 3.45 P.M.

Dinner will be provided at the Sun Hotel, Chatham, at 5.45 P.M.

The Antiseptic Treatment of Wounds by Carbolic Acid will be brought before the meeting by A. W. Nankivell, Esq., F.R.C.S.

Trains down:—North Kent Railway, 2.10; London, Chatham, and Dover Railway, 2.5.

FREDERICK JAMES BROWN, M.D., *Hon. Secretary.*
Rochester, September 14th, 1869.

SOUTH MIDLAND BRANCH.

THE thirteenth autumnal meeting of the above Branch will be held on Wednesday, October 6th, in the Board Room of the Stamford and Rutland Infirmary, at 2 P.M.: WILLIAM NEWMAN, M.D., President, in the Chair.

Gentlemen intending to read papers or cases, are requested to send the titles forthwith to Dr. Bryan, Northampton.

J. M. BRYAN, M.D., Northampton } *Hon. Secs.*
G. P. GOLDSMITH, Esq., Bedford }
Northampton, September 1869.

FORMATION OF A BRANCH IN SOUTH WALES.

A MEETING of medical men residing in Swansea and the neighbourhood was held on August 31st, at Swansea, in the Lecture Theatre of the Royal Institution of South Wales, to consider the propriety of establishing a Branch of the British Medical Association in South Wales. There exists already a Medico-Ethical Association, which embraces the members of the medical profession in practice in Swansea and its immediate neighbourhood; several of these gentlemen are already members of the British Medical Association.

The chair was taken by Dr. PADDON, the President of the Medico-Ethical Association. He briefly stated the object for which the meeting had been convened, and introduced Mr. Watkin Williams, the General Secretary to the Parent Association.

Mr. WATKIN WILLIAMS expressed his satisfaction in attending the meeting, and he hoped that South Wales would no longer be conspicuous by its absence among the representatives of other parts of the Kingdom in the proceedings of the British Medical Association. Mr. Williams explained the best method of establishing a Branch Society, and the necessary steps to be taken to ensure its proper working when established.

After some general discussion, the following resolution, proposed by Mr. Andrew DAVIES, and seconded by Mr. J. G. HALL, was carried unanimously.

"That, in the opinion of this Meeting, it is desirable to form a Branch of the British Medical Association for South Wales and Monmouthshire; and that Dr. Wilks be requested to undertake *pro tem.* the duties of Secretary, to communicate with the members of the profession in those districts, with a view to secure their cooperation, and to report the result at a meeting to be convened at his discretion."

Dr. PLATT WILKS, Honorary Secretary to the Swansea Medico-Ethical Association, stated that he had sent notices of the proposed scheme to all the members of the local Association, and also to many other gentlemen residing at Llanelly, Neath, Cardiff, and other towns in the county. He had received very favourable replies from the greater number of those who were prevented from attending the meeting, expressing their cordial approval of the proposed Branch, and signifying their wish to join the Association.

Several gentlemen present also expressed their desire of enrolling their names, a list of which was taken by the Honorary Secretary to be forwarded with the rest to the parent Association.

The CHAIRMAN, seconded by Mr. E. DAVIES, proposed a vote of thanks to Mr. Williams for his kindness in coming so far to assist, by his advice, in the formation of the local Branch of the Association.

Dr. LEWIS of Maesteg, seconded by Mr. MOWAT, proposed a vote of thanks to Dr. Paddon for his services in presiding on the occasion; after which the proceedings of the evening terminated.

CORRESPONDENCE.

THE DIALECTICAL SOCIETY.

SIR,—In the BRITISH MEDICAL JOURNAL for August 28th, I find a letter from the Honorary Secretary of the London Dialectical Society (D. H. Dyte), in which he states that the whole of the allegations respecting the Dialectical Society contained in my address lately delivered at Leeds are entirely untrue. He states, first, that the Society does not advocate Malthusianism; secondly, that the Society did not seek the co-operation of the medical profession to assist in the limitation of families; and thirdly, that the Society did not publish any book.

As to the first statement, it is very likely that no formal vote was taken; and indeed it is very possible that such a proceeding might have been superfluous and unnecessary; but that Malthusian principles were in favour among the members is pretty plain, when we find an important officer of the institution (the Treasurer, Dr. Drysdale) giving utterance to the following sentiments in a paper read by him before the Society on May 26th, 1869, and reported by himself in the *Medical Press and Circular* of June 9th, 1859. "Hence there was, as the illustrious Mr. Malthus had pointed out in his immortal work, the most important work perhaps which had ever appeared in its consequences towards the happiness of the race," etc.; and further on, the Treasurer of the Society reports himself to have said: "With Sismondi, then, he maintained that, wherever mischievous prejudices were not inculcated in the name of religion, although such teaching could lay no claim to such a sacred name, no parents would bring into the world more children than they could bring up well and provide for at their death." Finally, in the words of the greatest thinker of the age, Mr. John Stuart Mill, he held that

"little improvement can be expected in morality until the producing of large families is looked upon in the same light as drunkenness or any other physical excess."

In the debate that followed this paper I find that seven members took part. Of these, four supported the Malthusian views of Dr. Drysdale, and but one (Mr. Edward Jenkins) expressed an opinion adverse to them. From this single specimen your readers can judge what position Malthusian principles hold in the London Dialectical Society.

With respect to the second point in the Honorary Secretary's objection, that the Society did not seek the co-operation of the medical profession to assist in the limitation of families, a similar reply is to be given. The Society did not, very likely, formally propose and adopt such a resolution; but to save time, I will quote an editorial article from the *Medical Times and Gazette* of May 8th, 1868, which will give your readers information upon this point.

"We are compelled to notice—but for the present very briefly—a most scandalous insult offered by Viscount Amberley to our profession, one which we can only account for on the supposition of an entire oblivion of all difference between right and wrong, moral and physical. There is a society, called the Dialectical, established for the free discussion of any subject that may be brought before it, and especially for such as, however much they may need discussion, a delicacy, true or false, banishes from ordinary meetings. We have no objection whatever to this. A meeting of this society was held last month to discuss the 'Happiness of the Community as affected by large Families.' The subject was introduced by a Mr. Laurie, who advocated 'a small family system', such as prevails in France and elsewhere, as a remedy for over-population and poverty. One speaker, Dr. Chapman, who seemed like one sane man amongst a crowd of lunatics, denied the proposition on which the whole question turned. Nevertheless, the President, Viscount Amberley, said 'that the prevention of over-population was by far the most satisfactory method of attacking the evil..... Unfortunately, the influence of the clergy, in common with that of society and the natural passion of mankind, were opposed to the prevention of over-population. He objected to celibacy. Well, then, the only alternative seemed to him to be small families; and, after all, it turned out to be a medical question, how this could best be accomplished without injury to the health. He wished much he could hear the proposals of the medical men in the room as to the best means of limiting numbers. In America, ladies were in the habit of keeping back their families; but the methods they employed seemed to him to be dangerous to health. Hence, he should much like to hear a discussion as to whether some innocuous measure might not be discovered. It was remarkable that the subject should first have been taken up in America, where it was not so much required as it was here.' We shall return to this again. Meanwhile, before Lord Amberley repeats his insolent question, as to how far medical men are willing to degrade women and make themselves accomplices in unnatural crimes, we would observe that the fact of the prevalence of these infernal practices in America, where there are no aristocracy, no restriction on the supply of land, and no want of space, shows the hollowness of the excuses set up by such wretches as desire to enjoy the privileges of selfish lust, and to evade the duties of matrimony."

When such sentiments fell from so distinguished a member of the society, who occupied the chair at the meeting, and there is no record of indignant repudiation by the medical or other members who were present, your readers may judge for themselves whether it is wholly untrue that medical men were invited to give their assistance in such disgusting pursuits.

As to the third objection raised to my address, I have only to say that I did not say that the Dialectical Society had published any book. I quoted from a book which was written thirty years before the Dialectical Society was in existence; and I warned them against the doctrines contained in that book. I am, etc., THOS. E. BEATTY.

Dublin, August 31st, 1869.

ANTISEPTIC TREATMENT.

SIR,—In the last number of your JOURNAL, Dr. D. Campbell Black of Glasgow refers to my cases of ovariectomy in a way that must lead any one to suppose that I have no faith in the antiseptic treatment of wounds.

From my first operation of ovariectomy in 1862, to my ninety-second done this morning, I have more or less perfectly used some antiseptic dressing. At first, bags of charcoal, sulphite of soda, sulphate of iron, or Condy's fluid, were employed. In my twelfth case I began the use of the tar-bags. This admirable dressing I received from Mr. Spencer Wells, to whom I shall ever be indebted for much practical information most generously given, which has tended more than anything else

to keep down my death-rate, and helped me to avoid the rocks on which he himself first split. For nearly the last three years, along with Mr. Wells' dressing, I have in every case very freely used carbolic oil or the watery solution, both during the operation and in the after-treatment.

In the cure of other wounds, I now invariably follow Mr. Lister's method. Twice during the past month I have had occasion to operate for cancerous disease of the breast. In both the larger vessels were twisted, and numerous small oozing points were secured by carbolised catgut-ligatures. Both wounds were dressed antiseptically, exactly as I have seen Mr. Lister do. In neither case was there a single drop of pus from first to last, and the patients were convalescent in a few days. I have also employed the catgut-ligature on two occasions of very extensive adhesions of the omentum in ovariectomy, and also for sutures in closing the abdominal wound. I think I am only now beginning to realise what Mr. Lister's antiseptic method and his carbolised animal-ligatures are yet to do for surgery.

I cannot think, as Dr. Black would have us to believe, that sentiments similar to his own on the value of Mr. Lister's discoveries are entertained by the "bulk of the profession" in Glasgow. Mr. Lister has raised the medical school of that city and given it a name: it seems hard that on the eve of his leaving it there should be found even one to cast at a stone at him. I am, etc.,

THOMAS KEITH.

Edinburgh, September 1869.

THE LATE F. W. GIBSON, M.D.

SIR,—I beg to send you a few particulars respecting my nephew, Dr. F. W. Gibson, who has fallen a sacrifice as another victim to the state of things at the St. Pancras Parochial Infirmary. If you would kindly publish a short statement founded on these *data*, it would gratify Dr. Gibson's many friends, and furnish a note of warning from the dead to the living.

Dr. Gibson was a distinguished pupil of University College, and a graduate, with honours, in Arts and Medicine, of the University of London. He filled for some years the offices of House-Surgeon at the Taunton and Somerset Hospital, and of Resident Surgeon at the Broadmoor Government Lunatic Asylum. At the close of 1867, he was chosen Senior Resident Medical Officer of the St. Pancras Parochial Infirmary, being then in perfect health. Here, as elsewhere, he devoted his best energies to the welfare of the poor committed to his charge, and was the means of effecting many improvements. His zeal in the reform of abuses did not tend to increase his popularity with some of the Guardians and officials, and subjected him to many annoyances. On one occasion, he was charged with getting up unnecessary inquests for the sake of the fees: nevertheless, he persevered in doing his duty, *per fas et nefas*, regardless of consequences to himself. In the course of time, the impure atmosphere of the place began to tell on his constitution and undermine his health. Then low fever supervened; and eventually tubercular cachexia became developed. Search was made in vain for the source of the sewage smells; but there they were, doing their usual work slowly but surely. Dr. Gibson obtained a brief holiday, hurrying back to his post on hearing of the death of the matron—herself a victim to sewage-poison. He now became so weak and ill that his friends were alarmed for his life; and, under the advice of eminent physicians, he made preparation for an immediate voyage to Australia. Meanwhile, looking forward as he did to the completion of the new Infirmary at Highgate as a remedy for the more important evils of which he complained, where he would have better accommodation for himself, a higher salary, and more independence in carrying out his views of benefiting the sick, he naturally wished to retain the appointment he held, in case it should please Providence to bless the voyage to the recovery of his health. He therefore requested the Guardians to give him a long furlough, sufficient to enable him to pass the ensuing winter at Sydney, if it were deemed advisable. He reminded them that he had broken down in their service; and he offered to give up the whole of his salary during his absence. They would not, however, grant him more than three months' leave, and consequently he resigned. The sailing of the ship was, unfortunately, delayed; but at length he was off, under as comfortable circumstances as possible. Disease had, however, gained the mastery, and he died on June 24th, hardly one week from his leaving England. His immediate decease was rather sudden and unexpected, following a fit of coughing. Thus perished, in the prime of life, a sacrifice to the defective sanitary state of a crowded parochial infirmary, a valuable public officer, and an honourable, conscientious, and talented member of the profession.

I am, etc., W. F. MORGAN, F.R.C.S.

Berkeley Square, Bristol, Sept. 1869.

CONSUMPTION IN ICELAND.

"For what is impossible cannot be, and very very seldom comes to pass."

SIR,—Somebody, Snorro Sturleson I believe, heading a chapter, Snakes in Iceland, begins and ends it with, "There are no snakes in Iceland." The epigraph, *mutatis mutandis*, would answer Dr. Leared's, Does phthisis occur in Iceland? since his reply, reduced to a few words is, There is no phthisis in Iceland. Next to a reasonable assent, I court a reasonable opposition, and I hope that neither Drs. Leared nor Hjaltelin will imagine that I impute to them, for a moment, in respect of their comments on my Theory as to Tubercle Genesis, any object save that which they claim, namely the furtherance of truth. This premised, I must affirm that Dr. Leared has not adduced any facts in support of his position, that there is no phthisis in Iceland, which the science of pathology can accept as conclusive. It is beside the question whether phthisis be more or less prevalent in Iceland, than in Denmark, seeing that Dr. Leared denies the very existence of phthisis in Iceland, unless as imported. Supported by Dr. Hjaltelin, he would set aside my position that rebreathed air alone induces tubercle, and proclaim that in Iceland there was no indigenous tuberculosis of the lungs whatever. A mighty likely case, seeing that Iceland, owing to the unwholesome habits of the people, is the most unhealthy country in Europe. Schleisner, indeed, adverts to the multitude of chronic sufferers, "*chroniske uhelbredelige Patienter*." And yet, this notwithstanding, the inhabitants have the absurd pretention to be exempt, not only from consumption, but from syphilis and diseases of the heart. This proposition, however, he has not sustained. If the production of tubercle by rebreathed air, as I claim to have established, be a law of nature in England, Iceland under like circumstances can claim no immunity. At p. 40 of Schleisner's book, he adverts to the frequency of scrofula, "*Meget stort Antal af Krøblinge*." I need not remind Dr. Leared of the well known law that local tubercle, as a general rule, denotes its presence in the lungs also. The pathology of the living organism is alike in both. What induces disease in England induces it in Iceland, and conversely. What should we say of an inquirer who, speaking of a pathological condition the very commonest incident to the animal economy should, without conclusive statistics, the natural history of cases, and the particulars of extended *post mortem* inquiries, affirm that in Bavaria, for example, the pathological condition in question did not subsist unless as imported? Yet this, putting Iceland instead of Bavaria, is precisely what has been attempted by Doctors Leared and Hjaltelin. During a period of thirty years, Dr. Hjaltelin informs us through Dr. Leared, he has not met a single instance of indigenous phthisis in 30,000 cases, although in Iceland the huts do not afford, very often, more than 100 cubic feet of air to each individual. Dr. Hjaltelin further affirms that *post mortem* examinations become every year more common, he does not say how common, in Iceland, and that he has made numerous autopsies of which he yields no detailed particulars, the result being that *not a single case of tubercle of the lungs, up to the present, has been in this way discovered*. Fancy the frequency of *post mortem* examinations, during the short Icelandic summer or chill Icelandic winter, amid a scattered population, often remote from medical men, conducted in hovels very often restricted to 100 cubic feet of air per individual. I make here no special comment on Dr. Skaptason's averment, further than that it is alike incoherent and incredible with that of Dr. Hjaltelin. No statement could well be more affirmative; and none, I believe, more calculated to mislead and deceive.

Dr. Hjaltelin refers to Dr. Schleisner, but does not attempt to impeach his statements or his veracity. The presence of cysticerci in the lungs of Icelanders does not, of course, affect the question as to the frequency of tuberculation, since one condition is perfectly compatible with the other. And, now, I come to Schleisner's work, *Island undersøgt fra et lægevidenskabeligt Synspunkt*, wherein he states that among maladies principally fatal there were of *Brystsye* or phthisis, within ten years some 1167 cases, and of *tærende Syge* or decline, two names I take it for the one thing, 377 cases, or 1544 in all. In another place he adds, of consumption and decline, whereof the majority suffer from hydatids, the mortality, in Iceland, amounts to 10.3 per cent., "*af Brystsye og tærende Syge hvoraf imidlertid vistnok de Fleste hade været bortrevne af Hydatidesygdommen, aßer der paa Island 10.3 p. ct.*" This was just the amount of deaths in the ranks of the forlorn hope at the assault of Badajos, and which Dr. Hjaltelin, in the face of Schleisner's direct testimony, has the simplicity to ask us to believe has no existence, from tubercle, whatever. This most explicit statement is not in the least affected by the translation of the Icelandic word *Brjdstveiki* into the Danish word *Brystsye*, the two languages, otherwise, being merely forms of one and the same tongue. What position might I not now, to some at least, appear to occupy, did I not possess Schleisner's work, or were unable to refer to its most interesting contents. Will my

opponents contend that they alone are deserving of credit, and that Schleisner, laying for the moment aside my own reasonings and averments, is unworthy of any? Will they persist in their, under the circumstances, unparalleled statements, or will they suffer us to accept the testimony of a most competent observer? Either horn of the dilemma lies open to them. The pathology of Iceland, we may be well assured, admits of no other form of successful investigation than that pursued by the rest of Europe and the world. Statistical evidence, individual clinical and *post mortem* details, on a sufficiently extended scale, must per force assume the place of rash assertion and unsustained conclusions.

I am, etc.,

Belfast, Aug. 1869.

HENRY MAC CORMAC, M.D.

DEBATING COLUMN FOR DISCUSSION OF PAPERS, ETC., PUBLISHED IN THE "JOURNAL".

TREATMENT OF RHEUMATIC FEVER BY PERCHLORIDE OF IRON.

SIR,—In rheumatic fever, the blood is in a highly fibrinous condition; there is also a tendency to the deposit of fibrin, and to the formation of clots in the blood. The perchloride of iron is known to favour the coagulation of the blood. These are, I believe, well-established facts.

Dr. Russell Reynolds in his paper, an extract of which is given in the JOURNAL, informs us that he has treated eight cases of rheumatic fever with the perchloride of iron, and that of these one died with cerebral symptoms, and another with intercurrent pneumonia.

I well remember a case of tonsillitis which I treated with the perchloride of iron; the patient died with "cerebral symptoms"—such, indeed, as distinctly pointed to the formation of a clot, which must have obstructed the flow of blood to the brain. May I ask whether Dr. Reynolds's case was at all similar to this, and also whether, in the other case, it is possible that embolism of some of the pulmonary vessels may have given rise to the "intercurrent pneumonia"?

I have treated many cases of rheumatic fever with the iodide of potassium and large doses of the bicarbonate, and have certainly met with success equal to that reported by Dr. Reynolds, nor have I ever had a case which terminated fatally. I cannot help believing that the mode of treatment warded off those "symptoms and intercurrent diseases" which in Dr. Reynolds' cases proved so injurious.

Should further experience prove the perchloride of iron to be a remedy in rheumatic fever, my fear is that it will be a most dangerous one; whilst on the other hand, in the alkaline treatment, we have at least the means of lessening the tendency to the separation of fibrin from the blood, and of preventing those deposits upon the valves of the heart which we so much dread as the consequence of rheumatic fever.

In the case of tonsillitis to which I have referred, I do not consider that the use of perchloride of iron was the sole cause of embolism, but that it would favour, rather than prevent, such a complication.

I am, etc.,

H. ERNEST TRESTRAIL, L.R.C.P. Edin.

Harston, Sept. 1869.

EXPLORATION OF THE FEMALE BLADDER.

SIR,—At the conclusion of an interesting paper of Mr. Lund's, in the JOURNAL of July 31, upon "the discovery of a foreign body in the bladder by means of the endoscope, and its subsequent removal by the operation of lithotomy," that gentleman calls attention to the sharp "click," or concussion, which is sometimes to be noted as the female catheter enters or is exploring the bladder, and which "click" is liable to be mistaken for contact with a stone. The conditions necessary for its production are—a full bladder, a hollow instrument, and a sudden arrest in it of the urinary current. I have never heard this phenomenon alluded to before, but have experienced it to my cost.

Some years ago, a young lady was suffering from anomalous nervous symptoms, and, amongst others, she had retention of urine. For a long time the catheter was required, the patient describing a sensation as of "something having fallen in the bladder and stopped up the passage." Now and then it happened that this "something" did not fall, and for that day the urine passed comfortably. Of course I was not surprised, after using the catheter a few times, at striking a calculus. A careful exploration with a solid sound, however, revealed nothing; yet, the very next day, my catheter gave a smart click as I entered the bladder. This happened again and again, and so convinced did I become that the instrument struck and pushed aside a solid substance, that I determined upon dilating the urethra; my forefinger was eventually swept round the interior of the bladder, only to find that viscus perfectly empty and healthy. The case was one of hysteria. The question suggests itself: If the sense of contact with a stone was experienced on any, why not on every occasion of passing the catheter? I believe the explanation to

be this: the same conditions did not invariably obtain. There was always a full viscus and a hollow tube; but, if the stilette of the catheter fitted accurately, no sound was heard, whereas, when, as often happened, the stilette was not air-tight, and a few drops of urine escaped, the concussion was both heard and felt. Mr. Lund lucidly explains this. I need not repeat his observations.

I am, etc.,

Faversham, August 1869.

EDWARD GARRAWAY.

ACTION OF MERCURY IN INFLAMMATION.

SIR,—I observe in the BRITISH MEDICAL JOURNAL of July 31st, at page 122, a very important and interesting article, from the pen of Dr. C. W. Thorp, on Abscess of the Brain, with Anomalous Symptoms. From the very accurate description of the case, as given by Dr. Thorp himself, it would appear that his patient became very ill about the 9th or 10th of March, with headache and dyspeptic symptoms, and died on the 17th of the same month; and, on *post mortem* examination, twenty hours after death, the dura mater was found deeply congested, a large quantity of serum beneath the arachnoid, with about two ounces of pus in the right optic thalamus. Now, strange as it may appear to some men, such is the general result of all similar cases, in my opinion, when calomel or mercury has been given or administered after the manner it was in Dr. Thorp's case. The first effect I have found from calomel or mercury upon any inflamed part, or tumour, in the human body, was always to increase the inflammation, and to hurry it forward to suppuration and ulceration of the parts affected; and this peculiar action or effect of mercury upon inflammation I pointed out several years ago in the *Medical Circular*, when taking exception to, or opposing, Dr. C. Drysdale's wholesale condemnation of mercury in the treatment of syphilis. As Dr. Thorp's patient was ordered half-grain doses of calomel every hour for the space of forty-eight hours, perhaps (no doubt with the best intention), and then again, by advice of Mr. Turner, a grain of calomel every four hours—not to speak of the blister at the back of the neck being dressed with strong mercurial ointment—so I do not wonder in the least that two ounces of pus were found in the optic thalamus of Dr. Thorp's patient on *post mortem* examination. Such I believe to be almost invariably the result of administering calomel or blue pill after the above manner, and more especially during the acute stage of those inflammations.

I am, etc.,

N. MCGREEVY, F.R.C.S. Edin.

Drogheda, August 1869.

OBITUARY.

WILLIAM JOCELYN BRADFORD, M.B.

ON August 14th, at Killowen Point, Co. Down, Ireland, whither he had repaired early in July, in the hope of deriving benefit from the pure air of the place, died William Jocelyn Bradford, in the prime of life, and in the middle (as it seemed) of a career of usefulness.

Dr. Bradford graduated M.B. at Trinity College, Dublin, in 1852, having, four years previously, become a Licentiate of the Royal College of Surgeons of Ireland. He commenced the practice of his profession as Medical Superintendent of the Government Prison, and Medical Officer of the Ordnance Department at Spike Island; but settled at Islington about thirteen years since. On the establishment of District Medical Officers of the Post Office in 1859, he was appointed Medical Officer of the Northern District, and, up to the end of last June, discharged the duties of that office with praiseworthy zeal and efficiency; and it may safely be said of him, that he was powerful in diagnosis and successful in treatment. Dr. Bradford was, on the formation of the Post Office Rifle Corps, early in 1868, gazetted Surgeon thereof, having previously been for several years Assistant-Surgeon in the London Irish Rifles. His genial smile and ready wit will be missed by many; while his ready sympathy for suffering, and his kindly manner to all with whom he was brought into contact, will long be had in remembrance of those who knew him intimately.

EDWARD FRANCIS DEHANE, F.R.C.S. Lond., WOLVERHAMPTON.

It is with deep regret that we announce the death of Dr. Dehane, of Wolverhampton, which took place suddenly on the morning of September 8th from heart-disease. Mr. Dehane was a fellow-apprentice with Dr. Bell Fletcher at Shiffnall, and received his professional education at Middlesex Hospital (where his brother, Dr. John Dehane, was House-Physician for some time). He became a Licentiate of the Society of Apothecaries in 1825; a Member of the Royal College of Surgeons in

1826, and a Fellow in 1853. He was honorary surgeon to the Wolverhampton Dispensary; and when that establishment was enlarged into the South Staffordshire General Hospital, he became senior surgeon to that institution, and held the office many years. He was also a member of the Wolverhampton Town Council, a position which he accepted solely that he might advance those propositions for sanitary improvement which his extended experience had shown to him to be needful for promoting the healthfulness of the town. His exertions were, perhaps, premature; but they led the way to measures of improvement that have since been adopted. Mr. Dehane was appointed certifying surgeon under the Factory Extension Act, in which he took a warm interest, being chosen one of the committee of the Society of Certifying Surgeons at a meeting held in Birmingham. He was also on the staff of the medical officers of the Great Western Provident Society, and many years parish surgeon to the Wombourne district of the Leisdon Union; and he was holding other appointments of a similar nature. Mr. Dehane had been in practice forty-three years, and his death will be regretted by a large portion of the local community, as of one distinguished for his medical and surgical ability, his diligent and soothing attention to his patients, and highly esteemed by his medical brethren. Mr. Dehane was second son of the late Rev. John Dehane, M.A., Vicar of Beckbury, Salop, and also of Kildwick, Yorkshire. His mother was a daughter of John Wright, Esq., of Bolton Hall, Yorkshire, who was lineally descended from Sir Nathan Wright, last lord keeper in the reign of Queen Anne.

MEDICAL NEWS.

INDIAN MEDICAL SERVICE.—The Military Secretary, India Office, presents his compliments to the Editor of the *BRITISH MEDICAL JOURNAL*, and begs to enclose a list of the candidates for Her Majesty's Indian Medical Service who were successful at the competitive examination at Chelsea in February 1869, and who have undergone a course of instruction at the Army Medical School, together with the total number of marks obtained at the examinations at Chelsea and at Netley. [Maximum number of marks, 6,900.]

Order of Merit and Name.	Studied at.	No. Marks.
1. Calthrop, C. W.	London	5753*
2. Wood, A.	Aberdeen	5668
3. Sanders, R. C.	London	5455
4. Sanders, E.	London	5015
5. Franklin, B.	London	4895
6. Edis, F. P.	London	4888
7. Wright, R. T.	Edinburgh and London	4886
8. Davis, G. McB.	Ireland	4856
9. Gupta, K. P.	Edinburgh	4853
10. Howell, J. A.	London	4501
11. Linton, H. J.	Edinburgh and London	4255
12. Peters, C. T.	Edinburgh	4177
13. Roberts, H. P.	Edinburgh	4138
14. Colson, E.	London	4070
15. MacRury, C. W.	Edinburgh	4025
16. Murphy, M. E.	Ireland and Edinburgh	4021
17. Price, W.	Ireland	3938
18. Tyrrell, S. M.	Edinburgh	3921
19. Boalsh, W. H.	London and Glasgow	3863
20. Backhouse, J.	Ireland	3703

* Obtained the Herbert Prize.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, September 9th, 1869.

Clarke, Thomas Edward, Kirkby Lonsdale
Kite, John Alfred, Dover
Smith, Herbert Alder, Hatton Garden, E.C.
Sutcliffe, Arthur Edwin, Manchester
Williams, Josiah, Newport, Monmouthshire

The following gentlemen also on the same day passed their first professional examination.

Monks, Frederick Aubin, Guy's Hospital
Oakes, Charles, Dublin School of Medicine

MEDICAL VACANCIES.

THE following vacancies are declared:—

ABERDEEN, CITY PARISH OF—A District Medical Officer and Public Vaccinator.

BALLYMALION UNION, Co. Longford—Medical Officer for the Abbeyshrule Dispensary District: applications, October 1st; election, October 6th.

CHARING CROSS HOSPITAL—Physician for Treatment of Diseases of the Skin: applications, 28th. Lecturer on Midwifery; Lecturer on Botany.

CHORLTON, Lancashire—Certifying Factory Surgeon.

CHORLTON UNION—Consulting Medical Officer for the Workhouse.

EPHING UNION, Essex—Six District Medical Officers: applications, 23rd Sept.; election, 24th Sept.

GLOUCESTER GENERAL INFIRMARY—Assistant-Physician: applications, 30th Sept.

GREAT YARMOUTH HOSPITAL—Resident Medical Officer: applications, 27th Sept.; duties, 14th Oct.

LEXDEN AND WINSTREE UNION, Essex—Medical Officer for District No. 9: applications, 21st Sept.; election, 22nd Sept.

LONDON HOSPITAL—Assistant-Surgeon: election, 28th Sept.; Junior Assistant-Surgeon: applications, 20th Sept.

MANCHESTER, ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN—Resident Medical and Surgical Officer: applications, 23rd Sept.

NEWHAVEN UNION, Sussex—Medical Officer and Public Vaccinator for District No. 4: applications, 23rd Sept.; election, 24th Sept.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY—House-Surgeon: applications, 20th Sept.; duties, 15th Oct.

RATHDRUM UNION, co. Wicklow—Medical Officer for the Dunganstown Dispensary District: applications, 30th Sept.; election, 1st Oct.

ROSCREA UNION, Co. Tipperary—Medical Officer for the Workhouse and the Ballybritt Division of the Roscrea Dispensary District.

ROYAL ISLE OF WIGHT INFIRMARY, Ryde—House-Surgeon: applications, 5th October; vacancy, 3rd Nov.

SPALDING UNION, Lincolnshire—Medical Officer and Public Vaccinator for the Gosberton District: 27th Sept.

UNIVERSITY OF ABERDEEN—Three Examiners for Graduation in Medicine; election, October.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

PICK, Thomas P., Esq., appointed Assistant-Surgeon to St. George's Hospital, in the room of *B. E. Brodhurst, Esq., appointed Orthopaedic Surgeon.

WINSTONE, T. G., Esq., appointed, by the Postmaster General, Medical Officer of the Northern District Post Office, in the room of the late W. J. Bradford, M.B.

BIRTHS.

COLBECK.—On August 26th, at Dover, the wife of Thos. W. Colbeck, L.R.C.P.Ed., of a daughter.

DUKE.—On September 8th, at Upper Norwood, the wife of *Allen A. Duke, M.D., of a daughter.

DUNCAN.—On September 7th, at Gower Street, the wife of B. Archdeckne Duncan, M.D., of a daughter.

EDYE.—On August 28th, at Exeter, the wife of *Stonard Edey, Esq., Surgeon, of a daughter.

GROSVENOR.—On September 8th, at Ladbroke Grove, Kensington Park, the wife of George F. Grosvenor, M.D., of a son.

GÜNTHER.—On August 23rd, at Surbiton, the wife of A. Günther, M.D., of a son.

HARRISON.—On September 7th, at Ambleside, the wife of Robert Harrison, Esq., Surgeon, of a daughter.

JAMES.—On September 8th, at Perry Vale, Forest Hill, the wife of *A. James, M.D., of a son.

LOCKING.—On September 9th, at Wellerby, Hull, the wife of *B. Locking, L.R.C.P., of a daughter.

MILLAR.—On September 5th, at Edinburgh, the wife of John Millar, M.D., of a son.

Ogilvie.—On September 2nd, at Norwood, the wife of John F. Ogilvie, M.D., Egyptian Medical Service, of a son.

REID.—On August 27th, at Garioch, Aberdeenshire, the wife of John Watt Reid, M.D., Staff-Surgeon R.N., of a son.

SHAPLAND.—On September 3rd, at Thornton Heath, Croydon, the wife of *John Dee Shapland, Esq., Surgeon, of a son.

MARRIAGES.

***BANKS, Philip H., Esq.**, Surgeon, of Risely, Bedfordshire, to Sarah, daughter of the late W. G. BRINSLEY, Esq., of Bedford, at Neuchâtel, Switzerland, on August 31st.

BEADLES, Arthur, Esq., Surgeon, to Henrietta, daughter of Henry AMEY, Esq., Forest Hill, on September 7th.

CARTWRIGHT, J. A. T., Esq., Surgeon, Leintwardine, Herefordshire, to Ellen, eldest daughter of William KING, Esq., Beechfield, Walton, near Liverpool, at Bootle, on September 8th.

DUCKERING, Samuel, Esq., Assistant-Surgeon H.M.'s Indian Army, to Lilian, eldest daughter of the late John WRIGHT, Esq., of Rotherham, at Old St. Pancras, on September 1st.

ENSOR, John A., Esq., Surgeon, Tisbury, Wilts, to Harriette Whyte, youngest daughter of the late Samuel CROSS, Esq., at Puddletown, Dorset, on Aug. 31st.

EVANS, John Tasker, jun., M.D., Hertford, to Jane Emily, daughter of Edward H. GREEN, Esq., of Sprangwell, Herts, at Thundridge, on August 26th.

LIFF, William T., M.D., of Kennington Park Road, to Hannah, youngest daughter of the late Henry KEMP, Esq., of Streatham Common, at Kyre Wyard, Worcestershire, on September 13th.

IONIDES, Luke A., Esq., of Holland Park, to Elfrida Elizabeth, second daughter of George BIRD, M.D., of Welbeck Street, on August 29th.

MILSOME, John R., M.D., of Chertsey, to Mary, eldest daughter of the late James RICKMAN, Esq., of Staines, on September 2nd.

RAYNER, Richard, Esq., second son of Thomas Rayner, Esq., Grays, Sible Hedingham, Essex, to Mary Agnes, eldest daughter of J. Baxter LANGLEY, Esq., Surgeon, of Mildmay Park, at Stoke Newington, on September 8th.

DEATHS.

BURROUGHS.—On September 4th, Margaret Seely, infant daughter of E. F. H. Burroughs, Esq., Surgeon, Mayfield, Sussex.

***COOKWORTHY, Joseph Collier, M.D.**, of Plymouth, at Sandford Orcas, Sherborne, aged 78, on September 10th.

***DEHANE, Edward F., Esq.**, Surgeon, at Wolverhampton, on September 8th.

***GREAVES, George, Esq.**, Surgeon, at Stretford Road, Manchester, aged 63, on September 8th.

HYDE.—On June 19th, at Ladysmith, Natal, aged 3, Charles S. H., son of *G. Clarence Hyde, Esq., Surgeon.

LING.—On September 13th, at Gorleston, Suffolk, aged 25, Susan, wife of *William Squire Ling, Esq., Surgeon, Brightlingsea, Essex.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.

WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE Introductory Lecture at King's College will be delivered on October 1st by Dr. George Johnson.

STUDENS (Knutsford).—It is impossible to inform you "what would be the duration of a case of paraplegia ending in recovery and not caused by any injury or vertebral disease." No two such cases are alike.

NOISES IN THE HEAD.

SIR,—In your issue of the 4th instant, a Member of the British Medical Association asks for a remedy to meet this distressing affection. His case is singular, and may stand alone, from the circumstance that the noises "seem like bubbles bursting, or beads towards the front." Again, "the beads break towards the root of the nose, frontal sinuses, or fore part of the head"; there being, I apprehend, no noise in the ears. When heard in the latter situation, such noises are often kept up by pieces of wax, or disease of the bones of the ear, though these sounds are frequently due to neuralgia, or to debility of the nervous apparatus of the ear.

In one case that reached my notice, a lady 55 years of age, who was troubled with a hissing noise in the head, and seemed otherwise in good health, suddenly fell down in a fit of apoplexy, and expired.

In another case, a lady aged 60, has now suffered from noises in the head and ears since 1861. In the right ear, the sound is like that of a thrashing-machine in motion; in the left, it is like that of a singing tea-kettle, and is most apparent when the patient is alone. The noise sometimes creates so much confusion in the head, that she turns giddy, and is afraid of falling. In society or driving through the streets, she is not aware of it. Her general health is excellent. No remedy has been of any avail.

Gouty men advancing in life, or those suffering from suppressed gout with disordered liver and flatulent dyspepsia, are very liable to noises in the head, especially if they take active exercise after a meal, or habitually load their stomach. I have known such persons suddenly seized with vertigo and a buzzing noise in the head when walking, and they have only escaped falling by the timely assistance that has been rendered.

These noises in the head should always create suspicion in persons of full habit, who indulge in eating and sleeping, and are disinclined for exertion. If they are accompanied with headache, they may arise from over fulness, or disease of the cerebral vessels. Persons suffering from senile softening of the brain are very prone to these anomalous noises, and they should always increase the gravity of our prognosis. In those of purely nervous temperament, with a quiet circulation, there is not usually any harm to be dreaded, though even here the prognosis should be guarded.

Beyond keeping the mind tranquil, and the stomach and bowels regular, there is little to be hoped from treatment. In some cases, small doses of quinine (quarter of a grain), in combination with morphia (one-twentieth of a grain), three times a day, may do good; or strychnia (one-thirtieth of a grain) as frequently repeated. Counter-irritation behind the ears is also of service; but in many cases these patients become so accustomed to these sounds, that they are scarcely aware of them.

I am, etc.,
10, Manchester Square, September 1869.

W. H. DAY, M.D.

A SURGEON.—The supposed advantages of vaccination from the heifer (or calf) are—1, that the lymph is certain not to be contaminated by struma or syphilis; 2, that it is very energetic; and 3, that in case of scarcity, a large supply can easily be obtained. We do not think the first point of any value; and the second is counterbalanced by the circumstance that animal lymph is more irritating. In the case of a patient having resisted the action of human vaccine, it might be well to try that taken direct from the animal. Should our correspondent, or any other of our readers, have any experience of such cases, we shall be glad to receive them.

VISIBLE PULSE.

SIR,—Permit me to ask my professional brethren, through your columns, whether a visible (or locomotive) pulse at the wrist is a sure indication of aortic disease? I cannot find any clear statement on this point in any of the books in my possession.

I am, etc.,

X. Y. B.

MORTALITY AFTER OPERATIONS ON THE URINARY ORGANS.

SIR,—In your issue of August 21st, Mr. W. F. Teevan denies that the mortality after lithotomy is influenced by the passage of urine through the wound, but admits that most surgeons disagree with him on the point. Mr. Teevan's view may be right, and that of the majority of surgeons—including so high an authority as Dr. Henry Dick—may be wrong; at any rate, I am content, so far as Mr. Teevan is concerned, that I am allowed to have striven to remove that which by most surgeons is considered to be a source of increased mortality.

Mr. Teevan further relates an experiment, with the intention of proving that the drainage-tube is incompetent to keep the bladder empty; but his experiment is so incomplete, as to lack all that is requisite for carrying conviction. Might not the drachm to a drachm and a half of urine, which is said to remain in the bladder, after the removal of the catheter, have been contained in the catheter itself, and have passed back into the bladder upon the withdrawal of the instrument; or might it not have escaped from the ureters into the bladder, in consequence of the irritation produced by taking away the catheter?

Suppose for a moment I granted that a drachm and a half of urine is always present in the bladder, when a catheter, with drainage-tube attached, is retained; I might still point to the numerous cases I have now had, in which not a drop of urine has escaped by the wound, or by the side of the instrument; or I might rely upon the fact that, after both lithotomy and perineal section, where no catheter is used, the urine escapes, not guttatim, but in quantities, and only after an accumulation of much more than a drachm and a half, as a proof that Mr. Teevan's residual urine can do no harm. But a healthy bladder is as capable, I believe, of emptying itself of urine, when a catheter is retained, as it is in ordinary micturition. The essential conditions are alike under both circumstances: a free outlet for the urine, and complete contraction of the muscular wall of the bladder.

In taking my leave for the present of this subject, let me exhort Mr. Teevan to give the plan I have recommended a fair trial. I have full confidence in his becoming a convert. With many thanks for your courtesies in throwing open your columns,

I am, etc.,
Leeds, August 1869.

T. R. JESSOP.

PRESERVATION OF FREE-STONE.—L.R.C.P. should apply to the Editor of the *Builder*.

DRUGGISTS' CHARGES.

SIR,—In answer to the letter of your correspondent, "A Physician of 25 Years' Standing", will you grant me space to say a few words? In the first place, I readily admit that 3s. for a six-ounce mixture is exorbitant; but your correspondent says: "Had the druggist charged 1s., or even the customary 1s. 8d. for the bottle of mixture, he would have been amply repaid." If he means that a shilling is enough for a six-ounce mixture, I say emphatically that no druggist in this or any correspondingly expensive neighbourhood could exist on such a price: 1s. 8d. is a fair price, supposing the dose to be two tablespoonfuls; 2s., or more, if only one. By the latter plan of prescribing, it must be remembered the mixture contains a double quantity of every ingredient, but the vehicle. I am surprised that a physician of the experience which your correspondent must possess should consider that the price of a mixture should depend on the actual cost of the ingredients. Your correspondent appears to forget the heavy rent and taxes paid in Brompton and in all good neighbourhoods; the expense of assistants (not less than £100 a year each, if competent, and surely that is necessary), porters, and numberless other expenses—all of them absolute necessities. When our status is improved, as it will be in the course of a few years, through the recent and future Acts of Parliament (thanks to the able men that our Society possesses), I have no doubt our wealth will be equal to that of the butcher and baker: at present, it is not.

While on the subject, I should like to say that (it having become a custom with many medical men to order concentrated medicines, sometimes so concentrated that the dose is five or ten drops, a custom often attended with fatal results, as I probably need not remind you) if drops (so called) only were prescribed at the prices at present charged, we could certainly not live on the profits.

Your correspondent appears to look upon us as his natural enemies, and speaks of us as thorns in his side. From what I know, that certainly is not the view taken by the profession at large.

In conclusion, I think few will see the necessity of the College of Physicians having power or control over us, other than by the recent appointment of Dr. Headlam Greenhow, as visitor on behalf of the examinations of the Pharmaceutical Society, according to the Pharmacy Act, 1868.

I am, etc.,
London, August 1869.

A PHARMACEUTICAL CHEMIST.

SIR,—I read a letter in your JOURNAL of July 31st, from a Physician of 25 Years' Standing, in reference to an overcharge made by a druggist who dispensed one of the writer's prescriptions. The charge was, no doubt, high for the value received; but, at the same time, may I be allowed to ask if the charge for the advice given was any less in proportion than that made for the bottle of mixture? I am quite sure the writer will agree with me that the profits of the physician exceed to a vast extent those of the hard-worked druggist, who, early and late, toils in a heated atmosphere, surrounded with poisonous vapours, endeavouring to prepare to the best of his ability those means which science has revealed to the minds of the medical profession, and are of use in relieving suffering humanity.

The druggists do not, as a rule, realise (allowing of their high charges) fortunes, although they may have spent many years in their laborious trade, which is always attended with responsibility and close confinement. The physician's outlay may consist of pens, ink, and paper; but the chemist and druggist must have articles more costly than writing materials.

With respect to charging a few pence for making up a prescription, may I ask what would be the result if a lady sent a prescription to be made up, containing Epsom salts, tincture of senna, and water, to be made into a draught? The cost would be, say one penny; and, according to the writer's opinion, we should charge twopence for the same. Is it likely that the draught would reach the destination it was intended for? I should say, possibly not. The dust-hole would be its final resting-place, as it would be considered too cheap to be good, on the same principle as "advice gratis".

I have no doubt it is the same with chemists and druggists as with medical men; as they succeed in business, they add to their charges; and I may say, as the physician attains eminence, so he increases his fees, but on a grander scale.

I cannot see what just control the writer desires over the chemist and druggist, unless it is to compel him to supply his patients with medicines at a price the physician thinks sufficient, and not what the druggist knows will support his establishment and family without seeking protection in the Bankruptcy Court; if he does, at the same time he no doubt wishes his own actions to pass uncontrolled, and charge what fees he thinks proper.

I am, etc.,
August 1869.

A THORN.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to the Publisher, not later than *Thursday*, twelve o'clock.

MR. PARSONS, of Tanworth, writes that, in the *JOURNAL* of August 28th, he has perceived an account, headed "Successful Case of Cæsarean Operation, by J. S. Gaunt, Esq., Alvechurch, Mother and Child alive." He complains that, as he was the person who performed the operation, this heading is an injustice to him, and calculated to injure his reputation as a successful operator, as the greater part of the operation was performed by him, and the after-treatment was for the most part his own, or such as he suggested. Mr. Parsons sends also an account of the case, which agrees in the main with that given by Mr. Gaunt. It would appear, however, from his account, that the idea of performing the Cæsarean operation in the case originated with him; and he claims the credit of carrying out those details of the operation and the after-treatment which are not claimed by Mr. Gaunt for himself. Mr. Parsons will see, on again referring to Mr. Gaunt's paper, that he has made a mistake in quoting the title. As it stands in the *JOURNAL*, Mr. Gaunt's name is appended, not as the sole performer of the operation, but as the contributor of the narrative. We are confident that nothing could be further from Mr. Gaunt's intention than to take credit which was not due to him, and withhold it from a professional colleague to whom it was rightly due; and we are sure that every one who reads Mr. Gaunt's narrative with proper care, will see at once that Mr. Parsons undertook a very responsible duty, and performed it with high credit to himself.

T. C. J.—It is said that Philip Collot, who died in 1656, and was an expert lithotomist, was the first to cut adults and old people. He performed the operation by the "apparatus major" with great success. Mr. R. Elliott, Surgeon to the Chichester Infirmary, and Mr. Cock, Surgeon to Guy's Hospital, have both performed the operation three times in one subject.

AN EFFICIENT ATMOSPHERIC OZONISER.

SIR,—About a year ago, I purchased one of Messrs. Condy's atmospheric ozonisers; but, on receiving it, I found it to be on much too small a scale for general use. I had in my possession one of Maw's fountain enema syringes, and I bethought me that, if a fine rose could be attached to the exit-pipe, a large spray could be diffused through a considerable space. Messrs. Maw, on being applied to, furnished me with a flat rose to screw on to the pipe. The rose is two inches in diameter; on its flat surface, about thirty fine pin-holes are drilled; and, upon working the pump, a spray which can be directed at whatever angle may be desired, is easily produced. I have a fountain holding about four pints—a sufficient quantity to ozonise a large space. The instrument is perfectly portable; the rose can be removed and replaced by the ordinary tube, if the instrument is required for its original purpose. The force of the pump is quite sufficient to send the spray to a height of fourteen or fifteen feet, and the fluid descends through the air in a very fine shower of considerable circumference. A large ward can, by means of this instrument, have its air purified in a few minutes. The solution which I use is one part to forty of Condy's crimson fluid, but any other disinfectant can be used.

I am, etc.,

WALTER FERGUS, M.D.

Marlborough, August 1869.

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the *JOURNAL*, should arrive at the Office not later than 10 A.M. on *Thursday*.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The *Wiltshire County Mirror*, Sept. 8th; The *New York Medical Gazette*, August 28th; The *Parochial Critic*, Sept. 8th; The *New York Medical Record*, August 28th; The *Boston Medical and Surgical Journal*, August 26th; The *Aberdeen Free Press*, Sept. 7th; The *Madras Mail*, July 7th; The *Birmingham Daily Gazette*, Sept. 9th; The *Indian Medical Gazette*, August 2nd; The *Nottingham and Midland Counties Daily Express*, September 10th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. H. Lawson, London; Studens, Knutsford; Mr. Furneaux Jordan, Birmingham; Mr. J. N. Radcliffe, London; Dr. Paul, London; Messrs. Hammond and Nephew, London; Dr. Atkins, London; Mr. G. Fisher, Worksop; Messrs. Keen, Robinson, and Co., London; Mr. B. Locking, Willerby; Mr. C. R. Thompson, Westerham; Dr. F. Hall, Prescott; Dr. George Johnson, London; Dr. F. J. Brown, Rochester; Dr. A. B. Brabazon, Bath; Mr. W. Dalton, Bournemouth; Mr. J. Buckley, Manchester; Messrs. F. C. Calvert and Co., Bradford; Mr. E. Lloyd, London; Dr. Sheridan Muspratt, Liverpool; Messrs. Oliver and Boyd, Edinburgh; Mr. S. M. Bradley, Manchester; J. R. S. Bawtry.

LETTERS, ETC. (with enclosures) from:—

Mr. F. Le Gros Clark, London; Dr. James Russell, Birmingham; Dr. W. B. Mushet, Colney Hatch; Mr. W. F. Morgan, Bristol; Dr. Hayden, Dublin; Dr. Kidd, London; Dr. Mayo, London; Mr. W. King, Liverpool; The Secretary of the Ledwich School of Medicine, Dublin; Mr. R. Dehane, Wolverhampton; Mr. Neil McGreevy, Drogheda; Mr. C. R. Suffield, Birmingham; Mr. A. Beadles, Ryde; Dr. Wardell, Tunbridge Wells; Mr. Heward, Stamford; Dr. Edis, London; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Lomas, London; Dr. Treutler, Kew; Dr. D. Dyce Brown, Aberdeen; Dr. R. L. Bowles, Folkestone; Mr. T. Longmore, Netley; Dr. J. Lockhart Clarke, London; Dr. H. Charlton Bastian, London; Messrs. MacLachlan and Stewart, Edinburgh; Mr. Renshaw, London; Messrs. Macmillan and Co., London; Messrs. Churchill and Son, London; Mr. E. Sidebottom, Mottram, near Manchester; Dr. Quinlan, Dublin; The Secretary of the Royal Medical Benevolent College, Epsom; Dr. A. James, London; The Honorary Secretary of the West Kent District Branch; Dr. Bateman, Norwich; Dr. Mapother, Dublin; Mr. Vincent Jackson, Wolverhampton.

Results of Meteorological Observations, for the week ending Saturday, September 4th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.						Minimum ex- posed on grass.	Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	WIND.										RAIN.		
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.				Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell.	Amount in inches.
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm, etc.				
BATH..... Dr. Barter, F.M.S.	30.194	0.662	55.6	51.9	48.4	77	72.0	40.4	31.6	65.3	45.4	120.0	..	4.5	5	0.3	1.7	2.7	1	0.3	..	..	..	1	2.7	1	0.01
BOURNEMOUTH..... Dr. Compton, F.M.S.	30.222	0.610	56.6	50.7	45.2	66	73.6	41.2	32.4	67.0	47.0	137.0	37.3	2.1	4.5	0.3	4.3	..	0.3	1	0.7	..	..	0.3	2.2	1	0.04
DOVER..... Dr. Parsons.	30.152	0.510	57.1	52.4	48.1	72	78.0	40.0	38.0	66.3	45.4	..	..	5.6	..	1.3	1.7	3.3	0.7	..	..	..	..	3.7	3	0.09	
DUBLIN..... Dr. J. W. Moore.	30.295	0.727	54.7	51.1	47.7	76	63.6	41.3	22.3	59.7	48.4	..	34.9	5.6	..	0.7	3.7	0.3	0.7	0.6	0.7	0.3	..	..	3.3	2	0.41
KEW..... Dr. Treutler, F.L.S., etc.	30.217	0.593	56.0	51.0	46.3	70	73.2	41.5	31.7	63.3	47.0	131.5	32.3	5.3	5	..	3.3	1.3	0.7	..	..	..	..	1.3	2.6	0	0
LLANDUDNO..... Drs. Nicol and Dalton.	30.238	0.716	56.4	51.2	46.3	69	72.5	44.0	28.5	65.7	48.9	..	..	4.4	..	0.3	2.3	2	0.3	0.3	1.3	0.3	..	..	2.2	1	0.03
SCARBOROUGH..... Dr. Fox, M.R.C.P.	30.245	0.559	53.5	49.5	45.5	74	65.0	43.9	21.1	60.4	49.2	124.7	36.2	6.2	4.6	1.3	1.3	..	0.7	1	..	0.3	..	2.3	4	3	0.26	
SIDMOUTH..... Dr. Mackenzie, F.M.S.	30.174	0.658	56.5	51.2	46.3	69	74.9	44.4	30.5	66.7	49.4	..	..	1.4	5	1	1	3	1	1	..	..	..	..	1.5	1	0.07
WORTHING..... W. J. Harris, Esq., M.R.C.S.E.	30.205	0.611	58.2	52.0	46.4	65	75.2	44.7	30.5	67.9	50.0	134.5	34.4	3.5	4.9	1	4	0.3	0.7	0.3	..	..	..	0.7	2.3	0	0

REMARKS.—The mean pressure of the atmosphere has been but little different from that of last week, but it has been more unsteady, and the range therefore double what it was the week before. Temperature has diminished rather more than 10 degs. This decrease commenced on the 28th, when the wind suddenly changed from a previous S.W. direction to the N.E., and produced so great a depression that the difference between the maximum temperatures of Saturday (27th) and Sunday (28th) was, at Scarborough, 36.5 degs.; in Dublin, 20.7 degs.; at Kew, 23.2 degs. Towards the end of the week temperature again rose somewhat. To this great depression must be attributed the excessive range of temperature. Winds have been on the whole rather fresher than last week, and their direction have been principally E. and N.E. A N.E. gale appears to have passed over England and Ireland during the time from the 28th August to 1st September, traversing a comparatively narrow area in a direction from N.W. to S.E.—its force does not seem to have been very great,—in Dublin the greatest force was 8, while at Kew it never exceeded 6. The amount of clouds has increased, the sky having been generally about half covered. The rainfall has lain chiefly along the track of the atmospheric disturbance just referred to, and the largest quantities have hence been collected at Dublin and Scarborough; otherwise it has been quite insignificant. The weather of the past week has been a remarkable contrast to that of the week before. During the previous week the temperature rose steadily until its last day was also its hottest, the highest—speaking from the Kew observations—being 86.8 degs., which occurred about 2 p.m. From that time the temperature commenced to fall rapidly, and the minimum read the following morning was 53.4, *i. e.*, 33.4 degs. lower, and on the morning of the 31st 43.3 degs. was registered, which was also the lowest of the week. This appears, with some little variation, to have been the case throughout the country. So sudden and great a change of temperature could not occur without its effect on the health, and hence we have an increase in diarrhoea reported from several stations, which, however, was again checked by the more genial temperature which supervened during the latter half of the week.

Kew, W., September 8th, 1869.

W. J. TREUTLER.

LECTURES

ON THE

PRINCIPLES OF SURGICAL DIAGNOSIS:

ESPECIALLY IN RELATION TO SHOCK AND
VISCERAL LESIONS.*Delivered at the Royal College of Surgeons of England.*

By F. LE GROS CLARK, F.R.C.S.,

Hunterian Professor of Surgery and Pathology in the College; Surgeon to
St. Thomas's Hospital; and Examiner in Surgery at the
University of London.

LECTURE V.—LESIONS OF THE ABDOMEN (CONTINUED).

*Injuries Involving the Abdominal Viscera Generally.—Symptoms: Col-
lapse; Tympanites; Vomiting; Suppression or Retention of Urine;
Temperature; Hemorrhage; Pain; Peritonitis.—Rupture of Particular
Viscera, Membranous and Solid.—Penetrating Wounds Involving
Different Viscera.—Traumatic Cyst in Abdomen.—Fluctuation.—Con-
sequences of Injury to Chest and Abdomen Compared.*

PENETRATING wounds of the abdomen by blunt or sharp instruments are occasionally met with, but not frequently so, in civil practice. A wound of a viscus by a blunt missile, such as a bullet, except when small, very much resembles the condition of a laceration or rupture, and would, in most instances, be denoted by the same indications. I have already referred incidentally to this subject. Recorded instances of recovery, after a penetrating wound of the abdomen with a sharp instrument, are rare; and such fatal result, as the general consequence of wound of intestine, when in communication with the peritoneal cavity, is in accordance with the issue of experiments which have, from time to time, been performed on the lower animals, and especially recorded by Mr. Travers, and more recently by Dr. Gross, of Philadelphia. For the conditions suppose the escape of some portion of the intestinal contents, whereby acute peritonitis is established; and from this cause, as in similar lesions otherwise produced, fatal collapse follows. I have already remarked on the circumstances which favour recovery without serious consequences, after wound of the peritoneum; and I shall have occasion to revert to this subject before I conclude.

Further, we know that the stomach or the colon may be opened, or the bowel may be accidentally wounded in operating for hernia—for such cases have occurred—without serious effects, *quoad* the wound, provided regard be had to the security of the peritoneum from the ingress of foreign matter; therefore we may fairly conclude that such visceral lesion is not, in itself, destructive; on the contrary, we know that, under favouring circumstances, it is capable of repair. On the other hand, in a penetrating wound of the bowel, a necessary preliminary to a cure is, such a closure of the aperture by protrusion and eversion of the mucous membrane as shall, the parts being left at rest, be a security against the extravasation of its contents. These conditions are, unfortunately, rarely fulfilled, and hence the usual fatality of such injuries.

Therefore, the general symptoms and local signs of incised or punctured intestine—apart, that is, from demonstrative evidence by sight or touch—do not differ from those of ruptured bowel. The nature of the former class of lesions is such as to hold out a better prospect of recovery, small though it be, than the latter; but this advantage is chiefly due to the possibly limited extent of the breach rather than to any other circumstance. In both, the escape of the intestinal contents into the peritoneum is the chief source of danger, and the explanation of the fatality which attends these cases.

There is every reason to believe, as I remarked in my last lecture, that lesions by rupture of the solid viscera are not infrequently repaired, the obvious explanation of the relative immunity from peritonitis in such cases being, the absence of that source of irritation which is supplied from the membranous viscera. Laceration of the texture of the liver, and even of the kidney, does not usually include the tubular or membranous portions of these organs, so that the escape or extravasation of their special secretion into the peritoneal cavity is exceptional. Moreover, the presence of bile, even in abundance, if a conclusion may be drawn from the solitary case which I narrated just now, does not seem to entail the amount of mischief which might have been anticipated from its acrid properties. The presence even of urine in the pelvic peritoneum does not, in many instances, produce the rapidly fatal consequences which its escape into other tissues would, by analogy, lead us to expect. The speedy coating of any such textural lesion with plastic lymph arrests the tendency to extravasation in the solid viscera,

and limits the consequent inflammation to the seat of injury. The displacement of this important element of repair, by some accidental or incautious movement, would appear to offer satisfactory explanation of those symptoms of relapse which I have not infrequently noticed, and on which I have already commented.

Probably the repair of these lesions of the solid viscera is, under favouring circumstances, rapidly accomplished, as we should anticipate in parts so highly organised. In one instance, in which I saw the liver wounded on its surface to some extent, there was no trace of the injury a week afterwards, when the patient died. Incised or punctured wounds of the liver, if of any depth, are likely to be attended by considerable hæmorrhage; and this may be external, as occurred in a patient of mine who, in a fit of delirium, inflicted several wounds upon himself with a butcher's knife. He had bled profusely, and was cold and exsanguine when admitted into the hospital. A distinct fissure made by the knife in the liver could be felt. His symptoms included occasional spasm of the muscles of the back and abdomen, with eructation and nausea: the respiration was quick, feeble and shallow. The oozing of blood continued until his death, which occurred in less than twenty-four hours. One hour before death his temperature sank to 93 deg.—an unusually low degree. The pleuræ and pericardium contained blood-stained serum, but were uninjured: the peritoneum contained fluid blood. Both omentum and liver were penetrated by the knife. Hæmorrhage, occurring in a maniacal subject, was the cause of death in this instance; for no other organ was injured, and there was no trace of reparative effort visible. I may remark, in referring to this case, that it rarely occurs that we are able, before death, to identify a lesion of this description. In an earlier lecture I related an instance in which recovery took place, where there was good reason for believing that both the liver and lung were involved in a similar injury. The following case exemplifies the condition usually observed in penetrating wound of the abdomen, implicating the intestine.

B. G., aged 44, was admitted under my care, shortly after he had been stabbed in the abdomen with a knife. He was in a state of profound collapse, with cold surface and depressed temperature, and that peculiarly anxious expression of face which accompanies, though it can scarcely be said to specially denote, a mortal injury. The wound was two inches long, and just below and to the left of the umbilicus, and through it portions of the small intestine, colon, and omentum, protruded. He had several attacks of shivering and vomiting, with frequent eructation, and severe twitching of the muscles. A small wound of the intestine was closed with a silk suture, and the bowels were returned. He survived twenty-six hours, without signs of reaction. At the *post mortem* examination, the intestines on the left side were found somewhat glued together, and a few flakes of lymph were found between their coils elsewhere. There was some turbid reddish fluid in the pelvis, but no trace of fecal matter could be detected. A piece of the ileum was glued by recent lymph to a pouch between the transversalis and internal oblique muscles, opposite to the wound. Close to its mesenteric attachment was the part of the bowel which had been wounded. The opening was half-an-inch long; but its edges were so perfectly united, that no leakage occurred when the gut was distended with water. The early agglutination and consequent closure of the wound in the intestine is an interesting and encouraging circumstance: this case further exemplifies a remark which I made in my last lecture, and which I have repeatedly verified, that the reparative effort occurs very early, and often without those symptoms which denote reaction and acute peritonitis.

In a more extensive injury of the jejunum under my care, where the patient also survived about twenty-four hours, there was gas as well as foetid fluid in the peritoneum, and the intestines were rough with lymph. But in the case of a pregnant woman who was the subject of a lacerated wound near to the duodenum, and who survived only nine hours, there was no evidence of hypervascular action in the peritoneum. I infer, therefore, from these and very many similar cases which I have examined, that the reparative process, as evinced by local hyperæmia and the deposit of plastic material, may be initiated and proceed satisfactorily, without any general reaction following the mortal wound; and that unmistakeable tokens of this effort are manifested after the lapse of from twelve to twenty-four hours.

In these instances of penetrating wounds of the abdomen, the most satisfactory condition is indicated by the absence of symptoms which evince excess of local action accompanied with general prostration; and this is more likely to be secured by absolute rest than by any other means. The following case, though ultimately fatal, illustrates this remark, as well as the obscurity involving the diagnosis, from symptoms, in these injuries.

H. T., aged 19, was admitted into St. Thomas's Hospital with a wound from a small pistol-bullet, which entered the abdomen one inch

below and to the left of the umbilicus. The pistol was fired from the bottom of a flight of stairs, at the top of which he was standing. There was but little shock. The treatment consisted in giving opium internally, applying ice to the abdomen, and keeping him on a spare liquid diet. At the close of a week, during which interval he had remained perfectly at rest, and was almost entirely free from febrile disturbance, he felt so well that he got out of bed to pass urine. Immediately afterwards, symptoms of extravasation into the peritoneum came on rapidly; and he died within twenty-four hours. At the autopsy, a small cicatrix marked the spot at which the bullet had entered. A quantity of gas escaped from the distended peritoneum, which contained also recent lymph, pus, and turbid fluid. The omentum and abdominal wall were adherent together; fecal matter escaped when this adhesion was separated, the intestines being glued to the omentum. The small intestine was perforated in six places; and there were two apertures in the sigmoid flexure of the colon; from one of the former the fecal matter had chiefly escaped. There was no lesion in the posterior wall of the abdomen or the pelvis; but the bullet was not found.

In the succeeding case there is a reasonable probability that the bowel was wounded, or at any rate contused, though the patient's recovery did not permit the verification of this conjecture.

A groom, thirty years of age, of moderate development, was admitted into St. Thomas's Hospital with a penetrating wound of the abdomen, which had been pierced horizontally and transversely, from right to left, with the prong of a stable-fork. There were two wounds, about five inches apart and two inches below the umbilicus, of which the right was the larger. Very little blood had been lost, and he was in a state of collapse. He was kept under the influence of opium for a week, the wounds discharging very little; the tenderness was almost entirely confined to the neighbourhood of the wound. At the expiration of ten days an abscess formed between the wounds, from which fecal matter subsequently escaped. The discharge continued for three or four weeks, when the openings finally closed, and he entirely recovered. It is certainly possible that in this instance, as the patient had not a prominent abdomen, the intestine may have escaped injury. There was not even demonstrative proof, though very little doubt, that the peritoneum was perforated, as there was no indulgence in the pernicious practice of probing the wound. But it is quite possible that the blunt point of a pitch-fork may have pierced the serous membrane and pushed the bowel before it out of the way. Of the subsequent adhesion of the intestine to the peritoneal wall in front, and of its communication with the abscess, there was positive evidence; yet this result does not prove that the bowel was implicated in the original injury, though I think it probable that such was the case.

Before quitting the subject of abdominal lesions, I am tempted to mention a remarkable instance of the development of an enormous cyst succeeding an injury.

In October last, I was requested by Mr. Stedman, of Guildford, to visit a patient at the Surrey County Hospital, to which I have the honour of being consulting-surgeon. The following is a condensed history of the case before I saw the patient. H. F., a coachman, aged 25, was kicked by a horse midway between the ensiform cartilage and umbilicus. The injury paralysed the diaphragm for some seconds, but did not render him insensible. His suffering being great, he had an anodyne draught at night, which he rejected; this was the only occasion on which he was sick. At the expiration of two weeks, the pain continuing, he perceived a tumour in the epigastric region, after which the suffering increased, especially in movement; but he had neither sickness nor rigor. He then came to the hospital, pale and feeble; and lay curled up in bed, or resting on his hands and knees to obtain relief. A tense, elastic tumour, dull and fluctuating, occupied the epigastric region; it was tender, and descended with inspiration; the skin was not discoloured. A grooved needle was introduced, and a few drops of sero-sanguineous fluid escaped. The swelling steadily increased, and a fortnight later was tapped, five pints of claret-coloured albuminous fluid being drawn off. The sac speedily refilled, and ten days later four pints of fluid of the same character were removed. He suffered from dyspepsia, but had no sickness. After the lapse of another month, this cavity was again tapped, with the same result as before. This was repeated on three succeeding occasions, and an ineffectual effort was made to keep the opening patent. Six months from the date of his admission I saw him. There was then a hemispherical swelling extending, in a vertical direction, from the ensiform cartilage which was pushed forwards, to near the umbilicus, and laterally was lost beneath the ribs of either side. It was slightly conical in the centre, dense and resisting, but fluctuating. In the sitting posture, the intercostal spaces below the seventh ribs were bulging, especially on the left side, to which the swelling somewhat inclined. The ribs were widely expanded, giving abnormal breadth to the lower part of the chest by their divergence. On

tapping with the finger the lower intercostal spaces, a distinct wave was felt across on the opposite side of the chest, below the seventh rib. The breath-sounds were distinctly audible above this line; but not below, where there was complete dullness on percussion, except high in the left hypochondrium, which was abnormally resonant, from the presence of the displaced and distended stomach. The heart was pushed upwards, its apex beating between the third and fourth ribs. There was no dyspnoea, but imperfect oxygenation of the blood, as evinced by the pallor and slightly livid hue of the complexion. I made an incision, about an inch long, in the median line, over the summit of the tumour, dividing in succession the rectus and the posterior layer of its sheath. I could discover no separation between the peritoneum and the sac, which was then opened, and at least twelve pints of serum were allowed to escape. I then introduced my finger, and swept it over the interior of the sac; and, so far as I could reach, I could discover no communication with any serous cavity. The sac extended across the epigastrium, was adherent to the diaphragm above, and stretched deeply into both hypochondriac regions, displacing all the surrounding viscera, none of which could be felt, except the heart pulsating against the phrenic wall, and the aorta indistinctly beating behind. The interior of the collapsed sac felt like that of the urinary bladder—soft, uneven, corrugated, and thrown into folds. The ribs had fallen, and the complexion was improved by the more free expansion of the lungs after the operation. A small quantity of iodine was injected, and the opening was retained by the introduction of a piece of lint. It is unnecessary to relate the subsequent details of this case. I received, from time to time, an account of the patient, who gradually rallied from the slight constitutional disturbance and local inflammation following the operation. The opening was never allowed to close; and, according to the last account received after he had left the hospital, and, three months subsequently to my seeing him, he was looking healthy and growing stout. There was still a trifling discharge; but no appearance of tumour remained, a little thickening alone marking its original site. The respiration could be heard quite to the base of the lungs on both sides, behind. In front, the liver appeared to be permanently displaced, so as to encroach on the right lung; and the left lung could not be heard lower than the apex of the heart, in consequence of the stomach still retaining its former position. All the assimilative functions were healthily performed, and the patient was quite free from pain.

The possibility of our having, in this instance, to deal with a large hydatid cyst naturally suggested itself; but the character of the fluid contents, and especially its microscopic examination, forbade this conclusion. Moreover, the direct association of the tumour with the accident seemed to point to a traumatic origin. The examination of the interior of the sac proved that it was developed in the abdominal serous membrane; but in what way and under what circumstances must be matter of conjecture.

I have spoken of fluctuation as an important element in the diagnosis of abdominal tumours. But I may remark that this sign, in its most unequivocal form, is not diagnostic of the actual nature and quality of their contents. The slightest impulse will convey as perfect a wave across an ovarian cyst containing thick gelatinous matter, as in one containing limpid fluid. Even the subdivision of the tumour into many cysts does not interfere, in any appreciable degree, with the presence of this sign. In a case in which I recently performed ovariectomy, the mass of the tumour consisted of numberless endogenous cysts, the contents of which were various, some being occupied by puriform matter, others by colloid, and again, others by limpid or thick and grumous fluid; yet the wave across the distended belly could be elicited in any direction by the gentlest tap. I may also remark, in reference to this particular case, as, indeed, in others with which I have dealt, that the previous history did not induce me to expect the universal adhesions which I found; so insidious and unmarked is that form of vascular action which leads to this result.

In comparing the consequences of mechanical injury to the viscera of the chest and abdomen, and to their serous envelopes, the points of contrast are more striking than those of similarity. It is true that inflammation of the serous membranes exhibits, in its results, the same tendencies, whether in the head, chest, or abdomen; but these results operate very differently in the several regions. Even the milder forms of effusion in the pericardium and pleura are serious, from the mechanical impediment which they offer to the functional activity of the organs they envelope; whereas, the peritoneum may be enormously distended without the contained viscera suffering importantly from the pressure thereby exercised upon them. The difference in question is, of course, due to the contrast in the yielding character of the walls of the two cavities; and this feature, as I have already remarked, operates still more potentially in the cranium, where the pressure tells exclusively upon the deli-

cate texture of the organ within. What is true of the milder forms of inflammatory products, is not less so of the consequences of acute inflammation; but there are also other elements of considerable importance here introduced. In the chest, the tendency to complication, in the inflammatory action, of the lung-structure and pleura, is greater than in corresponding inflammation in the abdomen; and the peritoneum is more susceptible to the presence of its own morbid products than is the pleura; a circumstance apparently referable to the same cause as that to which the relative susceptibility to shock of these membranes, severally, is attributable.

In contrasting the effects of injury to the organs themselves contained in these two cavities, such comparison can be instituted only between the solid viscera of the abdomen and the lungs; as there is no analogy between the anatomical relations of the trachea with its bronchial ramifications, and the membranous viscera of the abdomen. Hæmorrhage is the most frequent cause of fatality in wounds of the lungs, liver, spleen, and, perhaps, of the kidney; but such bleeding always kills by exhaustion when derived from the latter organs; whereas, it may be destructive by suffocation when occurring in the former, either by obstructing the air-passages, or by accumulation in the pleura, and compression of the lung-tissue from without. The diagnosis is, therefore, more simple, from the physical signs present, in thoracic than in abdominal hæmorrhage.

The effects of shock, from contusion or concussion, on the lungs and abdominal viscera are manifested through the same system of nerves, but in a different way. Vascular congestion, the consequence of suspended function in the vaso-motor nerves, characterises the former; paralysis of the muscular coat of the bowels, and disturbance in the functions of the excretory organs is witnessed in the latter; and the duration of these symptoms is generally proportioned to their intensity.

The means by which nature cures these lesions are similar in the lungs and in the solid viscera of the abdomen; and in each, as a rule, the consequences of structural injury are limited, ultimately, to the neighbourhood of the breach. That the arrangements existing for the security of the various vital organs against injury are not perfect, is due to their mechanical requirements in the healthy performance of their functions, and to the necessary structure of their containing cavities in relation to these offices. For, neither in organic mechanism, nor in pathological processes or results, are we to expect incompatibilities, or to look for special provisions for every emergency. But we find the adaptation of the existing material and means to varied circumstances as perfect as the perplexing influence of disturbing elements will permit. And if the curative results are not always commensurate with our expectation or desire, it is because we do not give their full weight to the character and violence of the injury inflicted, nor attach due importance to the various predisposing and existing causes, which tend to mar the natural remedial efforts. Perhaps we may, without an excess of humility, confess that, from the imperfection of our science and art, our own endeavours to render assistance have fallen short of our good intentions; and it is not surprising if honesty sometimes compel us to admit that a better acquaintance with the actual condition of our patient, and a more judicious reading of nature's indications, would have saved us from the mortification of learning, when too late, how to render that timely assistance which might have been successful in protracting or preserving life.

ON A FATAL CASE OF GENERAL EMPHYSEMA PRODUCED BY VIOLENT SCREAMING.*

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GENERAL emphysema, produced otherwise than by accident from without, is an occurrence of sufficient rarity, for me to feel that no apology is needed in occupying this Section for a few minutes, whilst I relate the leading particulars of a case which has lately come before me in my practice.

The subject was a schoolboy, 8 years old, who resided in New Wortley, a suburb of Leeds. During the second week in December 1868, he daily joined his playmates in a game which required the participators in it to kick a stone as often and as violently as they could. On the night of the 15th of December, the lad complained of pain in the left ankle-joint, and, on examining the part, his mother found it red and swollen. On the 19th, I was requested to visit him, and I then found that the joint had become the seat of acute synovitis. There was a high condition of inflammatory fever, and the stomach rejected every

thing he swallowed. Leeches to the joint, followed by an evaporating lotion, a saline aperient, and a complete restriction of the food to small and oft repeated sips of brandy and milk, resulted, on the following day, the 20th of December, in a decided relief of his symptoms. On the 21st, he seemed exceedingly fretful, and complained almost constantly of pain in the right abdomen, and in the head; and, towards evening, he cried out of pain in the left chest. A mustard cataplasm on the chest, and a powder containing two grains of Dover's powder and four of mercury with chalk, procured him a favourable night. Early on the morning of the 22nd, however, he began to scream most violently, and without ceasing. He absolutely refused to be comforted for a moment even, or to give us any clue as to the site of his pain. All that day and the succeeding night he continued his screeching with no intermission. At about 6 o'clock on the morning of the 23rd, his mother noticed a little puffiness on the left side of his neck, and soon she became alarmed at the rapid progress made by the swelling. By 10 A.M., on my arrival, the head, face, neck, chest, and abdomen had become enormously distended; air could be distinctly felt in the cellular tissue all over the trunk, and down the arms as far as the wrists; none could be detected in the legs or thighs, or, indeed, below the groin on either side. He continued screaming, though less violently than on the day before. The treatment I adopted consisted of puncturing the skin in many places, and the administration of brandy. His breathing never became much embarrassed, but the circulation, and his powers generally, became gradually feebler, and at 2 P.M., eight hours after the first appearance of the emphysema, he died.

Twenty-six hours after death I made an examination of the chest, the friends stipulating that the head and ankle should be left untouched. The head, neck, and trunk remained largely distended; and the characteristic crackling could be felt as far down as the wrists in both arms. The ankle had acquired an almost natural appearance, being but little larger than the right joint. On making the incision necessary for opening the chest and abdomen, a large quantity of most offensive air escaped, and the muscles of the abdomen alone were observed to be completely blackened. In the abdomen, the organs were in a perfectly healthy and normal condition, and I was unable to find anything to account for the pain of which he had complained on the 21st. On opening the chest, the mediastina were found to contain air; but, although they were somewhat distended, I could not satisfy myself that the lungs had been greatly impeded in consequence; and this circumstance would probably account for the length of time, considering the extent and degree of emphysema, during which he lingered. Air had also penetrated in small quantity the costal subpleural tissue.

The heart and its coverings were healthy, the right cavities containing dark blood.

The lungs appeared of normal size; their inferior borders and their apices were the seats of slight vesicular emphysema. I was unable to detect any extravasated air beneath the pulmonary pleurae, except at the roots of the lungs; but, on a close inspection of the outer surface of the right lung, a very thin film of recent lymph was observed, and at irregular intervals I noticed very small immovable elevations, the largest of which was about the size of a pin's head. On cutting into these, they were found to be small irregular cavities containing air and a little red coloured serum. I counted eight of them, all on the front external surface of the lower lobe of the right lung, and I was unable to find any elsewhere. On microscopic examination, the lung-tissue, which shewed no signs of degeneration, was found torn at these places.

The points which I think worthy of notice in this case are:—

1. The cause of the rupture in the lung: the violent and long continued compression, viz., to which the lung was subjected, in the production of a series of loud shrill notes. The glottis would necessarily be nearly closed, thus offering a great impediment to the exit of the air, whilst the expiratory efforts were the greatest of which the lad was capable.

2. The age of the patient—8 years. Dr. Mapother of Dublin, remarking on a case of general emphysema, in a child, two years old, published by him in the *Medical Press and Circular* of April 29th, 1868, says: "Out of thirty-eight such recorded cases which I have analysed, thirty-four were in children under four years."

3. The great number of points at which the lung-tissue had become ruptured, eight of them at least, be it remarked, having been found upon the surface, immediately beneath the pleurae; whilst the most usual situation is undoubtedly near the root.

4. The comparatively small quantity of air found in the mediastina.

5. The probable immediate cause of death, which, I think, is to be found rather in the occurrence of a succession of injuries to a vital organ, than in the interference with respiration by pressure upon the lungs of extravasated air.

* Read in the Surgical Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

ON LOCOMOTOR ATAXY.*

By J. LOCKHART CLARKE, M.D., F.R.S., etc.

I HAVE a few remarks to make on the *pathological physiology* of locomotor ataxy—that is, on those *abnormal* actions of the spinal cord and voluntary muscles that are productive of incoordinate movements. These incoordinate movements have been, by different writers, attributed chiefly to cutaneous and muscular anæsthesia, as well as to loss of the so-called muscular sense; and different authors have given different degrees of prominence and importance to one or other of these morbid conditions. But the lesions of the spinal cord peculiar to locomotor ataxy induce, in some of the voluntary muscles, a certain abnormal condition which seems to have been entirely overlooked, but which appears to be really one of the chief causes of muscular incoordination. It is the opinion of some physiologists, that the loss of muscular coordination depends on the loss of reflex action in the spinal cord; and, since the posterior columns of the spinal cord are more or less damaged in locomotor ataxy, it has been inferred that spinal reflex action is dependent on the proper fibres of the posterior columns. But reflex action really depends on excitation of the grey substance by the posterior roots of the nerves, and the reflexion of the nerve-force so generated on to some of the motor nerves. Now, before I began my researches on the structure of the spinal cord, it was universally taught, both in England and abroad, that the posterior roots of the spinal nerves are attached *exclusively* to the *lateral* columns of the cord; whereas I showed—what is now universally admitted—that they are attached immediately to the *posterior* columns, and *not at all* to the *lateral*. The importance of this fact, in both a physiological and a pathological point of view, and especially in its relation to locomotor ataxy, will be presently made evident. In Fig. 2, which represents a transverse section of the left



Fig. 2.—*l.* Posterior roots of spinal nerves; *a.* Posterior white column; *b b.* Antero-lateral column; *d.* anterior fissure, at bottom of which is the decussation of anterior commissure; *d'.* Posterior median fissure; *i i i.* Anterior motor roots.

lateral half of the lumbar enlargement of the cord, the posterior nerve-roots (*l*) are seen to enter the whole breadth of the posterior horn of grey substance, through nearly the entire breadth of the posterior column (*a*); and in Fig. 3, which represents a *longitudinal* section of the cervical enlargement of the cord, we see the course of the roots of four consecutive nerves (*p p, p, p*) within the cord. These roots are of three kinds. The first kind (*a a a a*) enter the cord transversely, and pursue a very remarkable course. Each bundle, after traversing the longitudinal fibres of the posterior column (*p c*) in a compact form, and at a right angle, continues in the same direction to a considerable but

variable depth within the grey substance (*G*), dilating, and again contracting, so as to assume a fusiform appearance. It then bends round upon itself, at a right or more obtuse angle; and, running for a considerable distance in a longitudinal direction *down* the middle of the



Fig. 3.

cord, sends forward, at short intervals, into the anterior grey substance, a series of fibres, some of which mingle with those of the anterior roots (*A*), while others enter the anterior white column (as at *A C*, *A C*), in which they run longitudinally both upwards and downwards.

The second kind of posterior roots (*b, b, b*), also traverse the posterior column transversely, but sometimes a little obliquely from without inwards. Their component fibres are finer than those of the other bundles, measuring about the 1-7000th of an inch in diameter. Some of their fibres cross over transversely to the grey substance of the opposite side, through the posterior commissure behind the canal; others extend into the posterior and lateral white columns of the same side; while the rest may be traced deeply into the anterior grey substance (*G*, Fig. 3), where they diverge in different directions, and are ultimately lost to view.

The bundles forming the third kind of posterior roots (*c c c*, Fig. 3) enter the cord obliquely. A few of their fibres proceed near the surface of the posterior column, both upwards and downwards; and pass out again with roots above and below them. The rest cross the posterior column obliquely, and chiefly upwards; a small number, only, running downwards. Interlacing at the same time with each other and with the roots already described, these fibres diverge, and for the most part reach the grey substance at points successively more distant from their entrance into the cord in proportion to the obliquity of their course; the most divergent and superficial taking a longitudinal course, at least for some distance, with the fibres of the posterior column, amongst which they are lost. From these investigations (*Phil. Trans.*, 1853), I inferred that the posterior white columns of the spinal cord cannot be the only channels for the transmission of sensory impressions—an inference which was verified two years later by the experiments of Brown-Séquard (*Gazette Médicale*, 1855).

Such being the anatomical connexion of the posterior nerve-roots with the posterior columns of the cord, it is evident that scarcely any part of the length of those columns can be damaged, either by injury or disease, without involving destruction of a corresponding number of those roots; and, since reflex action of the cord requires that impres-

* Continued from page 122 of number for July 31st.

sions be conveyed by nerve-roots to the grey substance, the diminution of reflex action, in cases of injury to the posterior columns, is thus readily explained. But it is only occasionally, and to a certain extent, that reflex action, *in the ordinary sense of the term*, takes any part in the performance of voluntary movements. There is, however, a physiological state of the muscles dependent on reflex action, that is absolutely essential to the proper coordination of voluntary movements—I mean their tonicity, or that moderate but constant state of contraction which keeps the antagonist muscles, or those that are variously opposed to each other, in equilibrium or static tension. In the performance of voluntary movements, a constantly varying number of muscles, each of which differs more or less in *force* and in the *particular direction* which it gives to the limb or part, are associated together in action in an endless variety of ways. Each of the muscles that compose these varying groups must contract, either simultaneously or successively, to a certain *particular extent*, with a certain *degree of force*, and with a certain *degree of rapidity*, in relation to the actions of the others, according to the resultant direction desired in the voluntary effort; and this endless variety of ways in which a constantly varying number of muscles are balanced against each other in contraction, for the performance of constantly varying and complicated voluntary movements, affords the most exquisite and beautiful example of what in physical science is termed the *composition of forces*. In this balancing of muscular force, we have to learn by experience, and to remember, the exact voluntary effort required to contract each muscle to its proper *extent*, with its proper *force*, and with its proper *degree of rapidity*, in relation to the action of the others that complete the group employed. Now, it is evident that, if some of the muscles of the group employed have lost their normal tension or tone, they will not properly respond to the intentions of the voluntary stimulus, and will fail to perform their proper part in balancing the effects of the other muscles of the group that retain their tension, in the execution of any given movement. In proportion, therefore, to the exact *amount* of tension lost by any muscle or muscles of the group, and the *number of muscles* that have lost that tension, there must necessarily be a proportionate amount of *disorderly* movement or incoordination. But it appears to be satisfactorily proved by the experiments of Brondigeest, Rosenthal, and others, that this constant tension or tone of the voluntary muscles is due to a constant reflex action of the cerebro-spinal centres, and is immediately dependent on impressions conveyed from the muscles to those centres by the posterior roots of the nerves. Now, I have shown how these posterior spinal roots are spread out through the *posterior* columns of the cord; how impossible it is for these columns to be destroyed to any great extent without involving destruction of those roots; and how constantly these columns *are* so destroyed in locomotor ataxy. But, except in the very last stage of this malady, *all* the posterior roots are not injured by disintegration, and *some* of them are still competent to convey impression to the grey substance of the cord; so that *some* of the muscles retain their tone, while others lose it to a greater or less extent. Here, then, we find that actually the morbid condition of the spinal cord necessarily induces that partial loss of muscular tone which I have shown to be necessarily productive of muscular incoordination.

In the first volume of *St. George's Hospital Reports*, I have shown that, in locomotor ataxy, the voluntary movements are at first simply unsteady, like those of a man partially intoxicated; and that it is only later in the disease that the movements become jerking or spasmodic. Now, these two different kinds of movement admit of explanation by the progressive destruction of the posterior roots within the posterior columns; for at first, when the roots are only slightly damaged, and the tone or tension of some of the muscles is therefore only slightly impaired, these muscles oppose, although imperfectly, the force of their antagonists, and the movement will be tottering, or simply unsteady; but, later in the disease, when some of the posterior nerve-roots are completely destroyed, and the tone of some of the muscles is therefore entirely lost, while that of others is retained either wholly or in part, it is evident that the sound or sounder muscles will be unopposed by their lax antagonists, and will, therefore, contract to their full extent, and with a rapid jerking action.

There are two other points capable of explanation by this disintegration of the posterior roots in the posterior columns: I mean the numbness and loss of sensibility experienced in different parts of the body, which at the same time are the seats of the most excruciating pains. It is evident that, when the nerve-roots are severed by disintegration in the posterior columns, their peripheral ends can no longer transmit impressions to the cord; but their central ends may still be connected with the grey substance of the cord, and may, therefore, convey to it those irritating impressions that are caused by the process of their disintegration.

[To be concluded.]

CASE OF SPINA BIFIDA SUCCESSFULLY TREATED BY LIGATURE.

By EDWARD SIDEBOTTOM, M.R.C.S.E. & L.R.C.P.,
Mottram-in-Longdendale.

I WAS summoned on September 8th, 1866, to attend Mrs. Dewsnap, of Hollingworth, in her third confinement, who, after a long and tedious labour, was delivered of a fine full-grown male child, about the usual size and weight, apparently healthy and strong. I soon discovered that the infant was suffering from a bifid spine in the lumbar region, the tumour being about the size of an orange, tense, fluctuating, and of a pale purple colour.

I made known to the parents the danger attending such cases, and suggested that I might resort to some operation for the removal of the tumour, or try the ligature. I came to the conclusion to adopt the latter course, and in two days after its birth I placed a ligature of silk thread round the neck of the tumour, tightening the ligature only slightly. The second day I passed another (also of silk thread) without removing the first; this appeared to produce a good deal of irritation, causing several clonic convulsive attacks for several hours during the day, but which passed off in the evening. The next day I passed a third ligature (silk thread), not disturbing the two former ones, and using more constriction, still without causing more convulsions, but leaving the child fretful. The three ligatures were all kept on until the tumour sloughed off, which did not happen for three weeks, leaving only a very small wound, over which I applied a piece of dry lint, using gentle pressure. In three days the wound had perfectly healed, leaving the child's lower extremities partially paralysed. After a few days, cold water was applied by means of a sponge along the whole course of the spine daily with marked benefit, the paralysis disappearing by the end of three months.

The reason that I have not reported this case sooner, is simply that I might watch my little patient for some time to see if any new symptoms should develop themselves; but, now that three years have elapsed, I consider him out of danger. The little fellow is strong and healthy, and can run about as well as any boy of his age. In the course of my obstetric practice I have had many cases of spina bifida to which I have, in some cases, used the remedies generally recommended, such as support by trusses, bandages, and puncturing the tumour; others I have left to nature, some of which lived a few months, and one five years; but I must confess that for many years I have had the idea that ligaturing the tumour in certain cases might be of service. I have often mentioned it to many of my medical friends, from whom, however, I have met with but poor encouragement; but the nearly always unfavourable result of repeated puncturing, pressure, etc., and in this case the child being well nourished and strong, led me to adopt this plan of treatment, which I am happy to say has proved a perfect success. Forester, in the first instance, and Benjamin Bell more recently, advised the application of ligature round the base of the sac, provided the disease be local and a mere distension by fluid in consequence of the imperforation of the bones, and not a disease of the spinal marrow or membranes, and provided it be not complicated. It does not appear that either of them tried it. Erichsen (vol. 2, page 215) says he has "never known any but a fatal result follow the removal of these tumours by ligature, scissors, or knife." Gross (vol. 2, page 188) speaks equally discouragingly of the result; and I cannot find a case on record which has been treated successfully by this method. Dr. Nevins mentioned at the Liverpool Pathological Society in 1850 three cases in which puncture had been tried; one case was cured, the gentleman being then 40 years of age; the second died; and the third was quite well at the end of three or four months, with the sac contracted. Dr. Hana has related a case in which spontaneous rupture of the sac took place after measles, and the child recovered. Cases have been cured by puncture followed by injection of iodine, as proposed by Dr. Brainerd. The present case was doubtless one in which the spinal cord had no, or only slight, connection with the sac. Ollivier states that, when the disease is not complicated with hydrocephalus, he has generally found the spinal marrow traversing the sac unaltered; but if coexistent with hydrocephalus, or if the canal of the spinal marrow be distended with fluid, the cord may be flattened out, as it were, so as to apparently line the sac. The gradual compression by the tightening of the ligatures may have contributed a little to the favourable result in this case; and, should another opportunity present itself to me, I shall not hesitate in adopting the same course.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

NOTES OF A MORNING AT BRISTOL.

Charity Universal. 1735. Bristol Infirmary.

SUCH is the quaint inscription on the front of the Royal Infirmary of Bristol. It is an old building, and was for long without a rival in the place. Thirty-seven years ago, another hospital in the more mercantile part of the city was established, and now flourishes (having been rebuilt within the last ten years) under the designation of the General Hospital. The Medical School is separate from both, and allows attendance at either. The Royal Infirmary has two hundred and forty beds; the General Hospital, about one hundred fewer. The medical students are about equally divided between the two.

At the time of my visit, the house-surgeon, Mr. Board, was from home, and his place was ably supplied by Mr. E. Ludlow. Mr. Ludlow is the brother of the late Mr. Harvey Ludlow, a young surgeon of great abilities, who already held London appointments, and whose early death in the Crimea was lamented by all who knew him. To Mr. Ludlow I was indebted for most of the information respecting the hospital practice which is to be found in the following notes.

The interior of the hospital wards and other arrangements are all on the old plan; and, if the truth be told, the wards strike a stranger as rather gloomy. The windows are high, and one cannot look out. A new wing has just been opened, built at the sole cost of a munificent gentleman, Mr. Hill, which contrasts strongly with the old part. Its windows come low down, and give a very cheerful appearance. Everywhere the passages communicate; and the new wing is directly connected with the old, the building being one block. The old wards have deal floors, requiring washing; the new ones have floors of varnished oak. I had not much time to give to the wards; but Mr. Ludlow showed me some very interesting cases, amongst which the following may be mentioned.

Recovery after severe Compound Fracture of the Skull with Loss of Brain-Substance.

This patient is a lad aged 14, under Mr. Tibbits's care, who was admitted July 11th, having been kicked upon the right forehead by a horse. There was a compound and extensive fracture, with brain-substance lying in the wound. The boy was insensible. The trephine was used, and some portions of bone were taken away, others elevated. Next day, the boy regained some consciousness. He had a slow pulse (64) for some time afterwards, but, on the whole, did well. The wound is now healed, with the exception of one or two small places. The lad, although still kept to bed, is florid, cheerful, and perfectly well. Beneath the scar, the pulsations of the brain are easily seen. It is now more than two months since the injury and operation.

Usual Practice as to Trephining in Compound Fracture.

I inquired of Mr. Ludlow as to the rule of practice amongst Bristol surgeons as to trephining in cases of compound fracture with depression, and without symptoms. He said that, under such circumstances, the operation was never done. He related to me three cases which had done perfectly well without, but had seen others in which the event was bad. Mr. Tibbits's case, just related, was the only one of trephining (excluding a few in which portions of bone had been removed by other means) which, in a few years' experience in the hospital, he had seen. I shall mention subsequently some specimens bearing on this question, which I saw in the museum.

Excision of the Knee.

A girl, aged 14, whose left knee-joint was excised by Mr. Tibbits two months ago, promises a very good cure. The limb is now quite straight; the wound very nearly healed. She is very delicate-looking. I saw several cases of excision of the elbow, all doing well; but only the one referred to of the knee. My informant did not speak enthusiastically as to the results of knee-excisions. He said he only knew of one case in which it could be asserted that the limb was really useful. In several others, amputation had afterwards been necessary.

Excision of Os Calcis.

There was a little girl, also a patient of Mr. Tibbits, in whom the en-

tire os calcis had been removed, and who is now able to walk on the foot. It is healed, and there is comparatively little deformity. There is some movement at the ankle. Unfortunately, the os calcis of the other foot was diseased also; and this, having been gouged, is not yet sound.

Use of Carbolic Acid.

Carbolic acid is employed for almost all wounds, usually in weak solution, and in the form of carbolised oil applied as a dressing in lint. Formerly wounds were washed out with strong solutions, but this was not found to do well, and now milder applications of it are preferred. Although a favourable opinion is entertained of its effects, they are not considered to have been so good as its advocates have reported elsewhere.

Lithotomy; Excisions of Hip, etc.

Lithotomy is a frequent operation; and for all suitable cases the median method is preferred. The results are very good. Excision of the hip has not been recently performed, nor has ovariectomy.

Rarity of Erysipelas and Pyæmia.

Mr. Ludlow spoke strongly as to the infrequency of these hospital scourges. The operative practice of the institution is large, and the occurrence of either pyæmia or erysipelas after an operation is said to be very rare. This happy result is attributed chiefly to the free ventilation, by open windows, which is maintained.

[NOTE.—A few further memoranda from the excellent Museum of this institution will be given at a future time.]

FIFTEEN MINUTES IN THE BRISTOL GENERAL HOSPITAL.

Information Received and Impressions Formed.

Hospital well built. Not ten years old. Situation low, close to river. Near to shipping and manufactories. Probably many casualties. Floors all of concrete. Hospital in one block, with free passage communication. Wards of moderate size; plenty of windows, cheerful looking, and everywhere beautifully clean. Excisions of joints not infrequent. Three or four persons were walking about Bristol in whom excision of a knee-joint has been performed here. One case (recently) of second resection five years after first, the limb being bent and greatly shortened. Good result after the last operation. No resection of knee in the house at time of my visit. Several of resection of elbow, and many amputations. A few cases of resection of head of femur have been performed, and one gave a very good result. Pyæmia and erysipelas very rare. Erysipelas cases always removed at once to a small ward apart from the rest (but with passage communication). This ward often empty and often whitewashed. Empty and just whitewashed when I saw it. Pupils attend the hospital practice, but the school is at a distance. The dressing is done chiefly by the house-surgeon and assistant. The *post mortem* examinations, which are numerous, are done by the same officers, and the house-surgeon is also demonstrator of anatomy at the school.

Carbolic acid is highly thought of. Quite lately it has been used on Lister's plan. Poultices are still employed in bad cases, and when the carbolic acid has failed to prevent inflammation.

There are 140 beds, and all usually occupied. The concrete floors are very clean, but are liable to crack, and require repair. Two wards were disused and under repair on this account at the time of my visit.

Lithotomy is frequent. Some do the lateral, some the median, operation. Three or four cases of stone were in when I was there. Mr. Dobson showed me a woman now under care for valvular disease of the heart, in whom a curious form of gangrene of the feet is developing itself. One foot is dusky, covered with large vesications, somewhat swollen, and the skin discoloured, as if painted with a weak solution of nitrate of silver. This condition extends some little distance above the ankle. Capillaries, in which stagnation has occurred, are easily traced in the skin.

In the treatment of fracture of the patella, the elevation of the limb is still practised. Mr. Dobson showed me a case in which the history of the injury was peculiar. The man had his knee struck violently against a cart-wheel, the horse on which he was riding having run away. He saved his right knee from collision by lifting it on to the horse's neck, and was probably trying to save the other when it struck the wheel violently; the result was a fracture of the patella, partly transverse and partly starred, with considerable separation. The lower fragment is much smaller than the upper one (as usual). When I saw the case the fragments were somewhat separated, and freely movable.

As the Hospital is young, the museum is necessarily small, but it appeared well kept. It contains no specimens of fractures of the patella, nor any of separations of epiphyses—subjects respecting which I espe-

cially inquired. There were a few good paintings of skin-diseases, by Dr. Swayne, on the walls.

The out-patients work is very heavy. The present house-surgeon was a short time ago in the same office at St. Thomas's Hospital. He spoke very decidedly as to the much less frequent occurrence of erysipelas and pyæmia at the Bristol Institution than at the London one. No very evident reason for this difference could be alleged.

The courtesy with which Mr. Dobson, the very intelligent house-surgeon, accommodated himself to the hurry with which my visit was unavoidably paid, was equalled only by the dexterity with which he imparted a large amount of information in a very short space of time.

HULL GENERAL INFIRMARY.

TWO CASES OF TETANUS: WITH REMARKS.

By KELBURNE KING, M.D.

WALTER W., aged 17, was admitted into the Hull Infirmary on April 23rd, 1869, in consequence of the wheel of a waggon having passed over his feet while he was at work in the New West Dock. On examination, it was found that there was much contusion of the soft parts of the right great toe, and a lacerated wound on its dorsal aspect communicated with a comminuted fracture of the distal phalanx. There was, also, a contused wound of no great extent on the dorsum of the left foot.

There was nothing to call for any particular notice of this case, which was dressed with carbolic oil (1 to 12) and seemed to be going on favourably until May 2nd, tenth day after the injury. On the morning of that day, he complained of stiffness in the jaw. The masseter muscles felt tense, and the power of opening the mouth was limited to about half an inch.

On the 3rd, the stiffness had increased. The teeth could not be separated; the angles of the mouth were drawn downwards, but up to that time he had experienced neither pain nor paroxysm, and had slept well under the influence of opiate draughts.

On the 4th, the peculiar tetanic countenance was very perceptible (risus Sardonicus). The muscles of the neck, both before and behind, were in a state of constant rigidity, as were those of the chest, abdomen, and back. Opisthotonos had supervened, but there had not yet occurred any paxoxysm. Pressure upon the muscles gave the sensation of extreme hardness to the fingers, but did not cause any exacerbation, nor did he complain of pain. The pulse was about 96.

Up to this time, the condition of the patient had been that of tonic rigidity of the muscles, gradually and rapidly increasing both as to space and intensity; and, though he had been hitherto free from pain and from paroxysms, it was evident from the rapidity with which the disease advanced, as well as from the impossibility of conveying food into the stomach, that the case was one of great urgency, and of the acute kind from which recovery is hardly to be expected. Seeing that the symptoms were limited to muscular rigidity, it was hoped that, by combating this, relief or cure might be obtained. Accordingly, at 9 P.M., a tobacco enema was administered (half a drachm of pigtail to half a pint). This was followed, in a quarter of an hour, by profuse perspiration and vomiting, partial relaxation of the muscles, and acceleration of the pulse from 96 to 120. He passed a moderately comfortable night, and on the following morning (May 5th) there was decidedly less muscular contraction. Half a minim of the alkaloid nicotine was administered at 8.30 A.M., and repeated at 9.30 A.M. At noon he could open the mouth a little, about half an inch, and swallowed some beef-tea well. The nicotine was omitted, but about 3 P.M. he had some slight but sudden muscular spasms. He was ordered to have from half a minim to a whole minim of the nicotine every hour, in a dessert spoonful of brandy, the effect to be carefully watched.

In the twenty-four hours which elapsed from 3 P.M. on the 5th, to 3 P.M. on the 6th, he took 14 minims of nicotine. The general rigidity was less marked, but he had had several paroxysms: one about 9 A.M. so severe as to threaten asphyxia.

For twenty-four hours, from 3 P.M. on the 6th till 3 P.M. on the 7th, one minim of the nicotine was administered regularly every hour. From the afternoon of the 6th, the muscles were quite flaccid and relaxed between the paroxysms, but these were more frequent, and were now capable of being excited by pressure applied to the surface; but he swallowed well, took a considerable quantity of beef-tea and brandy, and the pulse, though 120, continued tolerably full and firm. In this condition he remained till 1 P.M. of the 8th May, when a severe paroxysm occurred affecting the respiratory muscles, and, in spite of artificial respiration being for some time persevered in, he died asphyxiated.

As usual in such cases, no pathological condition of the brain and spinal marrow could be detected, unless a general vascularity of the arachnoid membrane.

There are just two observations which I would take the liberty of making on this case.

The disease, at the first, though rapid in its progress and evidently of the acute traumatic character, had, for its sole symptom, muscular rigidity. It seemed fair to suppose that if this could be overcome, a reasonable chance of recovery would be afforded. Tobacco was selected as exerting a powerful depressing effect on the voluntary muscles, yet not impairing the heart's action. It was fully and fairly tried, and its physiological effects completely attained. The pulse though increased in rapidity was not diminished in force, and the voluntary muscles were rendered flaccid, except when under the influence of paroxysms. The collateral advantage of getting food into the stomach was also secured. Yet the man died on the eighth day after the first invasion of the disease; and this leads me to observe, secondly, that tetanus consists in a disordered condition of the nervous centres, in consequence of impressions conveyed from the peripheral nerves—that, once formed, this condition continues totally independent of impressions conveyed from without, and is not affected by isolation from the periphery—that it is of so subtle a nature as to elude and escape our present means of detection; and that, lastly, tonic muscular rigidity is merely a symptom of this disordered condition, and is by no means the cause of the disease, and that, consequently, its alleviation or even cure, if possible, is not to be necessarily followed by the cure of the disease.

By way of contrast to this case, I may briefly mention the last immediately before it, which I was called on to treat in this hospital.

Louisa S., aged 17, was admitted into the Infirmary on September 25th, 1866, in consequence of compound comminuted fracture of the metacarpal bone of the left thumb, with severe laceration of the palm of the hand extending into the wrist-joint. The thumb and forefinger, with their metacarpal bones, the trapezius, trapezoid, and part of the cuneiform bones, were removed at the time, but extensive sloughing took place.

On October 13th, it was necessary to amputate through the middle of the forearm.

On October 27th, fourteen days after, spasmodic twitchings took place in the arm, which extended to the muscles of the jaw and of the trunk generally. For a week the tetanic symptoms slowly increased, and both trismus and opisthotonos were partially developed. After that time, the general symptoms of tetanus gradually abated, but for a long time a spasmodic, or rather tonic, contraction of the biceps muscle of the affected arm continued. Her general health improved, and on November 22nd, she was discharged cured, except for this symptom, which persisted for a considerable time. No specific treatment was adopted.

TAUNTON AND SOMERSET HOSPITAL.

FRACTURE OF BASE OF SKULL: RECOVERY.

(Under the care of HENRY J. ALFORD, M.B.)

WILLIAM P., aged 15, was admitted at 8.10 P.M., on June 9th, 1868. He was riding a horse in the neighbourhood, when the animal took fright and threw him violently to the ground, he pitching on the top of his head. On admission, he was perfectly comatose; the extremities were cold, the pulse scarcely perceptible, the pupils dilated, and not acting by light. Blood flowed copiously from both ears, nose, and mouth. He was at once put to bed, and warmth was applied to the surface by means of hot bottles and blankets. His head was shaved and ice applied; and a drop of croton oil was placed on his tongue. He remained comatose for several days. Two days after admission, he became wildly delirious, and was with great difficulty kept in bed. He occasionally lapsed again into coma, and this state alternated with delirium. He was nourished by strong beef-tea; and his bowels were kept open by doses of calomel, and turpentine enemata. On the 21st he was so unruly that opium was given him to calm him; this he took in large doses with the best effect. The hæmorrhage from the ears was followed by a serous discharge which lasted for some time. Consciousness returned very slowly, and was for a long time only partial. He had, moreover, an internal squint, sometimes of one, sometimes of both eyes, but this entirely passed away before he left the hospital. He was kept very quiet, and by the end of August was so far recovered as to walk about the ward, although with an uncertain, staggering gait. His appetite became remarkably good, and he gained flesh rapidly. He still complained of pain in the head.

On September 19th, he was discharged quite well. He has often presented himself at the hospital since. He has a vacant, semi-idiotic expression; it is doubtful how far this (he being a Somersetshire plough-boy) is natural to him, and how far the result of his accident. His father says he is quite well, save that, when he first rises on a morning,

he staggers for a short time. This soon passes away, and he is able to follow his usual occupation.

COMPARATIVE PATHOLOGY:

BEING

REPORTS ON THE DISEASES OF THE LOWER ANIMALS IN RELATION TO THOSE OF MAN.

THE FOOT-AND-MOUTH MURRAIN.

THE foot-and-mouth exanthem is reported to be increasing in many parts of the country. It cannot be too widely known that it spreads by contagion only. The provisions of the recent Act will no doubt be put in force wherever it shews itself, and they may be expected to very much restrict its area. From Yorkshire, we hear of an attempt to stamp it out by slaughtering the cattle attacked. It is needless to remark, after our report of last week, that such a measure is unnecessary. The disease is a very mild one, and rarely fatal. Pigs should not be allowed to drink the milk, and both pigs and sheep should be kept away from cattle as much as possible. A London milk-firm has issued a notice to the public, that all the milk supplied by it is from cows which are under regular inspection. At Croydon, an attempt has been made by Mr. A. H. Smee to induce a belief that sewage irrigation to the meadows, as carried out in connexion with the town, has been the cause of the disease. Such an opinion is, of course, devoid of the slightest foundation, and is, in fact, disproved by the present wide-spread prevalence of the disease. At a meeting of the Croydon Board of Health, Dr. A. Carpenter, of that place, is reported to have stated that in his opinion the milk of animals sickening with the disease is not injurious. He added, that in the height of the disease the milk is absent, and that it is only when it returns during convalescence that it is unwholesome. We doubt the strict accuracy of these statements. Cows always give a diminished supply during their illness, but rarely, if ever, become quite dry. We do not know of any proof that the milk is more likely to be injurious in the stage of convalescence than in that of onset. It is not probable that the milk, unless visibly altered, is ever injurious in any great degree; but we must repeat the advice already given, that medical men should warn their patients against its use, especially for young children.

A NOTE ON THE "WALL-EYE".

THE "wall-eye" is simply a light blue or almost white iris. In the case of a white pony in which we examined it, the inner circle of the iris was of its usual dark brown almost black colour, next to it outwards was a circle of bright blue, and outermost of all was dead white. The sclerotic was pigmented as usual, and the margins of the eyelids. It was the left eye that was blue; the right was as dark as usual, and showed no peculiarity. The animal was white, and on both sides the eyelashes were white, although the edges of the lids were almost black. The pony was believed to see as well with one eye as with the other; and its owner, an accomplished veterinary surgeon, held that a wall eye was no detriment, that it was not liable to any special disease, and wore well. He thought it more common for the peculiarity to be unsymmetrical than otherwise. He could not give me any facts as to hereditary transmission. Such marked deviations from symmetry as for one eye to be very dark and the other very light, are, we believe, never witnessed in the human subject; but lesser degrees are not very uncommon, and are of special interest because certain facts have been recorded tending to show that eyes, odd as regards colour, are not unfrequently odd also as regards refractive power, and in their tendencies to disease. An explanation of the non-occurrence of such marked contrasts in man may, perhaps, be suggested in the infrequency with which intermarriage takes place between individuals differing as regards pigmentation to the same extent as a white and a black horse. This is, however, mere conjecture, and we are not aware of any fact supporting the belief that irides of different colour are more common among half-castes than amongst others.

REVIEWS AND NOTICES.

CALENDAR OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, Midsummer 1868 to Midsummer-day 1869. Pp. 319. Taylor and Francis. 1869.

THIS very interesting compilation has just been published, and contains a great amount of much valuable information on all matters relating to the College. The publication of the various sets of questions in anatomy, physiology, surgery, and medicine, submitted to candidates for the primary and pass-examinations for the diplomas of Fellowship and Membership during the past year, will be acceptable to those candidates about to go through those examinations during the ensuing year.

The Council, or governing body of the College, which consists of twenty-four members, has held thirteen meetings during the year. The proceedings of this body have been from time to time duly reported in the pages of the JOURNAL.

The Court of Examiners, which consists of ten members (exclusive of the two who conduct the examinations in Medicine), have held five meetings for the examination of candidates for the Fellowship. Seventy candidates presented themselves for the first or anatomical and physiological examination; of this number, 58 passed, and 12 were referred to their studies for six months. At the second, or pass-examination in Surgery and Medicine, there were 33 candidates; of this number, 31 passed, one was required to qualify in Medicine, and one was referred for twelve months. For the primary and pass-examinations of candidates for the diploma of membership, there were forty-five meetings, at the former of which there were 547 candidates examined, of which number 437 passed, and 110 were referred for three months. For the pass-examination on Surgical Anatomy, and the Principles and Practice of Surgery, there were 322 candidates, of which number 235 passed. Of those approved in Surgery, 42 were required to qualify in Medicine, of which number 7 afterwards qualified in this subject, 45 were referred for six months. The total number of diplomas issued was 242.

The Board of Examiners in Midwifery met four times, and examined 37 candidates, of which number 25 passed, 5 were referred for a written examination, and 7 were rejected for three months.

The Board of Examiners in Dental Surgery appear to enjoy almost a sinecure, as they only met once to examine four candidates, one of whom was rejected for six months.

The number of Fellows now on the list who have obtained the distinction by examination amounts to 389. The honorary Fellows, gradually becoming less, are 210; and those who have been elected on the recommendation of six Fellows are 730, making a total of 1,329, to whom the election into the Council is confided.

The financial statement shows that from Midsummer-day 1868 to Midsummer-day 1869, the receipts amounted to £10,852 14s., obtained principally by fees paid for the various diplomas of the College, and amounting to the large sum of £8,506. The investments in freehold property appear very productive, as no less than £929 16s. was received as rent for the two houses adjoining the College. Elections to the Fellowship, at ten guineas each, only produced £105. The dividends on investments in Government Securities amounted to £1,194 3s.

The disbursements were £10,669 15s. 4d. Here the principal item was paid in fees to examiners, Council, and auditors, amounting to £3,818 15s. 6d.—not an exorbitant sum when the great number of meetings already alluded to is taken into consideration. The next largest item is for salaries paid on account of office, museum, and library, to the large and increasing staff, amounting to £3,136 7s. 4d. Taxes, rates, and stamps, absorbed, £935 16s. 2d.; lectures, prizes, and oration, £59 5s. 2d. The oration festival (£82 16s.) is paid for out of funds left for that purpose by the executors of John Hunter. The item "Dinner for Council and Court of Examiners" no longer appears in the disbursements. The trust funds have been augmented to £10,335 13s. 11d. by the receipt of £5,000 from Mr. Erasmus Wilson, F.R.S., to endow a Professorship of Dermatology. The receipts being £10,852 15s. 4d., and the disbursements £10,669 15s. 4d., there appears a balance in favour of the College of £182 18s. 8d.

The President of the College is Mr. Edward Cock of Guy's Hospital, and the Vice-President Mr. Samuel Solly, F.R.S., of St. Thomas's Hospital, and Sir William Fergusson, Bart., of King's College.

Considerable labour must have been expended on this work, creditable alike to all engaged on it. The price, which has been reduced to 1s. only, will no doubt create a large demand for it from members and students.

THE STUDENT'S LIBRARY:

A GENERAL NOTICE OF THE BEST EDUCATIONAL BOOKS.

IN our Memoranda for Students, we advised strongly a liberal expenditure in books, and promised to supply some remarks intended for their guidance in selection. That promise we now attempt to fulfil. The task has been, in some respects, more onerous and difficult than we had contemplated; for the competing works are very numerous, and their comparative advantages are in some instances very nearly balanced. We have done our best not only to give sound advice to purchasers, but to act justly towards authors and publishers.

We have thought it best to give, first, lists of the principal books, arranged according to subject, with a few brief remarks appended to each. At the conclusion of the whole will be found a few notes as to the works required by students at different stages of their progress; and, lastly, on the mode of reading. One general remark we may here venture: that the English student's library is at the present day a very excellent one, surpassing not only by very far that offered at any previous time, but unequalled, we believe, in any other country. Its riches make selection the more difficult, and render assistance to the student the more necessary.

In a general way, students are themselves the best judges of what serves their purposes; and, were it not for the obvious and great inconvenience, that, if left to himself, each individual has to buy and pay for his own experience, we should scarcely have ventured on our present undertaking. We have endeavoured, in the present review, to give beginners the advantage of the experience of older students; and in many instances (especially in the case of well established works), the verdict recorded is to a large extent founded upon the opinions of the class for whom we write.

ANATOMY.

1. Quain's Anatomy. 7th edition. By Dr. Sharpey, Dr. Allen Thomson, and Dr. Cleland. 800 Illustrations. 2 vols., 8vo. £1 : 11 : 6. Walton.
2. Ellis's Demonstrations of Anatomy. 6th edition. 130 Illustrations. Small 8vo. 12s. 6d. Walton.
3. The Dublin Dissector (Harrison). 5th edition. 2 vols. 12s. 6d. Simpkin, Marshall, and Co.
4. Anatomy, Descriptive and Surgical. By Henry Gray, F.R.S. 4th edition, by T. Holmes, F.R.C.S. 1 vol., royal 8vo. 28s. Longmans.
5. The Anatomist's Vade Mecum. By Erasmus Wilson, F.R.S. 12s. 6d. Churchill.
6. Practical Anatomy. By Christopher Heath, F.R.C.S. 2nd edition, enlarged. Fcap. 8vo. 12s. 6d. Churchill.
7. Holden's Manual of the Dissection of the Human Body. By Luther Holden, F.R.C.S., and John Langton, F.R.C.S. 16s. Churchill.
8. Ward's Outlines of Human Osteology. Royal 32mo. 5s. Renshaw.
9. Holden's Osteology, with Plates. 4th edition. 8vo. 16s. Churchill.
10. Ellis and Ford—Illustrations of Dissections. 29 Parts. Imperial folio. £5 : 3. Walton.

The first year's student who asks, "What book on Anatomy shall I get?" must bear in mind that there are two divisions of the subject, Descriptive and Practical. He will require one book for reading at home systematically, and another for use in the dissecting-room. He will have considerable choice as regards each of these. Undoubtedly, at the head of the descriptive works stands Quain and Sharpey's work; and at the head of the other, Ellis's *Demonstrations*; but to many students there are others which may be more acceptable. Quain's *Anatomy* is complete, exceedingly accurate, the illustrations are numerous and very good; and, as a work of reference, it is invaluable. The introduction, on the Histology of the Tissues, is written by Dr. Sharpey, and is by far the ablest epitome that exists of all that is known on the subject, and should be well studied by every student who can obtain access to it.

To the average student, however, Quain is not the book which will find favour for reading at home. We think that Gray's work is far more generally used. The illustrations are diagrammatic; the names of the objects seen being printed on them, not indicated by figures referring to notes. This plan, we believe, was first introduced by Holden in

his *Osteology*. The directions for exposing the arteries, etc., are sufficiently precise to enable a student to use the book in the dissecting-room as well as at home, if he have no other dissector's manual; and the descriptions of the bones are much more detailed than those given in Quain, and to some men would be preferable to those given in Holden, as they are more systematic and in smaller compass, though of course not so useful for those who know nothing whatever of the names of the organs of special sense, a student will do well to consult Quain also; as, even in the last edition of Gray, several important points are by no means fully treated of. The outline figures, with the lines of direction of the requisite incisions shown, are peculiar to Gray's *Anatomy*, and in our opinion they are often very useful.

Wilson's *Vade Mecum* is a systematic treatise on the whole subject, and is much cheaper than either of the above. The information is not, however, of the most modern date; and the book, which formerly enjoyed an extensive popularity, is not now largely used in London schools. It excels in ingenious tables showing the relationship of parts. It is not adapted for a dissecting manual. The works for daily use in the dissecting-room are those of Ellis, Holden, and Heath.

Ellis is remarkably accurate and detailed in his descriptions, but often unnecessarily repeats, so as to confuse a young student, and irritate an older one. Many students cannot appreciate his directions for dissection, and, after puzzling over them for some time, either give up the problem and ask a demonstrator, or set rashly to work and spoil their own, and possibly a neighbour's "part" too. To the man who perseveres, however, and is anxious to learn his anatomy thoroughly, Ellis will be a dissecting-room companion which has no equal.

Heath's work attracts us by the excellent way in which the directions for dissection are given, separate from the descriptions, and in smaller print, so that the student can get at what he wants at once. The illustrations are plentiful, and taken from good sources. Our objection to the work is, that the description of the parts dissected is not always full enough. The *memoria technica* given in foot-notes will help a student to recollect many relations which have repeatedly escaped him before.

Holden's manual is more expensive than either of the above. Like Heath's, it is hardly detailed enough; but it is decidedly the one for a beginner who likes to be led on by very easy stages. The illustrations will almost teach by themselves; and the surgical notes scattered throughout the work ought to induce the student to find out other "practical applications" of anatomical facts for himself.

As to whether Ellis, Heath, or Holden should be bought, will depend on the mental acquisitiveness of the individual, and on the sum of money at his disposal. If he be afraid of Ellis, either of the others will answer his purpose. We ourselves would prefer Heath to Holden. The student who uses Heath in the rooms and Gray at home will have no excuse for want of knowledge of anatomy, as far as books can serve him.

In Osteology, Holden's treatise is unrivalled. It will enable a man who knows none of the numerous "eminences", etc., with the bone before him, to make them all out with a little care; but, having found out the names, probably the account in Gray, or that most complete and careful one found in Ward, may be more helpful as far as acquiring facility in rapid and exhaustive description is concerned.

If a student can afford them, let him buy Ellis and Ford's *Plates*. They are the best extant, and will be of the greatest use for home study. Any one wishing to make a student an useful present could select nothing better.

PHYSIOLOGY.

1. Lessons in Elementary Physiology. By T. H. Huxley, F.R.S. 18mo, cloth. 4s. 6d. Macmillan and Co.
2. Questions on the above. By T. Alcock, M.D. 1s. 6d.
3. Kirkes's Physiology. 7th edition. By W. Morrant Baker. 130 Illustrations. Small 8vo. 12s. 6d. Walton.
4. Manual of Physiology. By E. D. Mapother, M.D. 10s. 6d. Fannin.
5. Principles of Human Physiology. By W. Carpenter, M.D., F.R.S.; and H. Power, M.B. 7th edition. Three Steel Plates, 278 Engravings on Wood. 8vo, 28s. Churchill.
6. Human Physiology. By J. C. Dalton, M.D. 8vo, cloth. 274 Illustrations. 21s.
7. Manual of Physiology. By W. B. Carpenter, M.D., F.R.S. 252 Illustrations. 12s. 6d. Churchill.

The first book which a student should get is Huxley's *Lessons*. This will take him quickly, with a little careful study, to the level of the most accurate modern physiology. Having mastered that, then let him get Kirkes. The new edition contains everything wanted for examination, except at the University of London. For this, he must attack Carpenter's Human Physiology.

Dalton writes very clearly, and puts many facts (simply mentioned in the ordinary text-books) in a new way, so as to attract one's attention; but we think his last edition is somewhat behindhand. The chapters on Generation and Development almost for the first time made it possible for an average man to attain clear and sufficiently precise ideas on these subjects. The illustrations are now, however, to be found in Kirkes; and the smaller price of the latter will recommend it to most.

Carpenter's *Manual* at one time pleased us very much; but we think, if a student cannot afford to get Kirkes as well, or the *Human Physiology*, he had better choose Kirkes.

Mapother contains an extraordinary amount of information, well put, and has the additional attraction of questions.

The first part of Hooper's *Physician's Vade Mecum* contains a most able summary of physiology in relation to disease.

CHEMISTRY.*

1. A Manual of Chemistry (Fownes, Bence Jones, and Watts). 12s. 6d. Churchill.
2. Lessons in Chemistry. By Henry Roscoe, F.R.S. Well illustrated. 18mo, cloth. 4s. 6d. Macmillan.
3. Elements of Chemistry, Theoretical and Practical. By William Allen Miller, M.D., LL.D. 3 vols., 8vo. 60s. Longmans.
4. Introduction to Chemistry. By F. S. Barff, M.A. 4s. With Examination questions for Matriculation. Groombridge.
5. Practical Chemistry. By Bowman and Bloxam. 6s. 6d. Churchill.
6. Medical Chemistry. By Bowman and Bloxam. 6s. 6d. Churchill.

Barff's *Introduction* has been written with a view to the Matriculation Examinations at the University of London, contains several series of questions, and is used, we believe, in the University College School, preparatory to the more advanced course.

Bowman's Manuals have found great and deserved favour with students, and will continue to do so. The New Notation is not adopted.

Fownes continues to be the favourite manual. If any one should be unable to appreciate the recent additions, he will find Roscoe's manual a capital introduction. For many students, it will be far more useful to them than Fownes—at any rate, for some time. Fownes can be referred to with advantage.

Miller is the book for the University of London. The first volume contains a capital account of Natural Philosophy in relation to Chemistry.

SURGERY.

1. Science and Art of Surgery. By John E. Erichsen. 5th edition. 600 Illustrations. 2 vols., 8vo. £1:11:6. Walton.
2. Druitt's Surgeon's Vade Mecum. 10th edition. 12s. 6d. Renshaw.
3. The Principles and Practice of Surgery. By Professor Pirrie, F.R.S. 2nd edition. 24s. Churchill.
4. Abstracts of Surgical Principles for Students. Part 1, Inflammation, etc.; 2, Tumours; 3, Dislocations; 4, Fractures. 1s. each. By Thomas Annandale, F.R.C.S. Ed. Hardwicke.
5. A Manual of Surgery. By Fairlie Clarke, M.A., F.R.C.S. 32mo. 4s. 6d. Renshaw.
6. Outlines of Surgery. By F. Le Gros Clark, F.R.C.S. 5s.
7. Practical Surgery. By Sir W. Fergusson, F.R.S., Bart. 5th edit. 12s. 6d. Churchill.

Annandale's *Abstracts* seem carefully done. They are portable, and therefore may be found useful. We should, however, prefer the chapters in the *Surgeon's Vade Mecum*.

Every one should have a "Druitt". It is one of the best written (if not the very best) manuals on any subject, and contains a wonderful amount of information. A new edition is forthcoming, and will, no doubt, be fully up to the time.

Next to Druitt, as a surgical manual which all should have, comes Mr. Erichsen's work. It should be read by the third or fourth year's man, after Druitt has been well mastered, and is especially suitable for preparing for examination.

Pirrie has been a great favourite with several of our friends who are well able to choose good books; but the last edition is very far behind modern ideas in many respects. It is extremely well written, and we should hail a new edition, or a new book in the same style, as a real boon to students.

We would strongly recommend every student who can do so to read Mr. Simon's article on Inflammation in Holmes's *System of Surgery*.

* The following is the opinion of a Lecturer:—"Fownes is still the Student's Chemical Text-book. Williamson's is a good book, but only fitted for more advanced students. Miller's and Odling's Chemistry Manuals can scarcely be called students' books. For Practical Chemistry, Odling's little book is by far the best of any I am acquainted with. There is a sad dearth of Students' Text-books in Chemistry."

Its separate publication would be a great advantage both to teachers and taught.

MEDICINE.

1. Aitken's Science and Practice of Medicine. 2 vols. 34s. Griffin.
2. The Practice of Medicine. By Thomas Hawkes Tanner, M.D., M.R.C.P. 6th edition. 2 vols. 31s. 6d. Henry Renshaw.
3. Hooper's Physicians' Vade Mecum. 8th edition. 12s. 6d. Renshaw.
4. Dr. Tanner and Dr. Tilbury Fox. Manual of Clinical Medicine and Physical Diagnosis. 2nd edition. 7s. 6d. Renshaw.
5. A Manual of the Practice of Medicine. By Dr. Barlow. 12s. 6d. Churchill.
6. Clinical Lectures. By Dr. Hughes Bennett. 1 vol. A. and C. Black.
7. The Art of Case Taking. By J. S. Warter. Illustrated. 7s. 6d.
8. Lectures on the Practice of Physic. By Sir Thomas Watson, M.D. 2 vols. 34s. Parker.

Aitken is generally considered the standard work in Medicine; but students will find Tanner much more pleasant to read. Aitken is fragmentary, and badly connected. It gives excellent information on many subjects—information of a kind which can scarcely be obtained elsewhere; but it gives very unequal attention to different subjects.

It is very much to be regretted that Watson's *Lectures* are out of print; but we are informed that a new edition is in course of preparation.

Hooper's *Physician's Vade Mecum* will be the best manual a student of limited means can purchase. It is very complete, but so condensed as to be uninteresting to read, though useful for reference. The introductory physiology, etc., is well worth perusal by all.

Barlow's *Manual* is not very generally read, but we think it is for want of being better known. The pathology is excellent, being based almost entirely on the researches of Dr. Wilks. Principles of treatment are clearly stated. We are afraid, however, it will soon be old fashioned, if it be not so already.

The graphic *Lectures on Clinical Medicine* of Professor Trousseau can be obtained only by subscribing to the New Sydenham Society. They will be invaluable to the advanced student.

Dr. Bennett's well known work contains numerous microscopic drawings and histories of cases, with comments. It needs no praise from us.

The *Art of Case Taking*, by the late Dr. Warter, has been of great service to many students.

We advise a student to borrow and read through Watson's *Lectures* (the last edition); then to buy Barlow, Hooper, or Tanner, the last being perhaps the best; and to use the one selected as his manual for reading and reference. Lastly, in preparation for University examinations, and before settling in practice, he will do well to consult the storehouse of opinions to be found in Aitken.

MATERIA MEDICA.

1. A Manual of Materia Medica. By J. Forbes Royle, M.D., F.R.S., and F. W. Headlam, M.D. 12s. 6d. Churchill.
2. Garrod's Materia Medica and Therapeutics. Third edition. Small 8vo. 12s. 6d. Walton.
3. Handbook of Therapeutics. By Sydney Ringer, M.D. Small 8vo. 10s. 6d. H. K. Lewis.
4. Pereira (abridged). By Dr. Farre. 21s. Longman and Co.
5. The Prescriber's Companion. By Alfred Meadows, M.D. 3s. 6d. Renshaw.
6. Squire's Companion to the Pharmacopœia. 10s. 6d.

Garrod's *Materia Medica* is used almost universally.

Royle gives very complete chemical, botanical, and historical accounts; but these are not attractive to most men. The illustrations are very numerous. There are none in Garrod. It is deficient in therapeutical information. For University examination, it is the best.

Pereira (abridged) is generally liked by those who use the book. The chemistry, botany, etc., have been entrusted to competent hands, and it is very complete. It is also illustrated, but the price is much higher than that of Garrod, and the corresponding advantages are not very evident. There has not been a new edition since the introduction of the last *British Pharmacopœia*.

A good manual of therapeutics has for long been a *desideratum*, and Ringer's book will be well received by students. We must confess to considerable regret that the wants of students have not been more considered by the author. Comparatively little reference to introducers of drugs is made, the history is not given, and, when opinions are quoted, there is no reference to the place where they may be found. We should have liked to have seen more subheadings, in italics or otherwise. There is no bibliography, no inducement is offered to students to consult further authorities, which is surely much to be regretted. With-

out attempting to give an account of all the uses to which drugs have been put, still, we think, it would be well for a student to know where reliable information could be obtained on their chief uses, etc.

Meadows' *Companion* gives a list of drugs, doses, actions, etc.; it is cheap and very useful.

Squire's work, although chiefly intended for practitioners, is one likely to be very valuable to an advanced student. It is not needed by a beginner.

BOTANY.*

1. A Manual of Botany. By Bentley. Churchill. 12s. 6d. 1200 engravings. 2nd edition.
2. Lessons in Elementary Botany. By Daniel Oliver, F.R.S. 200 illustrations. 18mo. 4s. 6d. Macmillan.
3. Manual of Botany. By J. H. Balfour, M.D. 12s. 6d.
4. Descriptive Botany. 1s. Lindley.

The *Descriptive Botany* is almost necessary for men working up for the University of London Examinations.

Oliver contains quite enough for most purposes, and the student who has got well up in his little work, will be quite prepared as regards examinations. If more is wished for, Bentley may be procured. Neither of these is intended to help in the naming of plants, and if, as we strongly recommend, the student of medicine aims to make himself, to some extent at least, conversant with field botany, he must procure Withering, Babington, or Hooker. Babington is perhaps the best.

MIDWIFERY.

1. Theory and Practice of Midwifery. By Fleetwood Churchill. 5th edition. 123 wood engravings. 12s. 6d. Renshaw.
2. Obstetric Medicine and Surgery. By F. H. Ramsbotham, M.A., F.R.C.P. 8vo. 120 plates. 5th edition. 22s.
3. Tyler Smith on Obstetrics. 200 engravings. 2nd edition. 12s. 6d. Churchill.
4. Obstetric Aphorisms. By Dr. Swayne. 3s. 6d. Churchill.
5. Manual of Midwifery. By Dr. Meadows. 3s. 6d.

Tyler Smith we should recommend first as giving the clearest and most scientific account of obstetrics.

Churchill should be obtained in addition, if the student can afford it. Ramsbotham would be the student's book, if it were not for its cost and size. The plates are excellent.

Swayne's *Aphorisms* are found exceedingly useful by very many students of midwifery to explain what is to be seen and done in an ordinary labour, the processes going on, and the symptoms which should warn a student to send for help.

Meadows's *Manual* is a complete treatise, and thoroughly trustworthy. We believe it to be the best of the small books.

A student commencing the study of midwifery will do well to possess Swayne as a pocket companion, to read first Meadows's little manual, afterwards that of Tyler Smith, reserving Ramsbotham for perusal when preparing for University examination or as a work of reference. If he possess Swayne and Meadows, or Swayne and Tyler Smith, he will do very well.

DISEASES OF WOMEN.

1. Diseases of Women. By Dr. G. Hewitt. 16s. Longman.
2. Diseases of Women. By Dr. Fleetwood Churchill. 12s. 6d.
3. Diseases of Children. By Dr. Fleetwood Churchill. 12s. 6d.
4. Diseases of Women. By Dr. West. 16s. Churchill.
5. Diseases of Infancy and Childhood. By Dr. West. 5th edition. 16s. Longman.

* The following reply by a distinguished botanist to our inquiries as to works on this subject may be of use, and we give it in his own words.

"Oliver's *Lessons in Elementary Botany*. (Macmillan.) I like this best for students. It contains just as much as general students need to know and no more, is well arranged, and all points that can be illustrated by figures are illustrated by woodcuts special to the work.—Bentham's *Outlines of Botany, to accompany the Colonial Floras*. (Reeve.) Here you get the cream of the matter as expounded by the greatest living systematist; in 36 pages; no figures.—Lindley's *School Botany*. (Bradbury and Evans.) Besides a good introduction, contains descriptions of all, and figures of many, of the common wild and garden plants.

"More elaborate hand-books of structural and physiological botany, are Balfour's, Hensley's, and Asa Gray's. Balfour has not much grasp of his own, and fails in clearness; but for the rest, very full and complete. Hensley, excellent as a physiologist, but getting rather out of date now, and not a species man. Asa Gray excellent in every way; but it is an American book, and of course all points are illustrated by American plants.

"There are numbers of good French and German ones. A splendid book, which we have nothing to resemble in English, is *Le Maout et Decaisnes, Traité generale de Botanique*, 4to, 700 pages, 5500 woodcuts, illustrating copiously all the divisions of all the natural orders.

"Hand-books of British plants—Babington, Bensham, Hooker and Arnott. All three very good, differing principally in their views of species-limitation."

It is exceedingly difficult to select from these. All are excellent; but, for the student's purposes, perhaps the first is the best.

FORENSIC MEDICINE.

1. Principles of Forensic Medicine. By William A. Guy, M.B. 3rd edition. Copious illustrations. Fcap. cloth. 12s. 6d. Renshaw.
2. Taylor's Manual of Medical Jurisprudence. 12s. 6d. Churchill.
3. Principles of Medical Jurisprudence. By Dr. A. S. Taylor. 1 vol. 28s. Churchill.
4. Poisons. By T. Hawkes Tanner, M.D.
5. On Poisons. By Dr. A. S. Taylor. 12s. 6d.

Guy is the general favourite. Taylor's *Principles of Medical Jurisprudence* is the standard work on the subject, but too large for a student's requirements.

Tanner on Poisons will be found a trustworthy and handy little book.

VOCABULARIES.

1. Fowler's Medical Vocabulary. Fcap. cloth. 7s. 6d. Renshaw.
2. Medical Vocabulary. Post 8vo. 3rd edition. 8s. 6d. Churchill.
3. Henry's Glossary of Scientific Terms. 3s. 6d. Walton.

Every student should possess a vocabulary—Mayne or Fowler—and use it constantly. It should, in fact, be his first purchase. Mayne is rather more expensive, it contains more words, but some of them not of much use. The derivations are better, but the clinical definitions (as far as we could compare them) seem better given in Fowler. We should be glad if we could refer him to some good clinical vocabulary, which should give, not merely etymological meanings, but guide him as to the practical employment of medical words. Such a work (difficult we admit of compilation) would be invaluable to students—unfortunately none such exists.

Dr. Henry's little book is excellent, but is not so strictly medical as the others.

DISEASES OF THE SKIN.

1. Skin Diseases. By Tilbury Fox, M.D. 6s. Renshaw.
2. Handbook of Skin-Diseases. By Thomas Hillier, M.D. 7s. 6d. Walton.
3. Diseases of the Skin. By George Nayler, F.R.C.S. 10s. 6d. Churchill.
4. Diseases of the Skin. By Erasmus Wilson, F.R.S. 18s. With Plates, 36s. Churchill.
5. Students' Book of Cutaneous Medicine and Diseases of the Skin, etc. By Erasmus Wilson, F.R.S. 8s. 6d. Churchill.

It is difficult to choose in Diseases of the Skin; but on the whole we recommend Dr. Tilbury Fox's work as the one best suited at once to the student's wants and his pocket. He must, however, procure, if possible, a copy of the old edition, as the last is, in respect to paper, type, and woodcuts, very bad indeed. Mr. Nayler's is good, but not so complete as Fox; and the same remark, we think, applies to Dr. Hillier's. As a Cyclopædia of information in Skin-Diseases for the advanced student, Mr. Wilson's larger work has no rival.

MINOR SURGERY, OPERATIONS, ETC.

- A Manual of Minor Surgery and Bandaging. By Christopher Heath, F.R.C.S. New Edition. 5s. Churchill.
- The Essentials of Bandaging. By Berkeley Hill, M.B., F.R.C.S. 3s. 6d. Walton.
- A Manual of the Operations of Surgery. By Joseph Bell, F.R.C.S. Fcap. 8vo. 2nd Edition. 6s. Hardwicke.
- A Manual of Operations on the Dead Body. By T. Smith, F.R.C.S. 5s. 6d. Longmans.
- Operative Surgery. By C. F. Maunder, F.R.C.S. 6s. Churchill.

Heath's Manual is essential for dressers. Hill's is also very good indeed, but not quite so inclusive. Of the works in Operations, we prefer Mr. Bell's. The works of Smith and Maunder are out of print.

ZOOLOGY, NATURAL PHILOSOPHY, THE MICROSCOPE, ETC.

1. On Classification of Animals. By Professor Huxley, F.R.S. 6s. Churchill.
2. Elements of Natural Philosophy. By Mr. Brooke, F.R.S. 12s. 6d. Churchill.
3. 1st Vol. of Miller's Chemistry.
4. Ganot's Physics. 15s. Baillière.
5. The Microscope and its Revelations. By W. B. Carpenter, M.D., F.R.S. 400 Illustrations. 12s. 6d. Churchill.
6. How to Work the Microscope. By Dr. Lionel Beale, F.R.S. 21s. Harrison.

7. The Microscope in Medicine. By Dr. Lionel Beale, F.R.S. 16s. Churchill.
8. Histological Demonstrations. By G. Harley, M.D., F.R.S., and G. T. Brown, Esq. 12mo. 12s.

OPHTHALMOLOGY.

1. The Natural and Morbid Changes of the Human Eye. By Charles Bader. Text, 16s.; Plates, 21s. Trübner and Co.
2. A Handybook of Ophthalmic Surgery (Lawrence and Moon). 8vo, 6s. Hardwicke.
3. Diseases and Injuries of the Eye. Wood Engravings. By George Lawson, F.R.C.S. Fcap, 8vo. 7s. 6d. Renshaw.
4. A Guide to the Practical Study of Diseases of the Eye. By James Dixon, F.R.C.S. 9s. Churchill.
5. A Treatise on Diseases of the Eye. By J. Soelberg Wells. 24s. Churchill.

On Diseases of the Eye, Dixon's work should be read first. It is a model of clear concise writing, and will serve as an excellent introduction to the subject. It scarcely, however, contains enough to serve as a class-book. For the latter purpose, the student will find Mr. Lawson's by far the best that he can obtain. Bader's work and that of Mr. Wells are both of them excellent for reference, but too detailed for beginners. The little work of Mr. Z. Laurence on *Physiological Optics* is well worth perusal. On the special subject of the Ophthalmoscope, we have nothing to equal Carter's translation of Zander; but it contains much that a student will not want. If Mr. Carter, taking Zander as his basis, would write a new and smaller monograph himself, we have no doubt that he would merit our warm thanks and best commendation next year.

GENERAL REMARKS.

As a further guide to selection, we have made the subjoined list (necessarily imperfect) of the books required in each stage of the student's course.

The first year's student will find himself well supplied if his library contains the following:—Heath and Gray or Holden and Gray on Anatomy; Holden's Osteology; Huxley and Kirkes on Physiology; Roscoe and Fownes on Chemistry; Heath on Minor Surgery; Druitt's Surgeon's Vade Mecum; Oliver's Botany.

The second year's student will require to add Tanner's Practice of Medicine; Erichsen's Science and Art of Surgery; Tyler Smith on Midwifery; Churchill or Graily Hewitt on Diseases of Women; Tilbury Fox on Skin-Diseases; Lawson on Diseases of the Eye; Garrod's Materia Medica. He should also read through, not as a task, but as a treat, Watson's Lectures on Physic.

The student, in his third year, may buy or not as he likes, but ought certainly to read, the following:—Virchow's Cellular Pathology; Paget's Lectures on Pathology, etc.; Hilton on Rest and Pain; Mr. Simon's Essay on Inflammation in Holmes's System; Trousseau's Clinical Lectures; West on Diseases of Children.

In concluding this notice, we have a word or two of suggestion to authors, and also a few hints to students. To the authors of class-books we would commend a high sense of the dignity and value of the task they have undertaken. None but those actually engaged in teaching can appreciate at its true worth a well-written student's book. There is no possible field of work in which a man may do more for the advancement of science. We should gladly welcome books on some subjects more exclusively designed for the use of students, written with a definite aim to supply precisely their needs. We should be glad, also, to see additions to the number of concise, small, and very cheap manuals. The three issued by Macmillan on Botany, Chemistry, and Physiology, are models in their way; and works on their plan on other branches of professional study, designed for beginners, and for beginners only, would be most useful. Large books defeat their object and repel readers.

Many of the works which we have had under notice have displayed, we regret to say, remarkable qualities of growth. Long after it might have been supposed that they had reached adult age, they go on developing in size. We hear on all sides expressions of regret that such and such a book "has got so big." Erichsen's *Science and Art of Surgery*, and Tanner's *Practice of Medicine*, have been each expanded into two volumes, with corresponding increase in price. We applaud the care of authors in revising new editions; but, as regards the wants of students, it is much to be desired that size should be kept down, and that when additions are necessary, great attention should be given to the attempt to make room by the omission of superfluous information, or by pruning down redundant expressions. It is a great pity to spoil a good book by expansion and dilution.

Having strongly urged upon students the advisability of procuring a good library, it may not be amiss if we make a few suggestions on reading. He who would read to advantage must try to develop a good appetite for knowledge. Mental food, taken without relish, is rarely digested. It is of little use trying to cram information before the mind has appreciated its want. In the dissecting-room and the ward the student should seek difficulties which his books will solve. He should employ the latter quite as much for reference as for systematic study. Subjects which have seemed obscure in the day must be looked up at night.

It is his object to obtain a real practical knowledge of his subjects—not to become a mere book-man. To do this he must combine the study of things, with the use of books for their elucidation.

The plan of copying out extracts from books is scarcely to be commended. It is very commonly mere waste of time. On the other hand, the attempt to make an abstract of any given chapter the day after reading it, or the same day, without referring, is an admirable means both of impressing the memory and of ascertaining whether the subject has been understood.

ASSOCIATION INTELLIGENCE.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE next meeting of the above Branch is appointed to be held at St. Bartholomew's Hospital, Rochester, on Tuesday, September 28th, at 3.45 P.M.

Dinner will be provided at the Sun Hotel, Chatham, at 5.45 P.M.

The Antiseptic Treatment of Wounds by Carbolic Acid will be brought before the meeting by A. W. Nankivell, Esq., F.R.C.S.

Trains down:—North Kent Railway, 2.10; London, Chatham, and Dover Railway, 2.5.

FREDERICK JAMES BROWN, M.D., *Hon. Secretary.*

Rochester, September 14th, 1869.

SOUTH MIDLAND BRANCH.

THE thirteenth autumnal meeting of the above Branch will be held on Wednesday, October 6th, in the Board Room of the Stamford and Rutland Infirmary, at 2 P.M.: WILLIAM NEWMAN, M.D., President, in the Chair.

Gentlemen intending to read papers or cases, are requested to send the titles forthwith to Dr. Bryan, Northampton.

J. M. BRYAN, M.D., Northampton } *Hon. Secs.*
G. P. GOLDSMITH, Esq., Bedford }

Northampton, September 1869.

SHROPSHIRE ETHICAL BRANCH.

THE annual general meeting of the above Branch will be held at the Lion Hotel, Shrewsbury, on Wednesday, October 6th, at 2 P.M.; J. W. ROE, M.D., in the Chair.

Dinner will be served punctually at 4 P.M., for the convenience of the country members.

Gentlemen intending to read papers, or to be present at the dinner, will oblige by communicating their intention, at their earliest convenience, to

JUKES STYRAP, } *Hon. Secs.*
EDWYN ANDREW, }

Shrewsbury, September 20th, 1869.

WEST SOMERSET BRANCH.

THE autumnal meeting of the above Branch will be held at the Clarence Hotel, Bridgwater, on Thursday, October 21st, at 5 P.M.; H. J. ALFORD, M.B., President, in the Chair.

Gentlemen intending to be present at the dinner, or to read papers after, are requested to give notice to the Honorary Secretary.

W. M. KELLY, M.D., *Honorary Secretary.*

Taunton, September 22nd, 1869.

CUMBERLAND AND WESTMORLAND BRANCH.

THE autumnal meeting of the above Branch will be held at the Globe Hotel, Cockermouth, on Wednesday, October 13th, at 12.30 P.M.; M. W. TAYLOR, M.D., President, in the Chair.

Gentlemen intending to read papers or cases are requested to give notice to the Honorary Secretary.

HENRY BARNES, M.D., *Honorary Secretary.*

Carlisle, September 22nd, 1869.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, SEPTEMBER 25TH, 1869.

YELLOW FEVER AND QUARANTINE.

THE question of quarantine in reference to yellow fever has been again brought under notice. The West Indian Mail Packet, the *Atrato*, arrived a week ago off the Isle of Wight, having had a supposed case on board. She was ordered into quarantine in the Motherbank by the executive of the Privy Council. The questions which chiefly suggest themselves in reference to yellow fever are: first, is there any danger of its being introduced into our own country? and secondly, what proceedings are most to the advantage of the passengers and crew of the infected vessel? The step which was taken by Government in the matter has already been severely criticised by the public press on the alleged ground that it was not in the least necessary as regards ourselves, since yellow fever never spreads out of its own latitudes; and that it is cruelty to those immediately concerned. If the first were proven, the second would, of course, be admitted; but of the fact that yellow fever may be introduced upon English soil there can be no doubt. The occurrences which followed the arrival of the *Hecla* at Swansea two years ago are fresh in the memory of most, and leave no doubt on the question. Yet we may admit that the risk of contagion to our own population is but slight, and that there are really no grounds for fear that the disease may prevail as an epidemic amongst us. From an able report by Dr. Gavin Milroy, presented to the Epidemiological Society during its last session, we obtain valuable information as to the kind of quarantine which is necessary for our own safety. The risk of contagion is confined almost entirely to the ship, and usually to only certain parts of it. Those who visit the hold of the vessel are most liable to be attacked, but a certain degree of danger may wisely be considered to attach to all parts of the ship, and even to her neighbourhood. That, with the exception of the hold and the parts occupied by the sailors themselves, the risk is very slight, is proved by the fact that even the passengers rarely suffer. At Swansea, the spread of the disease amongst landmen was almost exclusively limited to those who boarded the vessel. All authorities agree that, under conditions of free ventilation with cold air, the risk of personal contagion may be considered almost nothing. We arrive, then, at the conclusion that, whilst it would be very dangerous to allow an infected vessel to come into port and receive visitors, there is but little danger from landing the passengers and crew. In reference to the interests of the latter, there can be no doubt that their speedy transference to airy hospital wards is most advisable. Apart from the great fact that this measure would take them away from the chief source of contagion, its moral effect in assuaging fear must be most beneficial. To a timid person, few circumstances can be more terrible than to be shut up for weeks in a poisoned ship with the avowed object of ascertaining who will sicken next.

The first measure adopted in the case of the *Atrato* was, therefore, most judicious, and the subsequent ones have been in harmony with the principles to which we have alluded. In such cases, a short delay must of necessity occur before suitable arrangements for landing the passengers and disinfecting the vessel can be made. In the present instance they were kept on board only a few days. It is satisfactory to know that only one case, and that somewhat doubtful in character, had occurred. The precautionary measures taken were, however, most fully justified.

PHYSICIAN AND SURGEON.

It is high time that the members of our profession should make up their minds on certain questions of medical reform. Great changes are undoubtedly at hand; and, unless the discussion of the preliminaries be undertaken boldly by all ranks of the profession, we can see but little hope of a satisfactory settlement. It is not a matter which ought to be left in the hands of a few, and certainly not with those who represent chiefly a special class. There are many details which will have to be discussed. We purpose to-day to ask attention to but one point: it is this; Is it well that the distinction between "Doctor" and "Surgeon" should be any longer maintained? Many of our readers will well remember the time when in most provincial towns it was considered contrary to medical etiquette for any one to use the title of M.D., or to call himself "doctor," and engage in general practice. Students who had been trained in the country with strict notions on this point saw with surprise, on coming to the metropolis, brass-plates with the inscription "Dr. —, Surgeon"; and observed with yet further astonishment that some M.D.'s had open shops. During the last twenty years, however, the use of medical titles has undergone a very considerable alteration even in the most conservative districts. Gentlemen engaged in general practice, but possessing an M.D. decoration, contrived to make such use of it that their local competitors found, or thought they found, that it was desirable to secure the same for themselves. Middle-aged men, happy in the confidence of their patients, and in the experience of years, were seized with a desire to be re-examined, and betook themselves in flocks to the Universities where the coveted M.D. could be best obtained. It will be admitted by all that at the present moment the distinction between "Dr." and "Mr.," as far as regards nine-tenths of those in our ranks who are so distinguished, is absolutely without meaning. It implies no difference in mode of practice, none in the character of the diseases which each is willing to attend, nor any in the charges which each will make. All will admit that to most the title of M.D. is useful only with regard to its effect on patients. In the majority of cases it does not imply either more extended education or longer experience.

If, then, it be admitted that, in reference to those who attend all kinds of cases—medical, surgical, and obstetric—the distinction between those who possess an M.D. diploma and those who do not is one which does not imply any real difference, it will be, we think, easy to show that it is both inconvenient and injurious to the real interests of the profession. It is calculated to mislead and embarrass the public, to inflict injustice, to afford opportunities for self-exaltation, and to endanger the friendly relations of neighbours. If there is, as we contend, no real difference, then it would surely be far better that we should all stand nominally, as well as really, on the same footing. The use of titles which have no real significance, and which are employed only for selfish ends, has a flavour of charlatanism which honest members of a liberal profession would do well to avoid.

There is another reason why it is desirable that the surgeon and physician should be placed on the same footing. It is the undeniable truth that surgery and medicine are one—a truth which becomes more and more evident, we might almost say more and more true, every year. Specialists there will be, and amongst these we may expect always to have a few who make operative surgery their department. They will, however, be very few; and amongst them even the purest of the pure will be very foolish if he disregard the study of medicine. Many changes have taken place in the profession recently which have tended to diminish the number of what were called pure surgeons. The introduction of chloroform has made operative surgery easy to a large class who formerly avoided it. Improved education, increased number of public appointments, have also conduced to the same end. At the present time, even in our largest provincial towns, we suspect there are exceedingly few who can afford to profess to restrict themselves exclu-

sively to what is called surgical practice. The great bulk of the profession—in fact, the whole of it, with a very small exception—are practitioners in both medicine and surgery. There can surely be no reason for keeping up the two titles out of regard to the feelings of this small class.

The question, then, which we wish to put soberly to the English profession is this: Would it not be better to bring our usage into accordance with that of almost the whole of Europe and of our sister realms? The title of Doctor is one which the public well understand as attaching to the profession of the medical art, and which they are even now fond of applying to many who have no legal claim to it. Would it not be better at once to adopt it for all, and to do away with an absurd appearance of grades in the profession which is unreal, confusing, and often unfair?

It will be asked, perhaps, has not a man a full right to enjoy the benefit of a superior degree? If you deprive him of that, will you not destroy one of the inducements to a liberal educational career? Our reply is, that the advantages accruing from *bonâ fide* degrees will always be felt. They will be estimated by a man's colleagues; they will count at times of public competition; their influence will be silently acknowledged by their possessor's friends. That, in addition to this kind of value, they should be condensed into some epithet which a man can inscribe upon his door-plate, or print on his visiting card, is, we think, scarcely advisable.

Nor is the possible objection that the public or the profession would, if all had the same title, find difficulty in distinguishing between the general practitioner and the consulting physician or surgeon, of any material weight. The diploma qualifying for consultation practice is one which is conferred by no college, but is given by the *fiat* of the profession itself. "A consulting physician I define to be a physician who is consulted", was the ready reply to a professed purist of but little practice, who objected to that title in the case of rival who enjoyed a large one. The public and the profession may be quite trusted to unravel this matter for themselves. Already they do it in the case of specialists; and should any of the latter attempt to appropriate a distinctive epithet, his act would be at once and very properly resented by the profession as bordering on quackery. We hope soon to have one examination common to all—one portal of entrance to our ranks—and we venture to commend the matter to the attentive consideration of the profession, whether it would not very much simplify the coming measures of medical reform if we were at once to decide to be content in future with one common title.

DR. C. WEST'S works on the Diseases of Women and of Children have just been translated into Italian.

Dr. BRISTOWE has been appointed Inspector of Prisons in the room of Mr. J. G. Perry, resigned.

M. LEFRANC DE POMPIGNAN has bequeathed to the School of Medicine at Toulouse a sum of money sufficient to produce an annual income of 1,500 *francs* (£60), to be awarded to a meritorious student of limited means, who, after having studied three years at the Toulouse school, is about to complete his medical education in Paris. If no such award can be made, the sum is to be distributed in prizes, or added to the capital, for the purpose of carrying out the intention of the testator.

APPOINTMENT OF ASSISTANT-SURGEONS AT THE LONDON HOSPITAL. THE election of two assistant-surgeons at the London Hospital may, we believe, be considered as over, although the actual appointments will not be made for a fortnight. There were five candidates, all eligible and all suitable. Three of them were London Hospital men, and two were from other schools. All very wisely agreed to abide by the re-

commendation of the House Committee, and thus avoid a contest. This preliminary having been settled, the House Committee announced that they had, after consultation with the staff, and very careful consideration of the qualifications of each, selected Mr. Macarthy and Mr. Reeves. The first is a London Hospital man, the second is one of the demonstrators of anatomy at the Middlesex Hospital. The two candidates from the school who have been passed over are, we understand, both of them very able men, but as yet rather young for such a responsible post. One of them is at present in office as House-Surgeon.

TRANSFUSION OF BLOOD.

PROFESSOR LANDOIS of Greifswald gives the statistics of ninety-nine cases in which transfusion of blood was performed on account of hæmorrhage. In eleven cases, there was from the first no hope of success. Of the remaining eighty-eight, the result was successful in sixty-five, in twenty the operation failed, and in three the result was doubtful. Transfusion has been performed in twelve cases of poisoning; in three only with success.

NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE.

THE thirteenth annual congress will be held at Bristol, from September 29th to October 6th, 1869. The Health Department will be under the Presidency of Dr. Symonds, with Dr. William Budd and Dr. Lankester as Vice-Presidents. This department considers the various questions relating to the public health; it collects statistical evidence of the relative healthiness of different localities, of different industrial occupations, and generally of the influence of external circumstances in the production of health or disease; it discusses improvements in house construction (more especially as to the dwellings of the labouring classes), in drainage, warming, ventilation; public baths and washhouses; adulteration of food, and its effects; recreation and amusement; the functions of Government in relation to public health; the legislative and administrative machinery expedient for its preservation; sanitary police, quarantine, etc.; poverty in relation to disease; and the effects of unhealthiness on the prosperity of places and nations. The following will be the special questions for discussion at the Bristol meeting. 1. Can Government beneficially further interfere to limit the spread of infectious diseases? 2. What legislative measures might be proposed to deal with cases of uncontrollable drunkenness? 3. Should the Contagious Diseases Act be extended to the civil population? The local secretaries are John Beddoe, M.D., David Davies, Esq., and R. W. Tibbits, Esq.

ULCERATION OF INTESTINE CAUSING SUDDEN DEATH.

A CASE well illustrating the remarks we made last week as to the desirability of a systematic record of "coroners' cases," has just occurred. A young gentleman, a clerk, was taken ill on Tuesday morning, and kept his bed through the day. On the evening of Wednesday a cup of tea was sent to him. Very shortly afterwards, his sister went to his room and found him writhing on his bed in agony. He said he was choking, and asked for some brandy, but before she could leave the room to get it he suddenly expired in her arms. Mr. James Kirkwood, the father of the deceased, said his son had not been ailing in any way previous to Tuesday last, and up to that time had never been under medical treatment in his life. The family were awakened early on Tuesday morning by the shrieks of the deceased, whom they found on the staircase walking in agony and complaining of intense pain in the stomach. For a time he completely lost his sight. Brandy was administered, deceased was put to bed, and medical aid summoned. On the following day he appeared to have perfectly recovered. Dr. Kibbler, who had attended deceased, said that from the external appearance of the body, there was not the slightest indication of disease, and he was perfectly at a loss to account for death. Subsequently witness made a *post mortem* examination, and found an ulcer in the intestines. This, it appeared, had suddenly given way, and there was a great deal of fluid in the abdominal cavity, which would at once account for death. He had never before either met with or heard of a case of a similar

character, and it was one which would prove of so much interest to the members of the medical profession that he was thankful the family of the deceased had resolved upon allowing a *post mortem* examination to take place.

There are several interesting features in this case, and it would have been well had it been put on record in more detail. The temporary loss of sight in connection with an abdominal lesion is a symptom which may claim attention. We believe it is not very infrequent.

ANTHROPOLOGY IN FRANCE.

THE study of anthropology as a special department of science clearly enjoys more favour in France than with us. The public museum for the reception of all objects bearing on the natural history of man, which was founded some time ago by the Minister of Public Instruction, and is under the direction of M. Quatrefages, has, we learn, just been enriched by a collection of types, life-size, of the natives of the Valley of the Nile, painted by M. Georges Lefébure, who has recently returned from a mission to the East.

THE PRESERVATION OF WINES.

FOUR years ago, M. Pasteur announced that he had ascertained that wines became spoiled in consequence of the presence of microscopic organisms, which could be destroyed by exposing the wine to a temperature of 55 *centigrade* (131 deg. Fahr.) for a few moments only. A committee of experts in wines was appointed to make a comparative examination of wines which had, and which had not, been subjected to heat; M. Lapparent being president, and M. Dumas and M. Pasteur assisting. They have concluded, that it is impossible to deny that the preservation of wine in bottles is greatly improved by heating; that the destruction of the germs is perfect, without the least impairment of the taste, colour, or limpidity of the wines. The report has been laid by M. Pasteur before the Academy of Sciences.

DEATHS FROM CHLOROFORM.

AN inquest was held last week, at the North Staffordshire Infirmary, Hanley, on the body of Alfred Boughey, a man 50 years of age, upon whom, on the previous Saturday, an attempt was made to perform an important operation. Dr. Ross, the house-physician, administered from fifteen to twenty drops of chloroform on a piece of lint, and the patient had inhaled the anæsthetic three or four minutes, whilst Dr. Walsh held his pulse. At the end of the time the pulse suddenly stopped, and the man ceased to live. Ammonia, galvanism, and other means were resorted to for an hour, with a view to restore animation, but all to no purpose. Dr. Ross and Mr. Folker were examined at the inquest, and deposed that every possible precaution was taken to prevent accidents. The coroner (Mr. Booth) said this was only the second case of the kind which had occurred at this Infirmary since the introduction of chloroform. The jury at once returned a verdict in accordance with the evidence, and entirely exonerating the medical men from blame. A death from chloroform near Croydon is also reported.

DEATH OF DR. JAMES HUNT: SCIENCE OR SUN-STROKE.

DR. JAMES HUNT, the energetic founder of the Anthropological Society, died shortly after the recent meeting of the British Association at Exeter, at one of the meetings of which he had undergone considerable mental excitement. A rumour got into print that his death was due to that occurrence. His friend and co-worker, Mr. Collingwood, has addressed the following letter to the newspapers.

"Sir,—I ask permission to correct an error which appears in your journal of to-day, on the authority of the *Western Mercury*, touching the death of Dr. James Hunt, founder of the Anthropological Society of London.

"I can authoritatively assure you that his illness was induced by sun-stroke, and that the cause of death cannot be ascribed to the 'treatment of anthropology at the Exeter meeting of the British Association'. It will be remembered that, mainly through the exertions of Dr. Hunt, anthropology was recognised at the Nottingham meeting, which devoted a department to that branch of science.

"Those who knew Dr. Hunt were well aware of his ability to sustain opposition, that his courage rose with the storm, and that his resources were such as never to fail him, although success was often not attained.

"By giving these remarks insertion you will do much towards correcting a false impression which has gone abroad, and which has already caused much pain to the friends of the deceased.—I am, sir, your obedient servant,

"J. FRED. COLLINGWOOD, Secretary.

"Anthropological Society of London, 4, St. Martin's Place, W.C., September 16th."

We cannot say that we quite sympathise with Mr. Collingwood in his sensitiveness as to the rumour in question. Men are in no way responsible for peculiarity of nervous organisation; and that a man should engage in the battle for what he believes truth with more vigour than his bodily strength will permit, is rather a credit than a disgrace. Had Dr. Hunt's fatal illness been in any way induced by over-excitement at Exeter, instead of being a reflection on him, it should surely count as a claim to rank amongst "the martyrs of science". However much we may differ from some of Dr. Hunt's opinions, all must admire his straightforward energy in their advocacy. He believed his creed thoroughly; and such a man was likely to feel keenly the opposition which lethargy and prejudice so persistently offer to everything new. Recent occurrences would suggest that, in the present day, the pursuit of science is more exciting than that of theology.

CASES OF HYDROPHOBIA.

ANOTHER death resulting from the attack of a rabid dog, which occurred on Friday, August 20th, in the neighbourhood of Camberwell, when ten persons were bitten, led to a coroner's inquiry on Monday, September 20th, before Mr. W. Carter; the subject being a lad aged 13, who was bitten on the nose. In the evidence, it was stated that the wound had been cauterised by Dr. Duke. The wound healed well. No symptoms occurred till Tuesday evening, when he became so ill that the friends sent for Dr. Duke. He refused fluids, and shuddered whenever drink was offered him. He died at about half-past three on the Thursday. He was an out-patient at St. Thomas's Hospital during the healing of the wound. Several cases of hydrophobia are reported to have recently occurred in Yorkshire. One of these, at Huddersfield, has proved fatal. The victim was a boy five years of age. He was bitten in July last, and his wounds were attended to by a surgeon. Symptoms of hydrophobia made their appearance a few days ago, and the sufferer died on Monday, September 13th.

MENTAL WORK AND LONGEVITY.

THE death of the Bishop of Exeter at the age of ninety-one is of some interest to those engaged in the study of longevity. His had been a most active life. He was said to have spent from twenty to thirty thousand pounds in law-suits; had been engaged almost without intermission in vehement controversy; and had written so much, that the titles only of his works occupy thirty pages in the British Museum Catalogue. His whole life was spent in hot water; but it seemed to agree with him, for he lived through three generations. His father had lived to eighty, and his mother to seventy. In addition to an inherited soundness of constitution, we cannot doubt that he possessed the invaluable power of dealing with outward things objectively, and not allowing either controversy or disappointment to disturb his digestion or his rest.

SPHYGMOGRAPHY BY TELEGRAPH.

THE following instance of the results obtained by the combined operation of the sphygmograph and the electric telegraph was recorded a few days ago in the *Pall Mall Gazette*. During the recent meeting of the American Science Association, at Salem, Dr. Upham of Boston delivered a lecture upon the human heart and its actions, and at the conclusion he exhibited in the Hall the pulsations of several patients and physicians of the City Hospital in Boston—fourteen miles distant. The Franklin Telegraph Company gave the use of a wire between the two places; the heart beatings were made automatically to send currents through it,

and they were rendered visible to the audience by a beam of magnesium light which quivered upon the wall of the darkened room in perfect sympathy with the distant pulse. First, a healthy man's artery was put to the apparatus, and the light spot vibrated sixty times a minute. The second was a healthy but excitable person, and the quiverings were ninety per minute. Next, the spectral pulse showed that 118 beats per minute were coming from the hospital; and lastly, the beam jerked at an altogether irregular rate; in the former case the beats came from a patient suffering from pneumonia; in the latter, from one affected with organic heart-disease.

METEOROLOGICAL PREDICTION.

METEOROLOGISTS are looking forward with some interest to the 5th of October. At 7 A.M., the moon will be in that part of her orbit which is nearest the earth, and her attraction at its maximum force. At noon, it will be on the earth's equator; and, at 2 P.M., lines drawn from the earth's centre will cut the sun and moon in the same arc of right ascension. Mr. S. M. Saxby, R.N., who draws attention to this circumstance, predicts from it high tides and destructive storms. There is, perhaps, but little evidence from the experience of the past to support such conclusions. They have, however, sufficient *à priori* probability to make further observation of much interest.

BABY-FARMING IN FRANCE.

In a trial for murder, which has just taken place at Le Mans, the indictment alleged against one of the accused the following facts of family and personal history:—"In 1846, her mother's husband was convicted of theft, and he had a sister who committed suicide in 1853 on account of an accusation that she had poisoned somebody with phosphorus. This prisoner herself was a natural child, and she has had two natural children. Her profession was that of baby-farmer, and the astounding statement is made that in the course of her time, although now only 47 years of age, she has had 81 children to nurse from Paris, of whom not half went back alive."

DEATH FROM A COIN IMPACTED IN THE ŒSOPHAGUS.

THE Medical Officer of the Pentonville Prison, in his Report presented this year, mentions a remarkable case which occurred recently in that gaol. Convict "5,211" was suddenly seized with vomiting of blood, and died of hæmorrhage in a few hours. The *post mortem* examination showed a counterfeit half-crown lodged in a pouch in the gullet, which had caused ulceration and perforation of the aorta. The prisoner had been a "smasher"; and, in order to escape detection, swallowed the coin ten or eleven months before his death. The absence of any difficulty in swallowing food, or other symptom indicative of the presence of a foreign body in the gullet, is remarkable. Cases are probably very infrequent in which smooth bodies, such as coins, have caused fatal ulceration.

SCOTLAND.

UNIVERSITY OF ABERDEEN: THE EXAMINERS IN MEDICINE.

THE appointment of Examiners for Graduation in the University of Aberdeen takes place shortly, and it is, we hear, likely that the present men will be reappointed. These Examinerships were instituted about ten years ago by the Commissioners appointed to inquire into the condition of the Scotch Universities. They are three in number, and are filled up every three years by the University Court. The present Examiners, local men of recognised ability and experience, have all held office for several years, and one, if we are rightly informed, from the first. In two cases, the gentlemen are advanced in years, and, we believe, independent of the small sum attached to the duties. The system which has hitherto been adopted in the appointment of Examiners is recognised by the more liberal friends of the University to be bad in very many respects, and has given rise to grave dissatisfaction amongst a large body of graduates. They complain that the undue length of time over which

the examinations—held twice a year—extend, prevents men from a distance and free from local influences, which are uncommonly strong in Aberdeen, from offering themselves as candidates. This is no doubt a difficult matter; but, although we would in the strongest terms condemn any plan likely to interfere with the searching character of the examinations, still we cannot but think they could be as effectually conducted in a much shorter time. Again, it is objected that the same examiners should be appointed again and again, and thus allowed to monopolise appointments which should be as much as possible distributed among distinguished graduates of some years' standing, who would be equally capable examiners, and who, at the same time, are more in need of the remuneration attached to the office. If this were done, the University would have many opportunities of honouring the graduates who had honoured her, and an impulse would in addition be given to them to take a more active interest in the affairs of their *Alma Mater*. There are at this moment many well known practitioners in the town and country of Aberdeen, and in various other parts of the kingdom, who are in every respect admirably fitted for the duties of Examiners. We trust, therefore, that the University Court will see fit to modify somewhat a course which is giving so much dissatisfaction, and which is not in the best interests of the University.

THE DUMFRIES AND GALLOWAY ROYAL INFIRMARY.

THE foundation stone of a new Infirmary for Dumfries and Galloway was laid with masonic honours on the 15th instant. The present infirmary was established in 1776; but in regard to ventilation, arrangement of wards, etc., it has been found inadequate for the proper treatment of the sick and convalescent. The new hospital is to contain 100 beds (80 being the number in the old infirmary) with 1,400 cubic feet of space to each. The cost of the building is estimated at £12,000 or £13,000. Towards this, subscriptions amounting to between £10,000 and £11,000 have been raised, including £5,000 presented by Mrs. Lawrie of Maxwelltown on condition of one of the wards being named after her late husband.

IRELAND.

VACCINATION IN IRELAND.

DR. C. A. CAMERON, Professor of Hygiene in the Royal College of Surgeons, Ireland, has addressed a long communication to the Dublin newspapers warning their readers against the "insensate outcry" raised in England against the vaccination laws, and urging the importance of thoroughly enforcing the law in Ireland. The following paragraph of his letter shows the fruits which vaccination has borne in Ireland:

"In Ireland small-pox was once a fearful scourge. During the ten years ended in 1841, no fewer than 58,006 persons perished from small-pox in Ireland, and three times that number were disfigured for life by the ravages of the disease. During the decade ended in 1851, the deaths from small-pox numbered 38,275, and in the following decade the deaths from this disease amounted to 12,727. In the year 1866, 186 deaths occurred, and in 1867, only 20 persons lost their lives from small-pox. Last year, 19 persons died from small-pox. Thus it will be seen that small-pox has almost literally ceased to exist in Ireland."

THE NEW WEST BROMWICH INFIRMARY.—Two memorial stones were placed on Tuesday last, by the Countess of Dartmouth, with great ceremony, in the presence of a numerous assemblage of the nobility and gentry, and local public bodies. The subscriptions up to the present time amount to about £7,000, of which £1,828 has been contributed by the working men of the locality.

FARADAY ON IMAGINATION AND LOVE OF FACTS.—Some very interesting memoranda of Faraday's life, published in *The Chemist and Druggist* by Dr. Bence Jones, are thus concluded:—He said of himself, "In early life I was a very lively imaginative person, who could believe in the Arabian Nights as easily as in the Encyclopædia. But facts were important to me and saved me. I could trust a fact." And so afterwards this blacksmith's son from Jacob's Well Mews, full of inborn religion, and gentleness, genius, and energy, searched for and trusted to facts in his experimental researches, and thus left to science a monument of himself that may be compared even to that of Newton.

MEDICAL SCHOOLS AND HOSPITALS IN IRELAND.

UNIVERSITY OF DUBLIN: SCHOOL OF PHYSIC.—Regius Professor of Physic, Dr. W. Stokes, F.R.S.; Regius Professor of Surgery, Dr. R. Adams; University Professor of Anatomy and Surgery, Dr. B. G. M'Dowel; Tu. Thurs. Sat., 1. University Professor of Chemistry, Dr. J. Apjohn, F.R.S.; Tu. Thurs. Sat., 2. University Professor of Botany, Mr. Wright. Professor of Surgery in Trinity College, Dr. R. W. Smith; Mon. Wed. Fri., 1. University Anatomist, Dr. E. H. Bennett; Tu. Thurs. Sat., 12. University Lecturer in Operative Surgery, Dr. R. G. Butcher. University Examiner in Surgery (1868-9), Dr. J. H. Wharton. King's Professor of Institutes of Medicine, Dr. R. Law. King's Professor of Practice of Medicine, Dr. W. Moore; Mon. Wed. Fri., 3. King's Professor of Materia Medica and Pharmacy, Dr. Aquilla Smith. King's Professor of Midwifery, Dr. E. B. Sinclair; Mon. Wed. Fri., 4. Professor of Medical Jurisprudence, Dr. R. Travers. Heat, Electricity, and Magnetism—Mr. Galbraith; Mon. Wed. Fri., 2. The Courses consist of 56 Lectures each: attendance on at least 42 Lectures in each Course is required.—The Winter Session will commence on October 1st, by the opening of the Dissecting-Room. Lectures will commence on November 2nd.—Two Medical Scholars are elected annually by the Board of Trinity College, at the Previous Medical Examination, held at the end of June; subject to conditions stated in the College Calendar. Each Scholarship is worth £20 per annum, and is tenable for two years. The Professors of the School of Physic give Three Exhibitions annually, amounting altogether in value to £40; subject to conditions prescribed by the Professors.

SCHOOL OF SURGERY, ROYAL COLLEGE OF SURGEONS OF IRELAND.—The Dissecting-Rooms open on Oct. 1.—The Winter Courses will commence on Monday, October 26th, as follows. Anatomy and Physiology—Dr. Mapother; daily, except Sat., 2 P.M. Descriptive Anatomy—Dr. Bevan and Mr. Morgan; daily, 12 noon. Surgery—Dr. Hargrave and Mr. Hughes; Tu. Thurs. Sat., 3. Practice of Medicine—Dr. Benson; Mon. Wed. Fri., 3. Chemistry—Dr. W. Barker; Mon. Wed. Fri., 1. Midwifery—Dr. Sawyer; Mon. Wed. Fri., 4.—The Dissections are under the direction of the Professors of Descriptive Anatomy, assisted by the Demonstrators, Mr. Croly, Dr. Stoney, Dr. Hewitt, Mr. S. Hewitt, Dr. Stoker, Mr. Kelly, and Mr. Ormsby.—A public Course of Lectures on Comparative Anatomy is delivered by the Professor of Anatomy and Physiology at the commencement of the Session, and additional Lectures on the same subject are delivered at intervals during the Winter.—Practical instruction in Operative Surgery is given by the Professors of Surgery.—The Professor of Chemistry receives Operating Pupils into the Chemical Laboratory.—Prizes in Anatomy, Physiology, and Surgery, will be given to Students of each year.—In the Summer Session, the following courses will be delivered. Materia Medica, Mr. Macnamara; Medical Jurisprudence, Dr. Geoghegan; Botany, Dr. Minchin; Practical Chemistry, Dr. W. Barker; Midwifery, Dr. Sawyer; Hygiene, Dr. Cameron. Fee for each Course, £3 3s. Comparative Anatomy and Hygiene are free.

CARMICHAEL SCHOOL OF MEDICINE.—This School is in the immediate vicinity of the Richmond, Whitworth, and Hardwicke Hospitals, and is connected with these Institutions, as well as with the Mater Misericordiae and Jervis Street Hospitals, by its Teachers. The student is thus furnished with every facility for completing his professional education. The Winter Courses of Lectures will commence the first week of November. The following Lectures will be delivered. Surgery and Operative Surgery—Mr. W. Stokes; Medicine—Dr. Cruise and Dr. Gordon; Anatomy and Physiology—Mr. Curran; Anatomy, Descriptive and Surgical—Dr. Corley; Chemistry—Dr. Davy; Midwifery—Dr. Jennings. Dissections are superintended by Mr. Curran, Dr. Corley, Dr. Purser, Mr. Shaw, Mr. T. W. Madden, Mr. R. St. J. Mayne, and Mr. Clarke. The Dissecting Rooms are open on October 1st.—The Museum comprises a valuable collection of Anatomical and Pathological preparations. There is also an extensive Museum of Materia Medica.—Carmichael Premiums, the value of £60, are awarded yearly, each year's class having its own Premiums allotted. The Mayne Scholarship will be awarded for proficiency in purely Practical Medicine, Surgery, and Anatomy, as tested by Clinical Examination, Operations, and Dissections. During the Session, Mr. Stokes will give Courses of Demonstrations and Illustrations in Operative Surgery. In the Summer Session, the following Lectures will be delivered. Botany—Dr. Campbell; Materia Medica and Pharmacy—Dr. Frazer; Medical Jurisprudence—Dr. O'Reilly; Practical Chemistry—Dr. Davy. Carmichael Premiums will be awarded in each of these classes also, at the termination of the Session. Fee for each course, £3 3s.

CATHOLIC UNIVERSITY, DUBLIN.—The following Courses will be delivered. Anatomy and Physiology, and Anatomical Demonstrations, Dr. Hayden, and Dr. Cryan; Surgery, Mr. Tyrrell; Medicine, Dr. Lyons; Chemistry, Dr. Sullivan; Midwifery, Dr. Byrne; Practical Chemistry, Dr. Sullivan; Materia Medica, Dr. Quinlan; Medical Jurisprudence, Dr. MacSwiney; Pathology, Dr. Lyons; Botany, Dr. Sigerson; Natural Philosophy, Mr. Hennessy, F.R.S.—Fee for each course, £3 3s. A Connolly Exhibition (value £20) is offered for competition in the combined subjects of Physiology, Physiological Anatomy, Chemistry, and Botany; and a Gold Medal (value £7), in Surgery, Medicine, and Midwifery. Class prizes are also given.

LEDWICH SCHOOL OF SURGERY, DUBLIN.—Anatomy and Physiology, Mr. E. Ledwich and Mr. T. P. Mason; Surgery, Mr. J. H. Wharton and Mr. J. K. Barton; Medicine, Dr. Little and Dr. Eames; Midwifery, Dr. John Ringland; Materia Medica, Dr. B. F. M'Dowel; Forensic Medicine and Hygiene, Dr. R. Travers; Botany, Mr. T. D. T. Maunsell; Chemistry, Dr. C. Cameron; Demonstrations and Descriptive Anatomy, Mr. S. Bright, Mr. R. Glanville, Mr. M. J. Kilgariff, Mr. W. H. O'Leary, and Mr. W. H. Corry.—All the Courses of Lectures required by the various Licensing Bodies to entitle the Student to present himself for Examination are delivered in the Theatre of the Institution, and are fully recognised.—The School is in a central situation, and in the immediate vicinity of four great Medical and Surgical Hospitals.—Demonstrators will be present in the Dissecting-rooms at all hours.—At the termination of the Session, Prizes will be awarded to the best Answerers.

DR. STEEVENS'S HOSPITAL AND MEDICAL COLLEGE, DUBLIN.—Clinical Instruction is given at the Hospital by Mr. Wilmot, on Saturday at 10; and at 8.30 A.M. as follows: Dr. Freke, Monday; Mr. Colles, Tuesday; Mr. Hamilton, Wednesday; Mr. M'Donnell, Thursday; Dr. Burke, Friday; Dr. Isdell, Saturday.—Operations at 10 on Saturdays.—Pathological Demonstrations by the Lecturers as opportunity offers.—The following Lectures are given in the Medical School: Anatomy and Physiology, and Morbid Anatomy, Mr. Hamilton, daily, except Saturday, 10 A.M.; Practice of Medicine, Dr. Freke, Monday, Wednesday, Friday, 11; Surgery, Mr. Colles, Tuesday, Thursday, Saturday, 11; Midwifery and Diseases of Women and Children, Dr. Isdell, Monday; Wednesday, Friday, 12; Chemistry, Dr. Aldridge and Dr. Cameron, Tuesday, Thursday, Saturday, 12; Descriptive Anatomy, Mr. M'Donnell, daily, 1 P.M.; Dissections, superintended by the Lecturers on Anatomy and the Demonstrators, 7 A.M. to 8 P.M.—A perpetual Fee of £78 15s., payable in two instalments, enables the Student to attend all the Lectures and Hospital Practice required by the Colleges of Surgeons, Halls, and the Public Service.—Each Course of Lectures, £3 3s.; Hospital Practice, 6 months, £7 7s.; 9 months, £9 9s.; Dresserships, winter 6 months, £21; summer 6 months, £15 15s.—The Reading Room and Museum are open daily.—There is also a lending Library.—Arrangements have been made with persons of respectability to provide pupils with lodgings in the neighbourhood, on reasonable terms.—Senior, Middle, and Junior Exhibitions are awarded, at the end of the Session, for general proficiency.—There are also two Prizes, each £10 10s., for the best reports of the cases in the Hospital during the Session.—Two Midwifery Assistants are each year selected by competitive examination; salary, £30 per annum.—There is accommodation in the Hospital for two Medical and six Surgical Resident Pupils.

ADELAIDE HOSPITAL, DUBLIN.—Physicians—Dr. Henry H. Head; Dr. James Little. Surgeons—Dr. A. J. Walsh; Dr. J. K. Barton; Mr. B. Wills Richardson. Ophthalmic and Aural Surgeon—Dr. J. H. L. Stoney. Assistant-Physician—Dr. W. G. Smith.—Attendance daily: Surgeons, 9 to 10 A.M.; Physicians, 10 to 11.—This Hospital contains 100 beds. There are two wards for Infants and Children, and a detached Fever Hospital. The Students are instructed in the use of the Stethoscope, Laryngoscope, and Microscope. There is a complete annual Course of Lectures on Diseases of the Eye and Ear. Two Medical and two Surgical Prizes are given at the close of the Session. Two Resident Pupils are selected half-yearly from the Students. Certificates of attendance upon this Hospital are recognised by all the Licensing Bodies.—Fee—Nine Months, £8 8s.; Six Months, £6 6s.; Summer Three Months, £3 3s.; Perpetual Pupil (paid at entrance), £21.

CITY OF DUBLIN HOSPITAL.—Physicians—Dr. C. Benson; Dr. J. H. Benson; Dr. D. B. Hewitt. Surgeons—Dr. W. Hargrave; Dr. T. C. Geoghegan; Mr. Jolliffe Tufnell; Dr. H. G. Croly. Ophthalmic Surgeon—Dr. A. H. Jacob. Consulting Physicians—Professor Apjohn and Dr. C. P. Croker. Consulting Ophthalmic Surgeon—Dr. A. Jacob. Dental Surgeon—Mr. F. McClean, junr.—The Clinical Lectures will be delivered on three days in the week by the Physicians and Surgeons; and Special Courses on Diseases of the Eye will be given by Dr. Jacob.

—The Certificates of attendance are received as qualification by all the Colleges, Halls, and Boards.

COOMBE LYING-IN HOSPITAL.—*Masters*—Dr. Ringland and Dr. Sawyer. *Obstetric Surgeon*—Dr. G. H. Kidd. *Assistant to Masters*—Dr. W. Roe. *Supernumerary Assistant*—Dr. T. P. Mason. *Consulting Physicians*—Sir D. J. Corrigan, Bart., M.D., Dr. C. P. Croker, Dr. J. T. Banks, Dr. A. Hudson. *Consulting Surgeons*—Dr. J. G. Wilmot, Dr. G. H. Porter, Mr. R. G. H. Butcher, Dr. J. S. Hughes. *Consulting Accoucheurs*—Mr. H. Carmichael, Dr. W. Jameson, Dr. F. Churchill, Dr. E. B. Sinclair. *Medical Officer of the Dispensary*—Sir W. Carroll, M.D. *Locum tenens of Dispensary Medical Officer for 1869*—Dr. Quinlan. *Analytical Chemist*—Dr. C. A. Cameron.—The Hospital contains 40 beds; and clinical lectures are delivered on the more important cases. Clinical Clerks are selected half-yearly. Prizes in Practical Midwifery are given at the end of each session. There is accommodation for eight intern pupils. Pupil Midwifery-Assistants are selected by competition, and hold office for a period not exceeding twelve months. *Fees*—Hospital Practice, intern pupils, 6 months, £10 10s.; extern pupils, £4 4s.—including Clinical Lectures in both cases. Registrar's fee for Diploma of Hospital, 10s. 6d.

JERVIS STREET HOSPITAL is one of the oldest of the Dublin Infirmarys. Clinical lectures are delivered by Drs. McSwiney and Martin, and Messrs. O'Reilly, Stapleton, Hughes, Forrest, Corley, Meldon, and White.

MATER MISERICORDIÆ HOSPITAL, DUBLIN.—*Physicians*—Dr. J. Hughes; Dr. T. Hayden; Dr. H. Curran. *Surgeons*—Mr. R. P. O'Reilly; Dr. F. R. Cruise; Dr. H. J. Tyrrell; Mr. P. J. Hayes.—The Hospital contains one hundred beds. Two Clinical Lectures will be delivered in each week. Connected with the Hospital is an extensive Dispensary. Special instruction will be given on Diseases of the Eye, and on the Use of the Stethoscope, Microscope, Laryngoscope, Endoscope, etc. Two Resident Pupils are elected twice yearly.—Two Clinical Prizes in Medicine, and two in Surgery, of the value of £10 and £5, will be awarded under the will of the late Mark Leonard, Esq.—Certificates of attendance upon this Hospital are recognised by all the Licensing Bodies.—*Terms*—Nine months, £8 8s.; six winter months, £6 6s.; three summer months, £3 3s. Instruction in Compounding Medicine is given in the Pharmacy.

MEATH HOSPITAL AND COUNTY DUBLIN INFIRMARY.—*Physicians*—Dr. Stokes; Dr. Hudson. *Surgeons*—Dr. H. Porter; Mr. J. H. Wharton; Dr. P. C. Smyly; Dr. Rawdon Macnamara; Dr. R. P. White; Dr. Strange.—Clinical Lectures, of which four will be delivered weekly, and instructions in Medicine and Surgery, will be given on alternate days. The Physicians and Surgeons will visit the Hospital at 9 A.M. The Hospital, which contains 120 beds, and to which an extensive Dispensary (open daily) and Lending Library are attached, is within a few minutes' walk of the College of Surgeons and the Ledwich School of Medicine. There is a Ward for the reception of Children. Certificates of attendance at this Hospital are recognised by all the Universities, Colleges, and Licensing Bodies in the United Kingdom. Four Prizes will be given at the termination of the Winter Course in the respective classes. A prize (value £4 4s.) has also been presented by Dr. Martin of Portlaw, for the best answering in the Junior Surgical Class. The office of Resident Pupil is open to Pupils as well as Apprentices.

MERCER'S HOSPITAL, WILLIAM STREET, DUBLIN.—*Physicians*—Dr. T. P. Mason; Dr. H. Eames. *Surgeons*—Mr. Ledwich; Mr. E. S. O'Grady; Mr. J. Morgan; Dr. Benjamin F. McDowell. *Consulting Surgeon*—Mr. A. Read.—There are two wards for the reception of Fever and Contagious Diseases. Systematic Clinical Lectures and catechetical instruction will be given. Dressers will be selected from the most attentive of the Students; and the Dispensary affords ample opportunities of acquiring dexterity in manual operations in Minor Surgery. The appointment of Resident Pupil is open to any Student through the medium of a Competitive Examination, and at the termination of his office he will be entitled to a Special Certificate, should his conduct have met with the approval of the Physicians and Surgeons.—*Terms of Attendance*—Six months, £6 6s.; nine months, £8 8s.; perpetual pupils, £21.

RICHMOND, WHITWORTH, AND HARDWICKE HOSPITALS, DUBLIN.—*Consulting Physician*: Sir D. J. Corrigan, Bart., M.D. *Physicians*: Dr. J. T. Banks; Dr. B. G. M'Dowel; Dr. S. Gordon; Dr. R. D. Lyons. *Surgeons*: Dr. R. Adams; Mr. J. Hamilton; Dr. R. W. Smith; Mr. William Stokes.—These Hospitals contain 312 beds; 110 for Surgical, 82 for Medical, 120 for Fevers and Epidemic Diseases. The Truss Establishment, for the distribution of trusses to the ruptured poor of Ireland, is connected with these Hospitals. There is an extensive Pathological Museum, containing above 4,000 drawings, casts, and preparations. There is also a well-selected Medical and Surgical Lending

Library. Medical and Surgical Clinical Lectures are delivered in the Hospital Theatre, and Bed-side Clinical Instruction is given daily by the Physicians and Surgeons. There will be a distinct Course of Lectures and Clinical Instruction on Fever. Mr. Purser will give Microscopical Demonstrations on Tuesdays; and Mr. Wilson will give Instruction in Diseases of the Eye, and the Use of the Ophthalmoscope, on Saturdays. Surgical Operations are performed on Wednesday mornings only, except in cases of emergency. Practical Pharmacy is taught under the superintendence of the Apothecary of the Hospitals. Eight resident Clinical Clerks and the Dressers are selected each half-year from among the best qualified of the Pupils, without the payment of any additional Fee. At the termination of the Session, Premiums will be awarded in Clinical Medicine and Surgery. The Richmond Institution for the Insane adjoins these Hospitals. Fee for attendance, £1 1s.—Fees: Winter and Summer Session (nine months), £9 9s.; Six Summer Months, £5 5s.; Perpetual Pupils, £25 paid on entrance.—The Practice of these Hospitals is free to the Medical Officers of the Navy and Army.—The Carmichael School of Medicine is in the immediate vicinity of these Hospitals.

ROTUNDO LYING-IN HOSPITAL.—*Consulting Physician*, Dr. C. P. Croker; *Consulting Surgeon*, Dr. R. Adams; *Master*, Dr. G. Johnston; *Assistant-Physicians*, Dr. J. Guinness Beatty and Dr. T. W. Madden. This Hospital, the largest Chartered Clinical School of Midwifery in the British dominions, contains 130 beds.—An Obstetrical Museum, containing upwards of 500 Preparations, and a Library, are attached to the Hospital.—Clinical Instruction in Midwifery and the Diseases of Women and Infants is given daily. The pupils are privileged to attend the Cow-Pock Institution.—The Lectures are recognised by the Licensing Bodies of the United Kingdom.—The Diploma is recognised by the Poor-law Commissioners in Ireland as a qualification in Midwifery.—The Intern Pupils have each a separate bedroom, with the use of a sitting-room.—Two courses of Lectures are given yearly—the first commencing early in November, the second early in May. *Fees*: Intern Pupils—Six Months, £21; Three Months, £12 12s.; Two Months, £8 8s. Extern Pupils—Six Months, £10 10s.; Three Months, £6 6s.; Two Months, £4 4s.

ST. VINCENT'S HOSPITAL, DUBLIN.—*Physicians*, Dr. F. B. Quinlan, Dr. Cryan; *Surgeons*, Dr. E. D. Mapother, Mr. W. H. O'Leary; *Surgeon-Dentist*, Mr. Doherty.—The Hospital contains one hundred beds.—Connected with the Hospital, are an extensive Dispensary, and a Sanatorium for Convalescent Patients at Stillorgan. Medical and Surgical Clinical Lectures will be delivered three times a week, and Clinical Instruction will be given daily.—Operations admitting of delay are performed on Friday mornings.—Certificates of attendance on the Practice of this Hospital are recognised by all the Licensing Bodies.—Two Resident Pupils will be appointed by competitive examination at the commencement of each Session.—At the end of the Winter Session, Senior and Junior Prizes in Clinical Medicine and Surgery will be given.

SIR PATRICK DUN'S HOSPITAL, DUBLIN.—*Consulting Physician*—Dr. Stokes, F.R.S.; *Consulting Surgeon*—Dr. R. Adams. *Clinical Physicians*—Dr. R. Law; Dr. Moore; Dr. Aquilla Smith. *Midwifery Physician*—Dr. E. B. Sinclair. *Clinical Surgeons*—Dr. B. G. M'Dowel; Dr. R. W. Smith; Dr. E. H. Bennett. *University Lecturer in Operative Surgery*—Dr. R. G. Butcher.—The Hospital is visited daily, at Nine o'clock, by each of the Physicians and Surgeons on duty.—*Clinical Lectures* are delivered in the Hospital Theatre, at Ten o'clock, on the following days: Mondays, the Clinical Physician on Duty; Tuesdays, the Clinical Surgeon on duty; Thursdays, Dr. Butcher; Fridays, Dr. Sinclair.—*Fees*—The payment of £3 3s. to the Registrar entitles any student to attend the Clinical Teaching for Twelve Months. In addition to the Hospital Fee, the following payments must be made for permission to attend the Weekly Lectures of the Clinical Physicians and Surgeons, which are delivered in the Hospital Theatre. First year, £9 9s.; second year, £6 6s.; third year, £3 3s. The Medical Scholars of Trinity College are entitled to Twelve Months' Residence in the Hospital, on conditions laid down by the Governors.—Silver Clinical Medals will be awarded to the Students who shall pass to best Examination on the Medical and on the Surgical cases treated in the Hospital during the year. The written part of the Examination shall consist of five cases recorded by each candidate. The Examinations for the Clinical Medals will be held in the first week of July in each year.—*Sir Patrick Dun's Maternity*.—Maternity Fee, for Six Months' instruction in Practical Midwifery, £3 3s. Students of Trinity College are not liable to any other payment for instruction in Practical Midwifery. Other Students are required to pay £3 3s. each, to the King's Professor, for Six Months' practical instruction, in addition to the Hospital Maternity Fee.—The Secretary of State for War has authorised the formation of a class of Midwives for Service in the Army, in connection with Sir P. Dun's Maternity.

WESTMORELAND LOCK HOSPITAL, DUBLIN.—*Surgeons*—Dr. B. M'Dowell; Mr. J. Morgan.—The Hospital contains 150 beds. Two Clinical Lectures will be delivered each week, commencing the first Monday in November. Fee for Hospital attendance, including Clinical Lectures: Winter Session, six months, £4:4; Summer Session, three months, £2:2.

QUEEN'S COLLEGE, BELFAST.—Faculty of Medicine. The Winter Session of 1869-70 will commence on November 2nd. Anatomy and Physiology, Dr. Redfern, daily, except Sat., 2; Practical Anatomy, Dr. Burden, daily, except Sat., 12; Chemistry, Dr. T. Andrews, daily, except Sat., 3; Medicine, Dr. J. Cuming, daily, except Sat., 4; Surgery, Dr. A. Gordon, Mon., Tues., Wed., Thurs., 1; Materia Medica, Dr. J. S. Reid, Mon., Tues., Wed., Thurs., 4; Midwifery, Dr. R. F. Dill, Mon., Tues., Thurs., 3; Medical Jurisprudence, Dr. J. F. Hodges, Wed., 3, Fri., 1; Natural History, Dr. Wyville Thomson, LL.D., Mon., Tues., Wed., Fri., 1.—*Fees*: Anatomy and Physiology—1st course, £3; each subsequent course, £2. Anatomical Demonstrations and Practical Anatomy—each course, £3. Practical Chemistry, £3. Other Medical Lectures—1st course, £2; each subsequent course, £1.—The Examination for Medical Scholarships, tenable for one year, and of which two are awarded to the Students of each year of the Medical Course, will commence on Thursday, October 18th. The Matriculation Examination will commence on the same day.

BELFAST GENERAL HOSPITAL.—Physicians, Dr. Drennan, Dr. Smith, Dr. Ross, Dr. Cuming; Surgeons, Dr. Browne, R.N., Dr. Murney, J.P., Dr. Gordon, Dr. W. MacCormac.—The Malcolm Exhibition, value £20, founded by the widow of the late Dr. Malcolm, is awarded annually, by competitive examination in April, to Students attending this Hospital. The Charters' Medical Exhibition, value £50, will be awarded this year by competitive examination, to be held at the end of the Session. All medical students of at least two years' standing can compete.—*Fees for Clinical Instruction*—Winter Session, £5:5s.; Summer Session, £2 12s. 6d.—This Hospital, being the only one for the reception of accident and other surgical cases occurring in the large manufacturing town and seaport of Belfast, affords unusual facilities for acquiring a knowledge of Practical Surgery. Three resident pupils are appointed by examination.

BELFAST LYING-IN HOSPITAL.—Fee for the Session, £3:3s.

QUEEN'S COLLEGE, CORK.—Faculty of Medicine. Professors: Anatomy and Physiology, and Practical Anatomy, Dr. J. H. Corbett, daily, except Sat., 1; Medicine, Dr. D. C. O'Connor, Mon., Wed., Fri., 3; Surgery, Dr. W. K. Tanner, Tues., Thurs., 4, Sat., 1; Materia Medica, Dr. Purcell O'Leary, Tues., Thurs., 3, Sat., 12; Medical Jurisprudence, Tues., Thurs., 12, Fri., 1; Midwifery, Dr. J. R. Harvey, Mon., Wed., Fri., 4; Natural Philosophy, Mr. England, Tues. Thurs.; Chemistry, Dr. Blyth, Mon., Wed., Fri., 2; Practical Chemistry, daily, except Sat.; Natural History, Dr. J. R. Greene, Mon., Wed., Fri. The Lectures will commence on November 2nd. In the Course of Practical Anatomy, the Professor of Anatomy and Physiology will be assisted by Drs. Shinkwin and Jones. Eight Scholarships will be awarded to Students in Medicine: Two Junior Scholarships, of £25 each, to Students commencing their first, second, third, or fourth years.—Clinical Medicine or Clinical Surgery at the North and South Infirmarys, by the Physicians and Surgeons of these institutions. Fee: 12 months, £8:8; six months, £5:5; Practical Pharmacy, 3 months, £3:3.—Clinical Midwifery at the Lying-in Hospital. Fee: 6 months, £3:3.

QUEEN'S COLLEGE, GALWAY.—Faculty of Medicine: Chemistry, Dr. T. H. Rowney, Mon., Wed., Fri., Sat., 12; Natural History, Dr. A. G. Melville, Tues., Thurs., Sat., 11; Fri., 10; Anatomy and Physiology, Dr. J. Cleland, daily, except Sat., 3; Practical Anatomy, daily, except Sat., 1. Medicine, Dr. N. Colahan, Tues., Thurs., Sat., 2; Surgery, Dr. J. V. Browne, Mon., Wed., Fri., 11; Materia Medica, Mr. S. M'Coy, Mond., Wed., Fri., 4; Midwifery, Dr. R. Doherty, Mon., Wed., Fri., 2, Sat. 1; Medical Jurisprudence, Mr. S. M'Coy, Tues., Thurs., Sat., 4. The First Matriculation Examination for the Session 1868-9 will be held at the commencement of the term (October 19th); the last, for Students in the Faculty of Medicine, will be held on November 16th. The Examinations for Scholarships and Exhibitions will commence on Thursday, October 22nd. Eight Scholarships, of the value of £25 each, will be offered for competition; viz., two to Students of the first, second, third, and fourth years respectively. In addition, four Exhibitions of £10 each will be offered; two to Students of the first and second years respectively; and two Exhibitions of £20 each—one to Students of the third and fourth years respectively. All Scholars are exempt from payment of a moiety of the fees for the classes attended.

CORRESPONDENCE.

DEBATING COLUMN FOR DISCUSSION OF PAPERS, ETC.,
PUBLISHED IN THE "JOURNAL".

THE BICHLORIDE OF METHYLENE.

SIR,—Being constantly giving the bichloride of methylene as an anæsthetic in all kinds of operations, I should personally, and I think the profession at large would, be indebted for the publication of more full particulars of any cases in which unpleasant symptoms occur under its influence. For instance, in the brief notice in the JOURNAL of the 4th, it is said "the alarming symptoms passed off under appropriate treatment." What was this treatment? That which I have adopted when any unusual symptoms arise during the administration of any anæsthetic is to turn the patient slowly on to the left side—the only practice resorted to, and one universally successful in the ophthalmic department at Guy's.

Next, it is suggested that, because these two cases were children, it is less safe in them than in adults. Is it not rather that, because in children the effect is much more rapid, it requires to be much more closely watched? I have given it to a large number of children, some as young as six months, with effects equal with those in adults. The peculiarly rapid effect and absence of sickness are as much due to the peculiar mode of administration as to the bichloride itself; and this I believe was in London first practised at Guy's, where I commenced to give it in comparison with chloroform and nitrous oxide gas at the request of Mr. Bader, who particularly felt the want of such an anæsthetic. The contrast between it and chloroform is certainly greatly in its favour; but not more so than between it and the nitrous oxide gas, over which I have found it to possess many advantages, and which it equals in every respect. The detailed results of my experience have been given in papers read before the Guy's Physical Society, and the Surgical Section of the British Medical Association at Leeds; and I purpose shortly to compare the general and special advantages of each of these anæsthetics, and endeavour to dispel many misapprehensions which are continually being published, especially that the bichloride is less adapted for prolonged operations. I have found it superior in every respect, its greater cost, compared with chloroform, being the only drawback; but this will, however, soon be lessened, and then it will become the anæsthetic for all kinds of operations, both long and short, for, properly administered, it is equally suitable in all.

I am, etc.,

RICHARD RENDLE,

Surgical Registrar, Guy's Hospital.

THE USE OF OBSTETRIC INSTRUMENTS.

SIR,—I can hardly think that the profession generally will agree with the letters of Drs. Savage and Scurrah of Birmingham, respecting the very frequent use of forceps in ordinary midwifery cases which they advocate. For my part, I protest strongly against the course which they suggest, and feel sure it is unjustifiable. Dr. Savage, it appears, has used the forceps during the years 1868, 1867, and 1866, once in every seven, six, and ten cases respectively that he has attended; and he acknowledges that in most the labour would have terminated naturally, but he interfered to spare much pain, anxiety, and exhaustion to his patients, and this especially in the primiparæ whom he delivered.

Now I think it can be affirmed that, in the great majority of cases where the second stage of labour ceases to be actively progressive—cases in which it is proposed to interfere—no harm is taking place to either mother or child, and the uterus is probably only resting itself for a time to return recruited to finish its task. In such cases, delivery by forceps, unless there be absolute need, and especially in primiparæ, is wrong; for, as the perinæum has not then undergone its natural process of softening and dilatation, the delivery, as proposed, is almost certain to produce its laceration.

My own experience is decidedly adverse to Dr. Savage's. He, it seems, has met with no ill effects afterwards, such as laceration of the soft parts, or extensive rupture of the perinæum; but I believe that this latter takes place more or less in almost every case of instrumental delivery of primiparæ, except where the forceps are taken off before the birth of the head; and, as surgeons often do not care to look for it, so they think it has not occurred. In my own forceps-cases, I have always examined patients with due propriety to satisfy myself on this point, though I yield to none in the care used in effecting delivery, and I have found it almost constant. The laceration gives rise to more or less soreness, swelling, and inconvenience; it defers convalescence, exposes the patient to risk to some extent, and in the end generally leaves the vagina more patulous than it should be.

The more I see of midwifery, the more I am convinced that it is the soundest policy and the safest plan to let Nature do her own work as much as possible; that there is, as a rule, nothing like giving patients plenty of time, and that the risk in so doing is infinitely less than in interfering unnecessarily. Besides, such interference may readily be mistaken by the friends, who are likely to think the doctor has only used the instruments to finish his job and get away.

In 350 cases during the past two years, I have used the forceps seven times—once in every 50 cases; and, as I rarely have a still-born case, and still much more rarely lose a mother, I cannot believe that delivery by instruments once in every six, seven, or ten cases would at all conduce to save life or do good. I think it would be the other way.

I am, etc., J. ST. THOS. CLARKE, M.B.Lond.

Charles Street, Leicester, Sept. 1869.

POISON-SATURATION OF OLD HOSPITALS.

SIR,—Your short article on this subject, published in the *BRITISH MEDICAL JOURNAL* of the 4th instant, involves questions of importance which, in reference to the "old hospitals", will fairly admit further consideration. Nor is the importance of the subject limited to hospitals; for, if it be correct that the death-rate of old hospitals is higher than it ought to be, the same may, to a certain extent, be true of other public institutions.

My object in this letter is to communicate facts which seem to show the importance, as a sanitary measure, of periodically vacating portions of large public institutions.

As principal medical officer for many years of one of the large Government prisons, I have on three occasions recorded a marked reduction of the mortality during the years which immediately followed the closing of various portions of the respective prisons. The reductions were so marked, that I brought them under the notice of "the Directors of Convict Prisons" in my annual Medical Report for the year 1862. The following extract from that report is published in "The Reports of the Directors of Convict Prisons for the Year 1862."

"The yearly average death-rate of the prison (Brixton Prison) for the five years ending December 1861 was, of those prisoners who were healthy on reception, 8.54 per thousand prisoners; and, including those women who were invalids on reception, 20.35 per thousand. During the year 1862, the death-rate, including the deaths of prisoners who were invalided to the prison, amounted to only 8.54 per thousand, precisely that of the five years' average, above quoted, of the deaths of the prisoners who were healthy on reception.

"I have noticed on two previous occasions, within the last fourteen years, a similar fall in the mortality of prisons; and on each of those occasions the decrease took place in the year which immediately followed a temporary vacation of a portion of the prison. It occurred in Millbank during my period of office there; and it has now occurred in this prison in the year which immediately followed the vacation, for the first time, of portions of this prison. During the years 1860-61, the interior of the prison was repainted, and of necessity portions of the habitable part of the establishment were alternately and completely vacated for a period of four or five weeks. I do not wish to attach undue importance to this fact as being the cause of the low mortality of the last year, nor should I have thus noticed it had it occurred for the first time in my experience; but as a similar result has invariably followed three consecutive temporary vacations of prison buildings, I have thought it worthy of being placed on record. Whitewashing and colouring of the corridors and cells are done yearly, but the above recorded facts seem to justify the inference that a temporary rest, if I may so express it, of portions of a large establishment, at intervals of six or seven years, is followed by decided benefit to the health of its inhabitants. If this be so, might not such a simple sanitary measure be occasionally employed, when an opportunity offered for doing so, without seriously interfering with the working of the prison? And further, if it be true in reference to the health of prisons, might we not expect that a like measure would be followed by a corresponding benefit to the health of the inmates of other public buildings which are constantly and fully occupied?"

In the article published in the *JOURNAL* of the 4th instant, you mention the comparative immunity from crisympelas, pyæmia, etc., during the two years which followed the closing of the surgical wards in the London Hospital after the last outbreak of cholera. May we not infer from this and from the facts which I have recorded, that the habitual closing of hospital wards for short periods would give results equally favourable with those noticed in the London Hospital? and may not this simple remedy, in addition to the ordinary sanitary regulations, materially help to render the older hospitals as healthy as those of recent date?

I am, etc., J. D. RENDLE, M.D.

Park Hill, Clapham Park, Sept. 1869.

OBITUARY.

FORBES WATSON, ESQ., OF NOTTINGHAM.

THE death of Mr. Forbes Watson, at the early age of twenty-nine, has given rise to a feeling of great regret in Nottingham. He was for some time medical officer at the Nottingham Union, and while holding that office he was very greatly esteemed for his conscientious and faithful discharge of duty. He had had the advantage of a careful early training at home, leading him to make the best use of the advantages afforded by St. Thomas's Hospital, where he received his medical education. He was successful in obtaining medals and exhibitions. He was a fair classical scholar, well read in English literature, and was fond of metaphysics. He took particular delight in a knowledge of botany, in which his information was amazingly full and exact, and always seemed ready at hand. He was exceedingly kind to the poor. One medical friend bears testimony that Mr. Watson was, at a time when his means were exceedingly limited, in the habit of continuously relieving cases of distress. During three winters of very bad trade, twenty-four of the very poorest round him came every Tuesday to his house to receive a loaf and a tract. His health had been very precarious for two years before his death.

In compiling the above, we have availed ourselves of a long and interesting biographical notice in the *Nottingham Express*.

PETER MARK ROGET, M.D., F.R.S.

Dr. Peter Mark Roget died on September 10th, at Malvern, in the 91st year of his age. He was the son of the Rev. John Roget, a descendant of a Swiss family, and minister of one of the Swiss churches in London; his mother being a sister of the late Sir Samuel Romilly. Having chosen medicine as his profession he proceeded to Edinburgh, where he completed the usual course of medical studies at the University. He took the degree of Doctor of Medicine in 1798. He afterwards attended the London medical schools as the pupil of Baillie, Cruikshank, Wilson, Heberden, and Hope. When the Continent became open to English travellers by the conclusion of the Peace of Amiens, Dr. Roget went to Paris and Geneva, where he remained two years. On the abrupt resumption of hostilities between France and England, Buonaparte suddenly resorted to the unjustifiable measure of seizing on all Englishmen who happened to be within the French territory, and Dr. Roget was among the number of the *détenus*. After being retained as a prisoner for two months, he obtained his liberty by means of a passport which was granted to him in virtue of the privileges belonging to him as the son of a citizen of Geneva. Returning to England, he became the travelling attendant of the Marquis of Lansdowne. On the termination of this engagement he started in practice in Manchester, and soon obtained the appointment of physician to the Infirmary; and he resided there four years. In 1808 he quitted this place for London, where he was admitted a licentiate of the College of Physicians. In 1811 he was chosen one of the secretaries of the Medical and Chirurgical Society of London, and in 1829 and 1830 was elected president. To the *Transactions* of the Society he contributed some papers. In 1814 a valuable paper contributed by him to the Royal Society obtained for him the fellowship of that institution. In 1820, and for many subsequent years, he held the appointment of Physician to the Spanish Embassy. In November 1827, on the retirement of Sir John Herschel from the office of Senior Secretary of the Royal Society, Dr. Roget was appointed his successor. In 1833 he wrote his *Bridgewater Treatise on Animal and Vegetable Physiology*. To the general public Dr. Roget is well known by his admirable *Thesaurus of English Words and Phrases*, a twentieth edition of which he was engaged on at his death. An interesting and extended life of Dr. Roget is given in *Pettigrew's Medical Portrait Gallery*.—*Times*.

THE REV. WILLIAM CLARK, M.D.

THE Rev. William Clark, M.D., for many years Professor of Anatomy in the University of Cambridge, died on the 9th September, at a very advanced age. The deceased Professor was entered at Trinity College nearly seventy years ago, in company with Professor Sedgwick, the late Lord Langdale, and Dr. Blomfield, formerly Bishop of London. He graduated in the year 1808, and was elected to a Trinity Fellowship in due course. In the year 1817 he became Professor of Anatomy. The duties of this Professorship Dr. Clark discharged with extraordinary zeal and success for nearly half a century; and his services were recognised at his retirement, in 1866, by a public subscription among the members of the University for a bust in commemoration of his merits.

THOMAS GRAHAM, D.C.L., F.R.S.

MASTER OF HER MAJESTY'S MINT.

WE regret to have to announce the death of Mr. Thomas Graham on September 16th, at the age of 63. Mr. Graham was the son of a merchant at Glasgow, and was educated at the Grammar School and University of that city, and afterwards spent ten years in Edinburgh. He then returned to Glasgow, where he distinguished himself as a practical chemist, and was elected Professor in the Andersonian University. In 1837, he was appointed Professor of Chemistry in University College, London, which position he retained until 1855; when, on the death of Sir John Herschel, he was appointed Master of the Mint. To him we are indebted for the discovery of the laws of the diffusion of gases, and of the diffusion of liquids, and the method of separation known as dialysis. He was a Fellow of the Royal Society, a member of the French Academy of Sciences, and an honorary D.C.L. of Oxford.

HENRY EWEN, F.R.C.S.

MR. EWEN of Long Sutton, in the county of Lincoln, died, after intense and protracted suffering, from disease of the stomach, on September 15th.

One of the most accomplished and successful practitioners in the kingdom, his life during the last forty years had been a continued career of uninterrupted usefulness, and his loss is most deeply felt and lamented by all the neighbourhood in which he resided. A sincere christian, he bore the pains and anguish attending his disease, whilst fully conscious of its inevitably fatal result, with great fortitude and most pious resignation.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, September 16th, 1869.

Betts, John, London Road, Brighton
Lett, Francis, Woolwich

The following gentleman also on the same day passed his first professional examination.

Marshall, John, Guy's Hospital

As an Assistant in compounding and dispensing medicines.

Grainger, Robert Reed, Sunderland

MEDICAL VACANCIES.

THE following vacancies are declared:—

ABERDEEN, CITY PARISH OF—A District Medical Officer and Public Vaccinator.

ARTHOG SLATE QUARRIES, Barmouth, Merionethshire—Surgeon.

BALLYMALION UNION, Co. Longford—Medical Officer for the Abbeyshrule Dispensary District: applications, October 1st; election, October 6th.

BELLINGHAM UNION, Northumberland—Medical Officer for District No. 2.

BRISTOL DISPENSARY—A Resident District Surgeon: applications, 2nd Oct.; election, 4th Oct.

CHARING CROSS HOSPITAL—Physician for Treatment of Diseases of the Skin: applications, 28th. Lecturer on Midwifery; Lecturer on Botany.

CHICHESTER INFIRMARY—Assistant to the House-Surgeon: duties early in October.

CHORLTON, Lancashire—Certifying Factory Surgeon.

CHORLTON UNION—Consulting Medical Officer for the Workhouse.

DINGLE UNION, co. Kerry—Apothecary for the Workhouse and Dingle Dispensary: 30th.

DOLGELLY UNION, Merionethshire—Medical Officer for the Barmouth District.

GLOUCESTER GENERAL INFIRMARY—Assistant-Physician: applications, 30th Sept.

GREAT YARMOUTH HOSPITAL—Resident Medical Officer: applications, 27th Sept.; duties, 14th Oct.

HOLBEACH UNION, Lincolnshire—Medical Officers for the Long Sutton and Central Wingland Districts.

HULL GENERAL INFIRMARY—Resident House-Surgeon.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND—King's Professor of the Institutes of Medicine: applications, 1st Oct.; appointment, 18th October.

LEEDS GENERAL INFIRMARY—Resident Medical Officer: applications, 4th Oct.; election, 7th Oct.

LONDON HOSPITAL—Two Assistant-Surgeons: 28th Sept.

MANCHESTER TOWNSHIP—Medical Officer for the St. Michael District.

PENZANCE UNION, Cornwall—Medical Officer for District No. 5.

RATHDRUM UNION, co. Wicklow—Medical Officer for the Dunganstown Dispensary District: applications, 30th Sept.; election, 1st Oct.

ROYAL SOUTHAMPTONSHIRE INFIRMARY, Southampton—Surgeon.

ROSCREA UNION, Co. Tipperary—Medical Officer for the Workhouse and the Ballybritt Division of the Roscrea Dispensary District.

ROYAL ISLE OF WIGHT INFIRMARY, Ryde—House-Surgeon: applications, 5th October; vacancy, 3rd Nov.

ST. BARTHOLOMEW'S HOSPITAL—Resident Physician.

SEISDON UNION, Staffordshire—Medical Officer for the Wombourn District.

SPALDING UNION, Lincolnshire—Medical Officer and Public Vaccinator for the Gosberton District: 27th Sept.

SWANSEA INFIRMARY—House-Surgeon: applications, 24th Nov.; election, 1st Dec.

UNIVERSITY OF ABERDEEN—Three Examiners for Graduation in Medicine; election, October.

WEST RIDING OF YORKSHIRE LUNATIC ASYLUM—Clinical Clerk: applications, 28th Sept.

WIRRAL UNION, Cheshire—Medical Officer for the Upton District.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

HUMBY, William Warren, M.R.C.P., appointed Resident Surgeon to the Bournemouth General Dispensary and Cottage Hospital.

PHILLIPS, John J., M.D., appointed Physician to the Royal Maternity Charity, in the room of *Robert Barnes, M.D., resigned.

BIRTHS.

BLASSON.—On September 15th, at Heckington, the wife of George Blasson, Esq., Surgeon, of a son.

GREENE.—On September 18th, at 218, Old Kent Road, the wife of *W. T. Greene, M.B., of a daughter.

MALINS.—At Cradley Heath, Staffordshire, on September 17th, the wife of *Edward Malins, M.D., of a son.

MAURICE.—On September 18th, at Reading, the wife of *Oliver C. Maurice, Esq., Surgeon, of a son.

Ogilvie.—On September 9th, at Lee, Kent, the wife of Charles F. Ogilvie, M.D., Surgeon Her Majesty's Bombay Army, of a daughter.

SIMMS.—On September 13th, at Twickenham, the wife of *F. Simms, M.B., of Wimpole Street, of a son.

MARRIAGES.

*ALLBUTT, Thomas Clifford, M.A., M.D., F.L.S., of Leeds, to Susan, only daughter of Thomas ENGLAND, Esq., of Weston House, Weston, Yorkshire, on Sept. 15th.

CRITCHETT, George A., Esq., eldest son of *George Critchett, Esq., Surgeon, of Harley Street, to Maria Amelia Carneiro Lins, youngest daughter of the late Manuel C. L. d'ALBUQUERQUE, LL.D., of Pernambuco, on September 16.

*DEIGHTON, Christopher, M.D., of Clapham, Yorkshire, to Ann, only daughter of the late Richard MATHER, Esq., of Litton, at Clapham, on September 14th.

GLOVER, James Grey, M.D., of Islington, to Mary, daughter of William MULLER, Esq., of Clapton, at Hackney, on September 16th.

HASSELL, Benden S., Esq., of Buxted, Sussex, to Fanny, second daughter of the late Jonathan MONCKTON, Esq., Surgeon, Brenchley, Kent, on September 15th.

DEATHS.

*EWEN, Henry, Esq., Surgeon, at Long Sutton, Lincolnshire, aged 65, on September 15th.

FOX, Henry Erasmus, Esq., Surgeon, on board the *Orwell*, off Madeira, aged 42, on August 16th.

FOX, Thomas, M.D., Retired Deputy Inspector-General, Army Medical Department, at Ilfracombe, aged 66, on August 31st.

GRAHAM, Howard Claude, M.B., late of Chillen, Chile, at Ryde, Isle of Wight, on September 4th.

HIGHETT.—On September 19th, Elizabeth Holder, wife of *Charles Highett, Esq., M.R.C.P.Ed., Montpelier, Bristol.

ROGET, Peter Mark, M.D., F.R.S., at Malvern, aged 90, on September 12th.

THE COUNCIL OF THE ROYAL HOSPITAL FOR DISEASES OF THE CHEST, CITY ROAD, acknowledge the receipt of the liberal donation of *one thousand* pounds which has been paid to the credit of the Hospital with Messrs. Glyn, Mills, Currie, and Co. The sum has been given under the initials W. P. D.

BEQUESTS.—Mr. Richard Gosling, banker, of Fleet Street, has bequeathed £100 to St. George's Hospital.—Mr. Edward Giles, formerly of the Stock Exchange, late of Clapham Common, has left £500 to the Brompton Hospital, and £1,000 each to the Royal Sea-bathing Infirmary at Margate, and the Sussex County Hospital, Brighton.—The late Dr. William Bullar, of Southampton, has bequeathed £3,000 to the Royal Hampshire Infirmary.

THE DEAN OF CARLISLE ON MODERN OPINIONS.—In a sermon at Carlisle to those just ordained, Dean Close was bold to say "that in all the dreams of Hindoos, and all the false religions—corrupt, degraded, and ridiculous—that were ever among the Pagans, there were none so frivolous and childish as those unto which the science of the present day has reduced our scientific men."

MORTALITY RETURN IN 1746.—The following is copied from *Aris's Birmingham Gazette*, No. 235, the copy that gives an account of the Battle of "Collodden." The return is for Birmingham for the week ending May 10th, 1746. "Diseases and casualties this week. Diseases;—Aged 58, Consumption 90, Convulsions 113, Dropsy 26, Fever 95, small-pox 70, Teeth 24. Casualties,—Drown'd 2, Found dead 2, Suffocated 1, Hang'd himself 1, Killed by a Cart 1, Scalded 1, Shot 1. Births and Burials this week. Christened,—Males 151, Females 139, In all 290. Buried,—Males 285, Females 258, In all 543. Decreased in the Burials this week 33." By the above return, small-pox caused 70 out of 485 deaths, or 14.5 per cent.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.

WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAYSt. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

MR. N. MCGREEVY requests us to correct an error in his letter published last week. He was described as "F.R.C.S. Edin.," instead of "L.R.C.S. Edin."

PROFESSOR CHURCH, M.A., whose Report on the Spectroscopic Examination of Animal Substances was read at the Exeter Meeting of the British Association, is not, as stated by a contemporary, the Assistant-Physician to St. Bartholomew's Hospital, but the Professor of Chemistry at the Royal Agricultural College.

A CORRESPONDENT.—The simplest is the best. A reflector and a lens without handles, at Krohne's in the Whitechapel Road, for 6s. or 8s. and upwards. Also, at nearly all the surgical instrument makers.

VISIBLE PULSE.

SIR,—In a large proportion of healthy persons whose arms are not plump, the pulsations of the radial artery are perfectly visible, or become so as soon as the energy of the heart's action is increased by exercise; and in thin men with irritable hearts a pulse somewhat resembling the true locomotive pulse may not infrequently be seen, both in that vessel and in the posterior tibial, where it lies behind the inner malleolus, though there is no regurgitation through the aortic orifice, of which lesion however the visible and vermicular pulse (at first noticed by Sir D. Corrigan) is a valuable sign when it is highly marked and observable in other vessels besides those I have mentioned. Having known this appearance cause much unnecessary alarm, I offer this reply to X. Y. B.

Dublin, September 18th, 1869.

I am, etc.,
J. L.

J. R. S. (Bantry, Ireland).—Under the circumstances you mention, we should strongly recommend you to subscribe to the New Sydenham Society. In addition to other valuable works, Trousseau's *Lectures*, etc., you will obtain every second year a *Resumé* of progress in the different departments of medicine, which will serve your purpose exceedingly well.

MAGNIVEN and CAMERON'S PEN.—We have for some time been in the habit of using the "Owl" and "Waverley" pens—the latter especially; and have been better satisfied with them than with almost any other steel pen. One writes easily with them. The "Pickwick" pen resembles the "Waverley," but is more suited for those writers who like fine points.

GLASS FOR HOSPITAL WALLS.

SIR,—Among the various suggestions which have lately been made for the prevention of the poisonous infiltration of hospital walls, I have seen no mention made of glass as a material for wall covering. Glass can now be made in sheets so large and thick, and at a cost, comparatively speaking, so reasonable, that no bar need exist to the entire coating of at least one surgical ward, to which infectious cases might be removed, with plate glass. The polished glass would be *absolutely impervious* to infiltration, and the surface could at any time be thoroughly washed. The large squares of glass may be accurately fitted together, and cemented, so as to exclude any chance of infiltration at their junctions. Some kind of "hold-fast," in addition to the cement, would probably be required to keep the glass in position. This, however, is a point which a practical glazier would readily settle. If the walls be previously painted or papered, the colour or pattern would show through the glass, and present a very pleasant and cheerful appearance to the patients.

Baslow, Chesterfield. I am, etc., FERGUSON BRANSON, M.D.

INFLUENCE OF THE MOON ON DISEASE.—In a pamphlet, *On Lunar Influence over Malarious Fevers*, Dr. W. J. Moore, Surgeon Rajpootana Agency, examines the evidence for and against this question. It appears that in India, malarious fevers are supposed by some medical men, and by many Anglo-Indians, to be aggravated at the new and full moon. This influence is supposed by the author to be indirect, and to be exerted primarily on the temperature, moisture, electrical and magnetic states, etc., of the atmosphere, which, in its turn, affects the development of "malarious influences" already existing in the systems of those who have suffered from malarious fever.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

A SUBSCRIBER.—There is no disease to which this name can properly be applied. You must describe the case. (*Tinea Tonsurans?*)

DR. CLIFFORD ALLBUTT'S Clinical Thermometer (Harvey and Reynolds, Leeds). Price 10s. 6d.

H. P. W.—*Botany*. Bentley (12s. 6d.) or Balfour. Oliver (Macmillan) is very good, but too small. You should also get Lindley's *Descriptive Botany*, 1s.—*Zoology*, etc. You must certainly get Huxley on Classification, 6s., just out. Also, Milne-Edwards or (better) Dallas.—*Natural Philosophy*. Ganot, 15s. Brooke, 12s. 6d., and Newth, 1s. 6d., will be found useful in addition.—*Chemistry*. Roscoe, 4s. 6d.; enough, if well mastered. Fownes, 12s. 6d. Recollect, the cheaper books may do to pass; but, if ambitious of honours, you must study the large books.

MERCANTILE MARINE.—The scurvy is said to have first appeared in Denmark in 1530.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Sept. 15th; The New York Medical Gazette, Sept. 4th; The Parochial Critic, Sept. 15th; The New York Medical Record, Sept. 4th; The Boston Medical and Surgical Journal, Sept. 2nd; The Aberdeen Free Press, Sept. 14th; The Madras Mail, July 14th; The Indian Medical Gazette, August 9th; The Newcastle Daily Journal, Sept. 15th; The Chester Courant, Sept. 15th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. P. Squire, London; Dr. Cameron, Dublin; A Subscriber, London; Mr. T. Longmore, Netley; Dr. Allbutt, Leeds; Dr. Wilkinson, Norwich; Mr. Tuson, London; Dr. J. Murie, London; The Honorary Secretary of the Meath Hospital and County of Dublin Infirmary; Dr. Cotton, London; Dr. Branson, Doncaster; Dr. George Johnson, London; Mr. J. Williams, Sudbury; Mr. E. C. Garland, Yeovil; Mr. G. Gaskoin, London; Dr. D. C. Black, Glasgow; Dr. Neil McGreevy, Drogheda; Dr. Fraser, Brighton; Dr. Ballard, London; Dr. Cheadle, London; S. W., London; Dr. J. J. Phillips, London; Suburban M.D.; R. H. O. J.; Dr. Coleman, Henley-on-Thames; Dr. Brabazon, Bath; Mr. Edwin Bush, Frome; Dr. Bradbury, Cambridge.

LETTERS, ETC. (with enclosures) from:—

Dr. H. Blanc, London; Mr. James Walton, London; Dr. Paul, London; The President and Treasurer of St. Thomas's Hospital; J. L., Dublin; Dr. Brumwell, Mossley, Manchester; Dr. Letheby, London; Mr. H. J. Alford, Taunton; Mr. T. R. Jessop, Leeds; Mr. F. Le Gros Clark, London; Dr. E. Sidebottom, Mottram-in-Longdendale; Mr. F. Wright, Stamford Bridge; Dr. Styrap, Shrewsbury; Dr. Kelly, Taunton; Dr. Malins, Cradley Heath; Dr. Oppert, London; Dr. Greene, London; Dr. Kelburne King, Hull; Mr. R. Rendle, London; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Lomas, London; Dr. Treutler, Kew; Dr. E. Headlam Greenhow, London; Dr. Cammack, Spalding; Dr. Hightett, Bristol; Dr. H. Barnes, Carlisle; Dr. John Murray; Dr. Hughlings Jackson; and Dr. Tidy.

BOOKS, ETC., RECEIVED.

The Fifth Annual Report of the Tewkesbury Rural Hospital, 1869.
The Sanitary Powers and Duties of Vestries as Sewer Authorities. By James B. Hutchins. London: 1869.
British Association for the Advancement of Science: Exeter Change for the British Lions. Edited by Snug the Joiner. London: 1869.
The Realities of Medical Attendance on the Sick Children of the Poor in Large Towns. By T. P. Heslop, M.D. London and Birmingham: 1869.
On External Perineal Urethrotomy. By J. W. S. Gouley, M.D. New York: 1869.
On Fresh Meat Preservation. By John Gamgee. London: 1869.
Discussion on the Syphilisation in the Medical Society in Kristiania.
The Army Medical Department Report for the year 1867.
Scarlet Fever and its Prevention. By Frederick Smith. Malvern: 1869.
An Attempt to apply Chemical Principles in Explanation of the Action of Remedies and Poisons. By W. H. Broadbent, M.D. London: 1869.
Report on Excisions of the Head of the Femur for Gunshot Injury. War Department, Surgeon-General's Office. Washington: 1869.
The Third Report of the Health and Meteorology of Newcastle and Gateshead. By G. H. Philipson, M.A., M.D. Newcastle: 1869.
The Medical Practice of To-day. By Sir W. Jenner, Bart., M.D. London: 1869.
On Lunar Influence over Malarious Fevers. By W. J. Moore. Bombay: 1869.
Lectures on the Preservation of Health. By C. A. Cameron, M.D. Illustrated with Woodcuts. London and New York: 1869.
The Thirteenth Report of the Commissioners of Her Majesty's Customs.
Transactions of the Odontological Society of Great Britain. Vol. vi.
The Principles of Surgery: Clinical, Medical, and Operative. By Frederick James Gant, F.R.C.S. London: 1864.
Oxygen: Nature's Remedy in Disease. By George Barth. Second Edition. London: 1869.
Practical Observations on the Harrogate Mineral Waters. By A. S. Myrtle, M.D. Second Edition, with Additions. London: 1869.
Report on the Sanitary Condition and Public Health of Mile End Old Town. By Matthew Corner, M.D. London: 1869.
The Ninetieth Annual Report of the Birmingham General Hospital.
The Report of the City of Glasgow Fever Hospital from May 1st to April 30th, 1869. By J. B. Russell, M.D. Glasgow: 1869.
Clinical Notes on Diseases of the Larynx. By William Marcet, M.D., F.R.S. London: 1869.

ABSTRACTS OF
INTRODUCTORY ADDRESSES
DELIVERED AT
THE METROPOLITAN AND PROVINCIAL
SCHOOLS,
On OCTOBER 1st, 1869.

KING'S COLLEGE.

THE Introductory Address was delivered by Dr. GEORGE JOHNSON.

The lecturer began by saying that, in the choice of a subject for his address, he had been influenced by the consideration that his audience would be a mixed assembly of professors, practitioners, students, and gentlemen of various pursuits and professions. Believing, as he did, that the science of medicine had reached that stage of progress and development at which it is possible to render its leading principles intelligible and interesting to those who have no special knowledge of our art; believing, too, that the public have an interest in obtaining such a knowledge of the principles by which we are guided, as will enable them to distinguish between the legitimate claims of medical science and the impudent demands of pretentious quackery, he had determined to attempt such an exposition of the aims and methods of medical science as should interest those who have little or no medical learning, while he endeavoured to avoid being tedious to those who have much. Before passing on, he briefly referred to recent changes in the staff;—Dr. Beale's resignation of the Chair of Physiology, and Dr. Rutherford's appointment as his successor; Dr. Beale's appointment to the Chair of Pathological Anatomy, while he retains his position at the hospital; and the appointment of Drs. Yeo and Kelly as Assistant-Physicians. Dr. Johnson then proceeded to say that the science of medicine has for its object to promote the physical well being of mankind, to prevent and to remove disease, to mitigate human suffering, to prolong human life. Without attempting a precise scientific definition of disease, it is sufficient for the present purpose to say, that disease is an abnormal condition of the body; it is not a separate entity, nor has it any existence apart from the body. It is of primary importance to distinguish between a disease and its cause. We get an idea of small-pox from seeing an individual suffering from that disease, but the cause of small-pox is a morbid poison which may be conveyed by the air or on the point of a lancet from one individual to another. It may seem a truism to remark, that every functional disturbance and every structural change have a cause, whether we can discover it or not. It is not equally obvious, though equally true, that the primary cause of most diseases is external to the body, which it enters or otherwise acts upon, generally through the lungs, or the alimentary canal, or the skin. It is one of the especial merits of modern medicine that it has devoted much labour and research to the investigation of the causes of disease. It is not enough to give a disease a name; to speak of inflammation of the lungs, or kidneys, or skin. We must endeavour to discover the cause and its mode of action upon the functions and tissues. Some of the greatest triumphs of medical discovery have been effected by researches throwing light upon the causes of disease, and consequently upon the means of prevention and of cure. Thus, that terrible disease called sea scurvy was traced to a deficiency of fresh vegetables in the diet; the various sources of chronic poisoning by lead have been made known, and ague has been traced to the influence of malarious exhalations from undrained marshes.

Within the last few years, it has been gradually ascertained that, in the great majority of cases of ague and of typhoid or enteric fever, water is the vehicle of the poison. This discovery has brought prominently into notice one of our most glaring sanitary defects. Formerly, in towns especially, cesspools and wells for the supply of drinking water were placed in such close proximity, that a mutual interchange of their contents was of frequent occurrence. Lately, cesspools and wells have been simultaneously abolished, and now the excreta are poured into those very rivers from which our drinking water is mainly derived. Thus, with a blind perversity, we have acted as if with a determination to inflict upon ourselves all the loathsome abominations involved in the curse of Rabshakeh. The discovery that water contaminated by sewage is the vehicle by which, mainly, though not entirely, cholera is communicated, has rendered it more than ever certain that the discharges from the alimentary canal, which are known to contain the specific poison of the disease, are the result of an effort to expel the poison from the system. The physiology of the process appears to be

this—certain effete and noxious matters, which have been once thrown off from the system, being rendered additionally noxious by the presence of a specific poison, are re-introduced through the agency of drinking water. Then, after being absorbed and undergoing a rapid process of multiplication, they are again ejected through the natural outlets of the body. Reference was then made to the influence of theory upon practice. Without a knowledge of the natural process of cure, we are in danger of directing our curative efforts in opposition to those of nature. In a case of small-pox, the eruption on the skin is an essential part of the process of recovery. To drive in the rash, is to kill the patient. A case was mentioned in which this was done by the application of a cold wet sheet, with a speedily fatal result. The history of medicine affords many illustrations of the mischievous influence of wrong theories upon practice. The cotemporaries of Sydenham believed that the maturation of the pustules of small-pox requires a high temperature for its completion. This they endeavoured to secure by closed doors and windows and heaps of bed-clothes. The patients, therefore, were poisoned by foul air, and the mortality was excessive. Probably no theory of disease has ever led to so great a sacrifice of life as that which, attributing the collapse of cholera to the discharges from the alimentary canal, suggests a treatment whose main object is to arrest those discharges by astringents, and especially by opiates. This theory has now few defenders. Careful observation has shown that the choleraic discharges, so far from being the main cause of collapse, are as essential a condition of recovery from collapse as the eruption in small-pox is essential to recovery from that disease, and the sudden arrest of the choleraic discharges by opiates is as fatal a mistake as the repression of the variolous eruption by the cold wet sheet. That the fatal results of the opiate treatment should not have led to the earlier abandonment of the erroneous theory upon which it was based, is an illustration of the doctrine propounded by the historian Buckle, that an erroneous theory is never abandoned because it produces injurious results. A theory once believed will continue to be believed until advance of knowledge shakes its foundation. A change of theoretical views with regard to the nature of cholera has done much to modify the treatment of that disease. The construction of medical theories is a difficult and a perilous undertaking, and it behoves all who apply theories to practice to take heed that their light be not darkness.

The main object of medical science is to gain the knowledge and the skill which will enable us to prevent, to remove, or to mitigate, disease. No general theory of therapeutics has the slightest claim to be accepted as true or trustworthy. The dogma, that "like cures like," *similia similibus curantur*, is certainly not an induction from ascertained facts. Equally incomplete and unsatisfactory is a theory which has often cropped out, and which was advocated in a recent number of the *Quarterly Review*—the theory that all disease is caused by or, at any rate, associated with a deficiency of vital force, and that, therefore, all remedial treatment should be restorative, with a view to increase vital power. Without stopping to inquire whether our knowledge of the so-called vital force renders it possible to estimate its amount in health and disease, we may unhesitatingly declare that the phenomena of disease, and the various modes of recovery and of cure, are too diverse to be included within the terms of this inadequate theory. The most general and comprehensive statement with regard to the cure of disease that can safely be made is this: most of those diseases that are curable by any means are curable by the unaided powers of nature, and the chief art of the physician, as of the surgeon, consists in regulating and directing those natural forces which will cure a fever or an inflamed lung as surely as they will heal a wound or mend a broken bone. The most competent observers agree in opinion that the specific remedies are few in number; quinine, mercury, iodide and bromide of potassium, may be looked upon as specifics, but to insure their curative action they must be given in full and not in infinitesimal doses.

Physicians of the present day are sometimes charged with a want of faith in the power to cure disease. To this charge, we plead not guilty. It is true that we have learnt that the use of drugs is more limited than we formerly believed. Yet we have an increased confidence in our power of dealing with disease, both in the way of prevention and of cure; and a firm conviction that we have acquired greater skill in the use of particular remedies. In the treatment of a fever, we trust more to good nursing and judicious feeding than to medicines, yet we give medicines when they are needed. So, in the management of many chronic diseases, we know that the secret of success consists in discovering and avoiding the cause, and not in the blind administration of drugs. In our more precise modern methods of exploring disease, we have a great advantage over our predecessors. The stethoscope, the microscope, the ophthalmoscope, the laryngoscope, the sphygmograph, and the thermometer, have contributed much to accuracy of diagnosis, and thus have indirectly advanced our knowledge of the real influence of re-

medies. The most brilliant result of modern therapeutical research is to be seen in the discovery and gradual improvement of the means of annihilating pain by general and local anæsthesia. But, here again, it is to be observed that some of the greatest improvements in the art of healing have been accomplished not by the discovery of new remedies, or by the acquirement of increased skill in the use of old ones, but by entirely different methods. In illustration of this statement, reference was made to the discovery of vaccination, and to the introduction of the non-restraint system of treating the insane. Without doubt, vaccination is the most splendid instance of successful preventive medicine that the human intellect has ever yet arrived at. That vaccination has not hitherto been entirely successful in the annihilation of small-pox, is mainly due to the fact that it has not been possible to ensure the efficient vaccination of every infant. The carelessness or the unskilfulness of some operators, and the negligence or the unreasonable prejudice of some parents who, in spite of the law, refuse to have their children vaccinated, are the chief hindrances in the way of the extermination of one of the most terrible and fatal of all diseases.

The release of the insane from the misery and degradation of chains and fetters, and the substitution of the non-restraint system of treatment, afford a memorable illustration of the triumph of common sense and christian charity over ignorance and prejudice. To Dr. Conolly the world is mainly indebted for the establishment of the principle that in the treatment of the insane, the non-restraint system is both practicable and safe. Dr. Conolly, it is true, was not the first to relieve the poor lunatic from the galling misery of mechanical restraint. This had been done to a great extent by Dr. Charlesworth and Mr. Gardiner Hill, in the Lincoln Asylum, and still earlier by William Tuke, in the Retreat near York, established by the Society of Friends, and about the same time by Pinel, in the Bicêtre Asylum in Paris. Dr. Conolly was appointed resident physician of the Hanwell Asylum in 1839. He then found that, out of 800 patients, upwards of 40 were under restraint. He gradually abolished all mechanical restraint, and to his public demonstration of the complete success of the system, it is mainly due that within a few years the non-restraint treatment was adopted in every asylum throughout the country. Dr. Conolly for some years gave clinical lectures at Hanwell, to pupils sent down from the London schools. It is much to be regretted that the abundant materials for clinical instruction which exist in the asylums throughout the country should be so little utilised as they are. A knowledge of insanity is essential for every practitioner of medicine. There are obvious reasons why cases of confirmed insanity should be treated by a special class of physicians; but it is equally obvious that insanity, in its earlier stages, when an accurate diagnosis and judicious treatment are of the highest importance, must, as a rule, come under the care of the ordinary medical attendant. For these reasons the public interest demands that the opportunities afforded to the generality of medical students for acquiring a knowledge of the various forms and phases of mental disease should be greater than they are at the present time. In the study of mental diseases, two classes of phenomena present themselves for examination: first, the influence of purely physical changes upon the mental condition; and, secondly, the influence of mental emotion upon the physical organisation. Thus a mental illusion, the vision of a supposed ghost, may be only, as Scrooge, in the Christmas Carol, suggests, "an undigested bit of beef, a crumb of cheese, or a fragment of an underdone potatoe"; on the other hand, a blood-stained dagger in the air may be the outcome of a mental conflict between the conscience and a strong temptation; and, again, sudden terror or intense grief may result in a life-long insanity or epilepsy. It is manifest that all impressions conveyed to the mind from without, and all outward manifestations of the mind's internal operations, are effected by material agents. Are we therefore driven to the conclusion that the mind itself is material, the product of a highly organised "protoplasm"? We think not, for we see that many of the mental functions—the phenomena of the reason, the conscience and the will, are so entirely different from the known properties of matter, however highly organised, that we cannot conceive of the one being a product of the other. Surely something more than "quintessence of dust," or organised protoplasm, has been concerned in the authorship of Hamlet, in the discovery of the laws of gravitation, in the invention of the steam engine and the electric telegraph, and in the spectrum-analysis of the sun and the stars. It has been revealed to us that there is within each human being a spirit capable of holding communion with the Divine spirit, and destined for an immortal life beyond the grave. This revelation, though far transcending in its clearness and completeness the result of any merely human inquiry, is yet in strict accordance with all that by other methods we can most surely learn of our present condition, our actual needs, our intellectual cravings, and our highest spiritual aspirations.

In conclusion, a few words were addressed specially to students of

medicine. During the earlier part of their course, their chief business was to make themselves physiologists. To study the structure and working of that wonderful machine, something more than "the cunningest of nature's clocks," whose derangements it would be the work of their after-life to correct. In studying physiology, they would need all the aid to be derived from anatomy, from chemistry, and from physics. In passing on to the study of disease, they would but be entering upon another department of physiology. Pathology—the science of disease—is another name for the physiology of disease. The processes and the products of disease result from the action of the normal mechanism and forces only modified by morbid conditions. Physiology forms the only sure basis for scientific pathology. In the midst of morbid processes, apparently the most disorderly and chaotic, there is a true cosmos, if only we can find the right key for their interpretation. In the study of therapeutics, they would learn that, although the administration of medicines forms but one element in the treatment of disease, it does, in fact, constitute an important part of the art of healing. We do possess remedial agents of undoubted power and of inestimable value, and we may reasonably hope that further research will increase the number and efficiency of our remedies. In estimating the influence of treatment two extremes are to be avoided: on the one hand, weak credulity; on the other, obstinate scepticism. "Finally, gentlemen, in your therapeutical studies, as in every other field of research, remember that your main object is not your own exaltation or selfish advancement, but truth—truth to be employed for 'the glory of the Creator and the relief of man's estate.' Let this, then, be your guiding maxim: 'Prove all things, hold fast that which is good'."

MIDDLESEX HOSPITAL.

Dr. ROBERT LIVEING delivered the Introductory Address.

After some introductory remarks, the lecturer discussed the subject of preliminary education, and alluded to the new regulations by which students may now become members of the University of Cambridge without belonging to any particular college, and thus avoid many of the expenses incidental to college membership. In referring to the subjects of the professional curriculum, he called attention to the fact that sufficient time was not allotted to the study of chemistry, and that it would be a great gain if part of that now spent on anatomy, both human and comparative, and the whole of that devoted to botany, could be employed in studying chemical science. He pointed out that natural sciences should be studied with one object in view, namely as a preparation for carrying out the ultimate purposes of the medical profession—the treatment and prevention of disease. He then said:—In a scientific point of view this may be the least satisfactory part of our duties, but morally it is the most important and the only one in which the public at large are immediately concerned. To cure disease is what is expected of us by the rest of mankind, and it is by virtue of this supposed power that we exist as a profession. Now the history of the past often serves as a guide or warning to the future; and with this view I would ask you to glance back for a moment at the history of medicine. In doing so, you cannot fail to be struck by the fact that superstition and the art of healing go hand in hand. Circe and Æsculapius are children of the same parent. We have but to open one of the old works on medicine, and we read of a thousand vile compounds as certain specifics for diseases. Vogel says that "a toad roasted alive in an earthen pot, and dried in an oven moderately heated", is an unfailing cure for the gout. It was not until the reign of George I, that touching for "the evil" was discontinued. Well, gentlemen, this system of quackery and superstition is the foundation upon which our present empirical treatment of disease rests; and, though science and education have removed most of its absurdities, it will yet be a long day before we can entirely shake off the effects of the past, and thoroughly emancipate ourselves from the thralldom of blind routine. Our predecessors had excuses for their multitudinous remedies and superstitious practices, for they knew nothing of the origin and nature of disease. A study of pathology and morbid anatomy has revealed to us what they were ignorant of, viz., the incurability of almost all serious maladies. Do not misunderstand me. I do not say the incurability of patients. I do not say that the course of disease is not sometimes modified and life prolonged by medicine, or that the thousand minor ills and pains to which flesh is heir are not relieved or removed by its agency. But what I do say is, that no remedies in the form of drugs will cure organic disease, or cut short the course of ordinary fevers. Nevertheless, it is very important that we should not hold erroneous views with regard to disease, or suppose that the treatment of patients is useless. An example will best enforce my meaning. Suppose we are called upon to treat a case of scarlatina, we start with the knowledge that no medicine will cure or cut short the

fever; but we do not therefore stand by and do nothing. We know the dangers to which the sufferer is exposed at the different stages of the disease, and we carefully guard against them. We take care that all necessary sanitary arrangements are made with a view to the benefit of the patient and the protection of others; we provide proper nursing, food, and physic; and we control the complications of the disease as they arise, and thus by careful treatment we bring the case to a favourable termination. In short, it is hardly possible to overestimate the value of judicious treatment in *incurable acute diseases*. Before concluding this part of my lecture, I am especially anxious to direct your attention to the subject of sanitary science, and that for two reasons; in the first place, because it forms no compulsory part of the medical curriculum—a *fact much to be regretted*; and in the second place, because I know no subject of equal importance except the clinical study and direct treatment of disease. In attempting to cure disease, we daily feel the limit of our power. A barrier seems to cross our path and stop further progress; but there is no limit to the good that may be effected by preventive medicine, and, though that science is still in its infancy, our knowledge is far, very far ahead of our practice. We have as yet no idea what beneficial effects would result to civilised races by placing them even for a few generations under the most favourable sanitary conditions, and under wise restrictive laws with regard to marriage. By way of illustrating the importance of this subject, I will direct your attention to one or two facts in connection with it. There is nothing more certain than the fact that all localised outbreaks of typhoid fever are entirely due to the introduction of poison by drinking water; and yet twelve thousand persons die annually in England and Wales from the “preventable disease”. Cholera, like typhoid fever, is chiefly propagated by water; and, although peculiar atmospheric conditions may play an important part in its development, yet it is more than probable that in this country at least cholera is a preventable disease. These two examples will serve to impress upon you the importance of turning your attention to the study of preventive as well as curative medicine. The educated non-professional public are profoundly ignorant of everything connected with the nature and origin of disease. They have nearly as much faith in nostrums and specifics as their forefathers, while the poorer classes are not only equally ignorant, but habitually neglect the ordinary essentials for preserving health; and as they believe in the ready curability of almost all diseases, so they take little care to guard against those external agencies and unnatural habits of life which produce them. With these two classes—the educated and the uneducated—you will hereafter be brought into daily communication, and it will be your duty to infuse amongst them sounder principles on such important subjects as the preservation of health and life.

On the subject of reform, the lecturer said:—In professions as in states, changes and reforms are talked of and criticised long before they are carried out, and of late we have heard much of two proposed changes, which like coming events have cast their shadows before. I mean the reform of our licensing system, and the admission of women to medical studies and practice. It cannot be denied that there is a growing feeling in the profession that our present system of regulations connected with the different forms of license to practise is far from satisfactory, and that “one uniform standard of examination and one legal qualification” should take the place of what I would call the divided responsibility which at present exists. There are, as you know, in the United Kingdom no fewer than eighteen or nineteen corporations that have power of granting a license to practise. Now the existence of many different licensing bodies would be a matter of small importance, if the same preliminary requirements and equally high standard of examination were adopted by all; but, as this is not the case, we ought to apply to our professional examinations what was objected to in the case of the Irish Church—I mean a system of “levelling up”. With regard to the other reform to which I alluded, there can be no doubt that women will ere long be admitted to medical degrees in England, as they are in many other countries of Europe and in America. Already a majority of the senate of the University of Edinburgh has decided to admit ladies, under certain regulations, to the study of medicine. Now, instead of hastily condemning this innovation as a necessary evil, I would ask you to bear in mind, what no one will venture to deny, the existence of a very great and daily increasing number of well-educated women who can barely earn a subsistence by teaching, needlework, and other like occupations, and of a still larger class who are dependent through life upon the charity of friends or relations. Now, if superfluous energy and wasted talent can be turned to good account, there is something gained; and the throwing open any new and legitimate sphere of employment to educated women will be an undoubted advantage to themselves and possibly to society at large. Thus far you will agree with me. Then comes the question, whether the practice of medicine is or is not a suitable occupation for women. This, time alone will

show. At present we have not had sufficient experience to guide us to positive conclusion. There is one practical point, however, connected with the subject that it would be well to bear in mind; viz.: it is essential to the success of the scheme that, if women be admitted to practise, they must first receive a sound education in *all the branches* of our profession, and fulfil all the requirements and pass the same examinations as are deemed necessary for men.

You are doubtless satisfied that in choosing medicine you have chosen an honourable and noble profession—the best and wisest have ever so regarded it. But, remember that with each of you rests the responsibility of upholding it in that light. Men will interpret the view you entertain of it through the medium of your own conduct. It is certainly easier to grow rich by adopting a system of humbug, than by leading a life of strict integrity and industry; you will, therefore, often be tempted to swerve from the straight road of professional rectitude, into some by-path to gain and fame. But, remember again, that no success in life will compensate you for the loss of self-respect.

“Honour and shame from no condition rise;
Act well your part, there all the honour lies.”

Foreseeing, then, the dangers that will beset your path through life, strive to earn for yourselves an unsullied name; strive to uphold the social position and honour of your profession; and, above all things, seek to make it “a rich storehouse for the glory of the Creator, and the relief of man’s estate”.

ST. THOMAS’S HOSPITAL.

Dr. STONE delivered the Introductory Address.

The relations between sense and science formed the subject of the address. It was a lay sermon, and its text the maxim of Protagoras, that “man is the measure of all things”. The speaker briefly reproduced the circumstances under which this was first discussed, as given in the *Theætetus* of Plato. He proposed to name his lecture *Novus Theætetus*, in memory and admiration of Lord Bacon, who adopted the same course on a larger scale towards the *Organon* of Aristotle. The object of both was contrast rather than commentary; for two thousand years had changed, even inverted, the mutual relation of sense and science, so that what was heresy and sophism in the old metaphysician might be a very watchword and symbol to the physician of to-day.

After disavowing a materialistic interpretation of the axiom, and setting apart the mysteries of revelation as too solemn for discussion, he asserted that the Archetypal man must be one standard, and criticised the assumed antagonism between sense and science. He shewed how different is our conception of sense from what it was till very recently. Our fingers, unlike those of our forefathers, can record their lightest touch thousands of miles away across an ocean, and in a land which they knew only by legend; our ear is tutored to the swell of the full organ, the rhythmic cadence of the fugue, and the measured thunder of the ordnance: it can follow the breathed air as it permeates the lungs, and hear the life-blood rushing through the heart; our eyes embrace things infinitely great and small, from infusion or blood-corpuscles to the large disc of Saturn, Uranus, or Neptune: they can even break up light itself into its elements, and measure the speed of Sirius through illimitable space.

The saying of Protagoras was then applied to physiology, shewing the importance of studying the healthy organism; to psychology; to statistics; and to art. The duty of cultivating our senses was insisted on as essential to our competence and repose of mind; not sight only, but touch and hearing also, for in medicine we might almost deny that “seeing is believing”, so much does it depend on auscultation.

Lastly, the maxim was applied to the pious commemoration of good and great men, our predecessors, the measure we should mete ourselves withal. An old foundation like St. Thomas’s had something far exceeding pride of birth or title; for it represented, not a line of weak men, but a continuity of good works, a steady unbroken pedigree of benevolence. In reviewing the losses of late years, such as Green, Grainger, Brinton, a tribute was paid to the memory of Gilbert Mack-murdo. He served long and faithfully, and was of exceptional kindness to his younger brethren. We who remain should model ourselves on the virtues of those who have gone before us. It was here that the torch of knowledge was handed to us, that we might carry it to the end of our pilgrimage, and hand it down undimmed by our errors or our indolence.

The following Prizes and Certificates were delivered by Francis Hicks, Esq., Treasurer:—

Third Year’s Students—H. W. Saunders, London, £30 and Certificate; L. M. Thomas, Camberwell, £20 and Certificate; M. F. Simon, Blackheath, £10 and Certificate. *Second Year’s Students*—

Hy. Williams, Longley, near Gloucester, £10. *First Year's Students*—B. Addy, West Deeping, Lincolnshire, £30 and Certificate; H. M. Maybury, Frimley, Surrey, £20 and Certificate. "*Physical Society's*" Prizes (with Certificates)—H. W. Saunders, London, Third Year; J. S. Slater, Leamington, Second Year; B. Addy, West Deeping, Lincolnshire, First Year. *Resident Accoucheur's* (Certificates)—Meredith Townsend, Clapham Rise; James Fielding, M.D., Toronto; Frederick Pollard, Taunton; C. N. Bell, Rochester. *Certificates of Honour for Attendance on Maternity Cases*—A. Barrow, F. Clark, J. Fielding, M.D., D. G. Fleming, M.D., A. H. Hughes, M.D., F. J. Parson, D. F. Pearson, E. Sergeant, M. F. Simon, J. Sutcliffe, T. M. Wilkinson. *Ophthalmic Clerks* (Certificates)—David Keagey, M.D., Toronto; G. C. Franklin, Leicester; H. D. Male, East Chinnock, Yeovil. *Prosectors* (Prizes and Certificates)—M. F. Simon, Blackheath; J. Sutcliffe, Ashton-under-Lyne. *Certificates of Honour to Physicians' Clinical Clerks*—J. H. Cartwright, S. Osborn, A. M. Palmer, W. R. Pike, E. Sergeant, J. S. Slater, J. Sutcliffe, G. M. Whitehead, H. Williams. *Certificates of Honour to the Surgeons' Dressers*—A. Barrow, G. Berry, E. J. H. Booth, G. C. Franklin, E. C. Hardyman, H. K. Hitchcock, H. D. Male, H. Meadows, F. J. Parson, G. B. Robathan, H. W. Saunders, E. C. Seaton, W. B. Slaughter, L. M. Thomas, E. A. Waterworth. *Surgery and Surgical Anatomy*—L. M. Thomas, Camberwell, Cheselden Medal; M. F. Simon, Blackheath, Kent, Prize and Hon. Certificate. *General Proficiency and Good Conduct*—H. W. Saunders, London, Treasurer's Gold Medal.

GUY'S HOSPITAL.

THE Introductory Address was delivered by Dr. C. HILTON FAGGE, in the presence of the late President of the Hospital, the Right Hon. Sir Lawrence Peel; the President, Mr. J. Gurney Hoare; the Treasurer, Mr. Thomas Turner; the Medical and Surgical Staff, and a large concourse of Students.

After a few prefatory remarks, in the course of which the Lecturer gave to the students a hearty welcome in the name of the authorities of the Hospital, and the staff, he passed on to offer some remarks to the new men. They should be very slow and careful, he told them, in forming acquaintances; for on these might probably depend their whole future career. The first year's men at a medical school are, at first, a "fortuitous concourse of atoms"; but they quickly develop into an organised community, having each year a sort of "epidemic constitution" of its own. The student should bear in mind that his teachers are continually estimating his powers, just as he himself cannot help forming an opinion as to the character of every one with whom he is thrown in contact. Moreover, actual records are kept of the work done by each pupil in the dissecting room, the out-patient departments, and the wards. It is by these records that the Medical Council is guided in selecting among the candidates, and recommending to the Treasurer, those most fitted for the various clinical appointments. At Guy's, these appointments are very numerous; every part of the hospital practice being systematically served by dressers or clerks, all of whom are chosen by merit and without payment. The hospital staff itself has for years been recruited from the medical school; and a position on it is within the reach of every man who can show that he deserves it. Each of Napoleon's soldiers was said to carry a marshal's *bâton* in his knapsack, and something analogous might perhaps be stated, without falsity, of the students at Guy's.

Dr. Fagge then proceeded to make some observations as to the way in which medicine should be studied, insisting on the great importance of clinical observation, both for diagnosis and treatment. To recognise a disease which is discoverable by sight, or touch, or hearing, a man must previously have seen, or handled, or listened to, cases more or less similar. If he do not get through his period of probation within the walls of the hospital at which he is a student, his own patients afterwards will be the raw material for his studies; and he will meet with great difficulties, for all the senses require to be sharpened, until changes can be appreciated which before were imperceptible. Even in a large hospital, the opportunities for watching patients affected with any one disease are irregular and fragmentary, so that a considerable time necessarily elapses before the student acquires a grasp of, and mastery over, his cases.

With regard to the question, whether first year's men should attend in the wards, the Lecturer admitted that it is in part one of time and money. But he urged that time is found for cricket, and football, and boating, and he thought that each student ought to resolve to do some clinical work every day or every other day. Indeed, although the power of concentrating the mind on one subject is a very valuable one, its indulgence creates a dangerous habit. And, however early the observation of disease may be commenced, the student's experience can never be complete.

"Death hath ten thousand several doors
For men to make their exit."

One of the highest attractions of medicine is that its subject matter is inexhaustible.

The importance of dissecting, and of practical morbid anatomy, was next insisted on, and Dr. Fagge then proceeded to make some remarks concerning lectures, quoting Dr. Johnson to the effect that they are most valuable where experiments can be shown; as, for instance, in chemistry, and in "the making of shoes." His hearers were warned against relying unduly on books, and against the bookworm spirit; but still more against the habit of desultory reading, now so prevalent. It would be well for a man to resolve that he would never read anything without deliberately judging for himself as to the validity of the conclusions arrived at.

The Lecturer afterwards gave some advice to students on the question whether they should aim at the degrees of the University of London. If they were ambitious, and had time, he strongly recommended them to do so; but under the opposite conditions, he urged them to weigh long and carefully before deciding on a career which would delay their proper medical studies to an extent that might be disastrous. The proportion of undergraduates who fail to obtain even the degree of M.B. is large, and a man stands but a poor chance who is hampered by money difficulties or by multitudinous calls on his time. It must not be overlooked, however, that the University of London is now the only British source from which a Metropolitan student can get a medical degree, without residence elsewhere. It is surprising that the London medical schools should have made no effort to remedy a state of things which is very prejudicial to their interests, for the regulations of the London University are so far prohibitive that only about ten Doctors of Medicine take a degree there annually, from all the schools put together.

The next matter discussed was the proposal made by Mr. Simon and others that examinations should be the sole check on the admissions to practise the medical art. The lecturer was adverse to this suggestion. Fairly good examination papers may, he remarked, be written by men who have no real practical knowledge of the subject; and, in his opinion, clinical examinations are not capable of effecting so much as has been supposed. The examiners can seldom have that detailed knowledge of the cases which is essential, since the question to be determined is whether the candidate can observe systematically and with precision.

Dr. Fagge then made some remarks as to the position and prospects of therapeutics. His view was, on the whole, encouraging. For the first time in the history of medicine, drugs and methods of treatment, have, within the last few years, been submitted to that which is the only real test of their value. Formerly, a medical man used to ask himself: "Is my patient better than he was a week ago, before he began to take my physic?" Now the question runs: "Is he better than he would have been had he had no physic?" And, broadly speaking, the result of these inquiries is that the more active remedies are still believed to possess most of the powers formerly accredited to them. There are, indeed, a large number of fatal diseases, but, as was argued by Sir J. Forbes, this is inevitable, *since man must die*. Even in functional complaints treatment sometimes fails, but then Dr. Fagge recommended his hearers to conclude, not that the pain or other disorder is irremovable, but that one does not know how to remove it. For a certain number of cases the expectant or negative treatment is the right treatment, but the aim of medical science should be to limit these year by year. Worse still than "expectation" is either "indifferentism" or a feeling of doubt as to the efficacy of drugs; as though it were hardly worth while to make energetic use of them.

"Our doubts are traitors,
And make us lose the good we oft might win
By fearing to attempt."

In conclusion, the lecturer appealed to his audience to weigh well how responsible is their calling, and reminded them that only on this condition could they reap the real rewards of the physician—the loving gratitude of their patients, the admiration of their friends, and the approval of their own conscience.

After the termination of the address, the late President of the Hospital, Sir Lawrence Peel, presented the Treasurer's Gold Medals, and the various Prizes and Certificates, for the Session 1868-9; the successful candidates being introduced by the Senior Physician, Dr. G. Owen Rees, F.R.S. *Treasurer's Gold Medal for Clinical Medicine*.—George Abbott, Nottingham. *Treasurer's Gold Medal for Clinical Surgery*.—George Abbott, Nottingham. Prizes: *Third Year's Students*—W. F. R. Burgess, Bethnal Green, First Prize, £40; George Abbott, Nottingham, Second Prize, £35; Arthur W. Smith, Halifax, Richard Wood, Malden Road, London, and John Jolliffe, Shepherd's Bush, Honorary Certificates; *Second Year's Students*—George D. Deeping, Newark, First

Prize, £35; equal, H. B. Bailey, Wisbeach, and Arthur Cooper, York, Second Prize (divided), £15 each; William T. Law, Holt, Wilts, and A. K. Newman, Lee, Kent, Honorary Certificates; *First Year's Students*—C. H. Golding Bird, Brunswick Square, First Prize, £30; George Turner, Portsea, Second Prize, £25; B. H. Williams, Haverfordwest, Third Prize, £10:10; J. Clague, Isle of Man, T. W. Jackson, Leyland, Lancashire, and Walter E. Hacon, Hackney, Honorary Certificates. *Entrance Examination in Classics, Mathematics, etc.*, Oct., 1868.—George T. Bettany, Cornwall, First Prize, £25; Thomas Eastes, Folkestone, Second Prize, £20; Robert H. Hughes, Putney, Third Prize, £15; H. S. Branfoot, Cheshire, Honorary Certificate.

ST. GEORGE'S HOSPITAL.

THE Introductory Lecture was delivered by Dr. WADHAM.

After a few words of greeting to the visitors, the lecturer, addressing the students, said that his colleagues and himself were anxious to offer them a most friendly welcome. The students should look upon them not only as lecturers, but as teachers anxious to impart all of the sciences of medicine and surgery which they knew, and so much of its arts as was capable of transmission. Instruction is an indefinable tentative process, which cannot be carried out with mechanical precision by aid of fixed and universal rules indiscriminately applied to varying intellects and dispositions: it requires a study of individual aptitude, and a perpetual variation of means and methods. Time, and labour, and application, were required on the part of the lecturers; but all this they were willing to give, provided the students would show a desire for instruction.

The lecturer then described the nature and responsibilities of the profession, and the prospects which it offered to those who thoroughly qualified themselves for its practice. But, even if a good physician or skilful surgeon, they must not imagine that, with industry and rectitude, success was certain. The utmost that could be done was to deserve it; for, although it rarely happened that in the higher branches of the profession any man obtained the general confidence of the public, and certainly never that and the confidence of the profession, without deserving it, it often occurred that those the profession respected the public ignored, and that the secondary and more numerous prizes were awarded to assertion and assurance, and not to modesty and merit. Those lines were perhaps more applicable to the medical than any other profession:

"How rarely, friends, an honest man inherits
Honours and wealth, with all his toil and pains.
It sounds like language from the land of spirits:
If any man obtain that which he merits,
Or any merit that which he obtains."

The necessity of studying anatomy, natural philosophy, and chemistry, as stepping-stones to the comprehension of physiology and the science of the profession, was then explained to the younger students. They were warned, however, not to neglect the systematic lectures given upon anatomy, or any of those prescribed in the curriculum of study; for not only the principles of medicine and surgery, and many other subjects, were much more easily learnt from them than from any other source, but the essential parts of such extensive subjects as chemistry and physiology would be, to the generality of students, impossible of attainment without the guide which lectures afford. In this intensely scientific age, when in medicine, as in other subjects, faith is the exception and Pyrrhonism the rule, when writing is the only accepted test of merit, and publicity the recognised medium of success; when we have weekly, and monthly, and quarterly, to consider not only the fervid but often unripe lucubrations of the young and enthusiastic of the profession, but the contributions of those to whom the sarcasm of Otway upon the authors of his own day, "that every dunce who starved presumed to write", might not unfairly be applied; when the so-called fact of to-day becomes on the morrow an abandoned and exploded fallacy—it is necessary to know what not to learn and what to forget. Addressing next those students who, having passed their examination in anatomy and physiology, were about to commence the practical portion of their studies, the lecturer impressed upon them the imperative importance of constant and diligent attendance in the wards of the hospital and in the dead-house. However much might be learned from books or lectures of the science of medicine and surgery, of the speculations of physiology, of pathological facts, and of *post mortem* appearances, it was only by earnest and constant observation of the sick, and subsequent examination of the dead, that a knowledge of diseases could be acquired. Whatever they might read or hear respecting the influences of so-called therapeutic agents, it was only by the evidence of their senses that they should be guided as to their employment, and this in total disregard of the crusade at present waged against some of them, and of the inability to give a scientific explanation

tion of their probable mode of action. Science, represented by vital chemistry and vital physiology, has contributed but little towards the detection of the ultimate causes of disease, and added less to our knowledge of therapeutics; so that, as regards these latter, our knowledge continues almost entirely empirical. Medicine, so far as it is a science, continues in all its branches one entirely of observation. The means by which the recent great advances in it have been obtained consist of instruments which, like the microscope, ophthalmoscope, and laryngoscope, are aids to our eyesight; of the pleximeter and stethoscope, which enable us advantageously to employ our hearing; of the thermometer and sphygmograph, which fairly represent an increased delicacy of touch; and of chemical reagents. The advances of late made in medicine as a practical art, whether they have relation to the prevention of disease, to its prognosis, diagnosis, or treatment, are all the result of diligent observation, of the educated use of the senses, and of laws and rules which, by an inductive process of reasoning, had been discovered from the facts and effects observed. The lecturer then enumerated, under their different heads, some of these advances. Observation alone, chiefly forced upon the profession by the ridiculous assertions regarding the efficacy of homœopathic remedies, had led to the recognition that not only many specific diseases and many uncomplicated inflammatory affections run a definite course over which therapeutic agents had no control, but even in chronic affections, and notably in those affecting nerve-tissue, after a lapse of time, and in the absence of all remedies, though probably under the influence of hygienic means, an impulse towards a return to the natural function of the tissues occurred. The functions of the physician and surgeon were often best performed by simply watching and directing the action of the vital forces, supporting the system, and relieving symptoms by the employment of those means of which experience had taught the value. Our general knowledge of therapeutics had made but little progress. Disbelief regarding the benefit of medicine was a common feeling; and we were in danger of being argued into the abandonment of some, upon the questioned utility of which it would be a portion of the students' duty to form an independent opinion for themselves. It must be remembered that to accidental observation, more than to any chemical or physiological reasoning, we owed the possession of almost every therapeutic agent we employed. Peruvian bark, for instance, was known as a cure for ague, and given for the relief of many pathological conditions, long before any chemist had discovered in the tissues an opalescent substance, resembling quinine in many of its chemical reactions, and before the theory was proposed that the rapid removal of this substance from the tissues by the action of marsh miasma was the cause of agues, and its supply its cure. Before vaso-motor nerves were discovered, or any physiologist had suggested that its influence was partly due to its effect through these upon the arterial circulation, and before its power in inflammation of impairing the vital properties and hindering the generation of white corpuscles had been experimentally proved, bromide of potassium had an action equally impossible to deny as to explain. He then alluded to the germ theory of putrefaction, and to the depurative theory of amyloid degeneration, and the influences which, if true, they would have upon the employment of many local applications, and also to the opinions recently expressed regarding the uselessness of these; to the theoretical proposal made to destroy cancerous growths by means of an agent the effects of which had only been watched upon the cancerous cells when dead; to the expectant treatment of syphilis and its consequences; to the almost general dictum against bleeding; and to the conclusions drawn respecting the action of calomel, podophylline, and taraxacum, from experiments made upon dogs. He remarked that arguments against the reception of these might be found in the facts that many animals could consume with impunity things fatal to man; that dogs which could take 240 grains of taraxacum as a dose without its affecting them, and who required from one to three drachms of aloes to purge them, were essentially dogs, and not men, and that when submitted to experiment they were not in that pathological condition which even in men might be an essential condition for producing the specific effects of the drugs; and lastly, that those who opposed many of these opinions were men who, although willing to profit by the advantages of modern science and the discoveries which every day produced, declined to ignore that practical knowledge of their art which it had taken them years of study and observation to acquire.

In conclusion, the lecturer said that he did not wish to decry chemical or physiological speculations, or deny the assistance they had rendered medicine, but only to put them in their proper places as her servants, and not her masters. Medical art was not the application of an abstract, demonstrable science, in which certain results might be infallibly drawn from certain data, or in which the disturbing forces might be calculated with scientific exactness. The symptoms of disease could never be

treated as so many factors, to be put into a reasoning mill and ground out by aid of a mathematical calculus into their true and unvarying products, but must be considered in connection with the constitution of the individual, and the circumstances under which they arise.

He would warn the students against seductive theories, against choosing shadows, and against that deductive process of reasoning which established imaginary laws and causes, and twisted facts and effects to fit them—reasonings which encouraged some to give quinine, carbolic acid, sulphites, and other septic agents to destroy in fever a poison which, if it did exist, had already commenced its specific action; to see in the purging of cholera a curative effort, and in aiding this, its proper treatment, and which lately led an eminent physiologist to state that the presence of opalescent phosphatic urine after injuries of the spine was the result of certain organic germs introduced into the bladder by catheters, and to be cured by the use of other catheters smeared with carbolic acid. If he had seemed to question the ability of chemists and physiologists to interpret facts which must depend upon fixed and certain causes, and which it would be of infinite service to medicine to have explained, it was because he regarded man's body as something more than a crucible, vitality as something more than chemical action, the variations of oxidation and nutrition in each particle of the body in disease as its effect and not its cause, and therapeutics something more than agents which promoted or retarded oxidation, because even the physical philosopher's comparison of man to a steam-engine, consuming fuel and generating force, to be afterwards correlated to his various physical and intellectual actions, left unexplained the mystery of the engine's creation, development, and repair, whilst acting, because both vital chemistry and vital physiology were based upon the unproved assumption that the same laws which prevail, and the same forces which operate upon inorganic matter external to the body, prevail and operate in a precisely similar manner upon the living organism within it, taking no notice of that formative power inherent in living matter, or that power of selection with which living tissues are endowed; and, finally, because he doubted whether the veil of Isis would ever be so far raised that man should stand face to face with truth, and his finite mind fully comprehend these infinite mysteries of creation; and because he recognised a sphere above and beyond the reach of human science.

LONDON HOSPITAL.

DR. C. MEYMOTT TIDY, Lecturer on Chemistry, delivered the Introductory Address.

He said:—To-day, gentlemen, is a day for old and young to meet, though the one turn his back upon the other; for old to look back, for young to look forward. Age may look back, indeed, to-day—sad, serious, sober. How long it has laboured; how steep and uphill its path; how weak and nerveless its mightiest effort; how small its reward has been! Yet maybe it is not all so sad. Strong deep marks it may see left behind it—steps which its own hand has cut—a ladder for its sons. No formless, shapeless grooves, but a mould of beauty, passion, and of strength; and though its hand tremble now, and its eye be dimmed, yet a good conscience is its joy, and a faith in the future its possession. Nor is it a little joy for the old to turn back in love and sympathy for his sons, to tell his children of the rough, rugged paths which have been made plain; of the old hard fight which is victory now; of the struggle whose crown is triumph. Nor does he envy the son who begins where he left off; for the child of science is begotten at his father's grave.

It were a happy meeting here to-day if it did nought but cherish the love of a father and the worship of a son. We may be quite sure of this, that it is only as bowed down in reverence before the spirit that is past and dead, that we can become the children of a living progress in the future. . . . And do you not think it right and proper that we should now and then try to see the influence of past investigation on present discovery? That we are wiser than the ancients I admit; but only wiser because the knowledge they amassed served as a nucleus for our work. If we had to commence anew, we should not be one whit wiser or sharper than they were. In short, to sum all up in one word—scientific investigation is a history of development. You sadly mistake the truth if you suppose we owe all the great discoveries of modern times to one or two individuals. No! depend upon this, if you would know the truth, you must go back and hunt up each little discovery that was first, perhaps, unheeded, or only put upon record on the page of a dusty manuscript, but which yet served as the foundation of more extensive experiments, and more elaborate research. Take an instance of what I mean. There are some who are tempted to laugh at the absurd doings and experiments of the alchemists. They picture to themselves either a set of rogues or a set of fools. There may have been some of the one class as I am certain there were some of the other. But of this

I feel confident, that we could never stand here to-day and tell of the mighty achievements of modern chemistry—aye, and modern medicine, too—had it not been for the patient, indefatigable work of these ancient pioneers of science. You tell me of their follies. You see a man who deems no hours too long—no labour too severe—to hunt after some mysterious powder by the agency of which he supposes he may be enabled to transmute the baser metals into gold. You smile as you read page after page of what you deem unmitigated folly; but you surely forget how much you are indebted to these seemingly absurd experiments for our acquaintance with various metallurgical operations, and the nature of metallic deposits. You see a second labouring to obtain a universal solvent. You laugh at him. Yet you forget that after all diamonds and other gems have surrendered to the chemist their adamantine strength, and that you are indebted for the discovery of sulphuric, nitric, and hydrochloric acids to these very experiments you ridicule. You see a third trying to distil a vital elixir, by the action of which life may be prolonged indefinitely. You say this, at any rate, is the height of folly, of absurdity, of arrogance. But do not forget what a host of medicines were the discoveries of the alchemists (amongst others, I need only mention antimony and mercury, and their salts), medicines which, when administered by those accustomed to the nature of disease, and wrested, as they should be wrested, from the hands of miserable quacks and impudent charlatans, have after all soothed many of the ills that flesh is heir to, and, I am bold to assert, have prolonged in no slight degree the average term of human existence.

Now it will be well, I think, in tracing this principle out to its full extent, to select a few illustrations, as instances of how our present refinement is but the result of this great process of development. Take, first, as an example, the history of that great operation of lithotomy.

I would venture to draw your attention to an illustration of the same great law in connection with a branch of science to which I have given more especial attention. An illustration that will suggest to us the endless nature of development. There is no end to it, or rather, I should say, the world's end is its end. Fully conscious that much is beyond human ken, "to be known only when we know as we are known," at any rate the record of scientific progress spurs us on to labour in this our day so that, if possible, we may add a stone to that vast structure the foundation of which was laid by the ages gone by and the completion of which is left for the ages to come. Not to care for posterity is a principle as far removed from common honesty as it is from common justice. You profit by the labour of generations past, and generations to come will profit by yours. Arrange then, I pray you, your work for to-morrow, though you may never see to-morrow.

It was in the year 1675, that Sir Isaac Newton presented the Royal Society with his remarkable treatise on "Opticks". With strange humility, he commences by speaking of his own deficiencies—figuring himself in words that have since become classical as "A child picking up pebbles on the sea-shore," but oh! what a wonderful child it was picking up the pebbles, and what wonderful pebbles they were that the child picked up! Never let us forget that you and I are standing on the same beach now. It is a strange fact that, gather as you will the productions cast up with such lavish prodigality, the acquisition is not to be regarded as any diminution of the treasures that remain. Much as Newton discovered, he left plenty for others.

In this paper he described his experiment of passing a ray of sunlight through a triangular piece of glass, called a prism, when, instead of white light, he obtained a band of seven different colours blending in beautiful harmony from red to violet, produced, as he showed, by the unequal refrangibility of the several colours. Further, he proved that this splitting up could only be effected once—I mean, *e.g.*, the red remained red, and the yellow yellow, no matter through what number of prisms they were respectively passed; and, once again, he showed that these seven colours, blended together again, produced white light. Thus, analytically and synthetically, he proved the compound nature of white light, and though, in some details, modern physicists doubt the accuracy of Newton's reasoning and deductions, none question the rare power that suggested the experiments.

It was in the year 1802 that Wollaston noticed that, upon admitting a ray of sunlight through a vertical slit, parallel to the sides of the prism, the spectrum produced was not perfectly continuous, but crossed at right angles to its length by dark bands, which dark bands were not present in the spectrum from the electric light. And now note how Wollaston reasoned respecting the nature of these dark bands. Upon counting them, he noticed *seven*, the exact number of colours in the spectrum, and immediately he jumped to the conclusion (not an unnatural one by any means) that these seven dark bands divided the seven colours of the spectrum into seven parts. I do not think Wollaston made any further experiments, nor did they, from what I can gather, attract the smallest amount of attention from the scientific world.

In the year 1814, Fraunhofer, a celebrated chemist residing at Munich, rediscovered these lines; and from that time to this, on account of his elaborate researches, they have been called after Fraunhofer, although, so far as mere priority of discovery is concerned, the honour belongs to Wollaston. It is strange to note in the history of development how often two men seem stirred to work at or about the same time at the same thing. It is a mysterious, though a natural, law that no great discoverer is ever vastly ahead of his contemporaries. There are always a number of persons whom he barely anticipates, moving in the same direction towards a similar goal, but of whom he just contrives to get a fortunate start. It does not matter, however, whether the race be won by a head or a length, nor ought it to diminish one whit our tribute of respect to the winner. But at what conclusions did Fraunhofer arrive concerning these lines? He found that none of them did correspond with the boundaries of the coloured spaces, as Wollaston supposed; and instead of seven lines he made out no less than 576, of the relative position of which he drew a map. And he further noted this, that these lines always occurred in solar light, whether it was direct or indirect, but that, when he examined the fixed stars, he was immediately confronted with a new set of lines, and that whilst the light from Mars and Venus gave the same lines as sun-light, those from Sirius, Castor, and Procyon differed in many important particulars. This, I think, was about the extent of Fraunhofer's experiments. Nor does it seem that he reasoned to any great extent upon them. He was content to gather together an army of facts. But this much he added:—First, That star-light differs essentially in its qualities from sunlight; and, secondly, that the dark lines were produced somehow or another in the sun itself, a conclusion which I shall show you directly, is confirmed by all subsequent observations. How slowly truth grows—first the seed, then the ear, then the full corn in the ear. It is error that springs up apace and spreads itself with lavish hand, here, there, and everywhere.

In the year 1822, Sir David Brewster and Dr. Gladstone examined the spectra produced by flames coloured with various substances. They remarked that in these cases they could only obtain one or more coloured bands, whilst the remainder of the spectrum was wanting, showing how the light produced by gaseous and vaporous bodies is only brilliant in a few channels—husbanded and limited to a few lines. And they further suggested the possibility of deciding what a substance might be, by the character of the localised band.

Ten years after this (1832), they examined the spectrum from solar light, having allowed it to pass before it fell on the prism through the vapour of nitrous acid, when they noticed certain dark lines, which they at once concluded were due to absorption of certain parts of the light. The following year (1833), Miller of Cambridge, and the late Professor Daniell, ascertained that dark lines in different positions of the spectrum were obtained when sunlight had been allowed to pass through bromine, iodine, and euchlorine. Two years later (1835), Wheatstone, examining the spectra of the electric light from different metallic points, observed that different metals gave different lines of light, the spectra not being continuous; and he remarked that the appearances were so remarkably characteristic that by this means the metals might easily be distinguished. Various physicists, more or less distinguished, devoted considerable time to the elucidation of these remarkable spectra; but it was not until 1859 that Professor Kirchhoff gathered together into one the whole of the experiments, reasoned upon them with rare philosophic accuracy, and applied these hitherto unapplied facts to the examination of terrestrial matter. He showed how, by placing the smallest trace of an alkaline or alkalino-earthly metal in a hydrogen flame, and examining with a spectroscope the spectrum produced, he was enabled to detect quantities that had hitherto eluded the finest balance or the most perfect test. The one-millionth of a grain of copper is easily detected; the 1-160 millionth of a grain of lithia (by which means it may be detected in rocks, rivers, milk, blood, and muscle); and the 1-180 millionth of a grain of soda will at once yield characteristic bands that reveal their presence. By noticing the existence of lines they had never seen before, Bunsen and Kirchhoff discovered two new metals in the residuum of some waters from Durckheim, in Rhenish Bavaria; and Mr. Crookes, in 1862, upon examining the sulphur from some Spanish copper pyrites, discovered a magnificent green band, such as no known substance produced, which led to the discovery of the new metal thallium; and but a few months since, one whom I feel it no slight honour to call my good friend, Mr. Sorby of Sheffield, announced the discovery of another metal, to which he has given the name of jargonium, from his having found it in certain specimens of Ceylonese jargonite. But this is not all. I have referred to the power that gases possess of absorbing various parts of the spectrum. Now liquids have this power too; and, as in the case of gases, noting that certain liquids only absorb a certain part of the spectrum not absorbed by other liquids—in short, that each liquid absorbs its own part of the spectrum—we are

enabled to employ this curious action as a means of detecting mysterious chemical changes taking place in the human body. Take, for example, the case of blood, the optical properties of which have been examined in 1862 by Hoppe, in 1864 by Stokes, in 1865 by Sorby, in 1868 by Herapath.

Stokes, in 1864, shewed that both venous and arterial blood contained a substance that he called *Cruorine*, which was capable of existing in two states of oxidation, the colour being different with each. They are examined thus. An excessively weak solution of the blood is placed between the light and the slit of the spectroscope, when, in the case of scarlet cruorine, or, as I will call it, the cruorine of arterial blood, two sharply defined black absorption-bands are visible, whilst with the purple cruorine, or the cruorine of venous blood, produced by acting on scarlet cruorine with deoxidising agents, and not due, as can be clearly shown, to the presence of carbonic acid, there are no longer two absorption bands, but only one—taking up the whole of the yellow, and part of the green rays of the spectrum. Now, it has been found that cruorine, when it has been dried or exposed to the air, or acted upon by sulphurous or other acids, becomes changed into a brown substance called *brown hæmatine*, which, upon examining it with the spectroscope, produces two absorption-bands like scarlet cruorine, but differs from it in producing a third absorption-band in the red ray; and, further, by the action of some reducing agents, as the hydrated protoxide of iron, brown hæmatine is changed into red hæmatine, which produces two bands like scarlet cruorine, but which are easily distinguished from the cruorine bands by their position and degree of intensity. And, now, mark the importance of all these facts. By the spectroscope, the merest trace of dried blood, no matter of what age, is, without much difficulty, discoverable; and to have such unquestionable means of detecting blood, is, I need not say, a matter of extreme importance to those engaged in medico-legal investigations, enabling us, with no hesitating voice, to assist a jury to judge a righteous judgment, either to clear the innocent or to convict the guilty. A thousandth of a grain of dried blood is quite sufficient to produce all the results; and Mr. Sorby, who has devoted a life, as a labour of love, to these remarkable experiments, and to whom science owes a debt of the deepest gratitude, asserts he can obtain the absorption-bands with a single half-corpuscle of dried blood. What an astounding illustration this, of the development of discovery! The physician may be able to discover the presence of blood-corpuscles in saline fluids, in urine, in saliva, and the generality of mucous discharges, by the aid of the microscope; and, provided the fluid in which they are suspended be of equal specific gravity to that of blood-serum, their form and size may then be determined, and their probable source as well. But how useless the microscope often proves itself when the blood is dry, on account of the difficulty of restoring old corpuscles to their old form. And then the chemist is appealed to—to detect possible albumen, and destruction of colour by the agency of heat, or non-destruction of colour by the action of ammonia. And yet, delicate as these tests are, how often we fail from the small quantity which we have to examine! The spectroscope demands attention to one point; and that is, that the solution operated upon should be sufficiently dilute.

Let me, however, point out that, startling as are the results of discovery, there is one thing, as yet, which we cannot do with the spectroscope; and that is, to discriminate human blood from that of other mammals. It may be, gentlemen, this discovery is reserved for some of you who are with us to-day for the first time; or, it may be, these little wantings are to teach us that there is a distinct limitation to scientific research. So far, but no further, or else you overstep the boundary, and the creature would usurp the power and authority of the Creator. Finite can never thoroughly understand the work of the Infinite. There is a limit to all our positive knowledge. The greatest power is to see it—the greatest wisdom is to confess it.

I am desirous of taking you one step further, and to shew you how we are enabled to stretch our hands beyond our earth, and to gain certain information respecting the constitution of the sun and far-distant stellar worlds; how, in short, we can analyse the atmosphere of the sun as certainly as we can that of our own planet. The glory of these discoveries, in the first instance, belongs to Professor Kirchhoff. They have received considerable attention of late. Amongst others, De la Rue, Higgins, Norman Lockyer, and Father Secchi, especially deserve mention.

It may not be unprofitable, reviewing the history of science, and learning experience from the past, that we should ask ourselves: what have been the principal hindrances to development; and what have been the chief causes of its successes? Amongst many obstacles in the way of progress, I have only time to note two.

First: An undue respect for the opinions of great men—in vulgar parlance, a love one person has for pinning his faith to that of another. Do not misunderstand me. Men are not equally gifted. There is an

intellectual as well as a physical superiority. That, I grant; but the world is disposed to reverence and accept, without due caution, the opinion of a learned aristocrat. It seems to place such a man on a throne above all others, and to regard it as little less than heresy to question a word they utter.

There are many circumstances that have of late years tended very materially to assist the work of medical progress. A considerable impulse has been imparted to the progress of development by the recognition of the mutual relationship subsisting between the different sciences, whereby the phenomena and known laws of the one may be applied to the determination and elucidation of the general characteristics of the other. The causes of the manifestations peculiar to each branch of scientific investigation were for long limited to the special subject in which they were engendered; but, as future research was brought to bear upon them, they were found to be connected by laws common to all. And thus it has not unfrequently happened that the researches made on a more remote subject have thrown a light on one that has long resisted our attempts at explanation—so long as we studied it apart from other branches of investigation. Then, further, it is right and proper that we should acknowledge the deep debt of gratitude we owe the medical press; and I must especially mention the *Lancet*, as being the first of our medical papers that ventured, amid the strongest protestations, to print the lectures of great teachers—thus scattering far and wide new and more extensive views of the various branches of the profession. Indeed, I would say, one of the main aids to development is the facility of a ready and unrestricted communication of thoughts and interchange of ideas. But on these, as on various other points, I have no time to speak now.

I would merely note two principal means, by attention to which, so far as we are concerned, we may be enabled hereafter to take our part in this great work—the development of scientific research.

I. The first is, the necessity for accurately mastering the foundations of medical science. It is a bad crop that has no depth of earth. There was considerable wisdom in directing that your first winter session and the principal part of your second should be devoted to anatomy, chemistry, and physiology; for these are the building's foundations. Let the various theories of surgery and medicine shift as they please—alter as they will alter in altering times—if the foundation is thoroughly secure, then it is able to bear its tiresome burden. The facts of anatomy and chemistry, too, are facts in a great measure located in a region of certainty, and are out of the world of change. Surgeons may differ as to the treatment of aneurisms; but that will not change the normal position of arteries. Here, at any rate, is something like strength for you. Never think, then, time wasted that you spend in the dissecting-room, or listening in this theatre to the humorous, laconic, yet learned addresses of him whom we count a worthy successor of the most popular of anatomical teachers. And, further, medicine could never have reached the high position it now occupies, nor will it ascend one single step in the ladder of development, unless it takes advantage of chemical research. I am claiming a high position for chemistry; and I deeply regret that there are not the same inducements for the medical student to study chemical phenomena that there are for him to study anatomy.

II. And now, gentlemen, finding that discovery has been a grand system of development (as all great systems are, be they religious, political, or scientific), it is clear that it now becomes our turn to extend and develop this chain of medical progress. To work from that point where others have been called upon to leave it: this is the work set us to do; nay, more, it is the work we set ourselves to do. But do not forget it is a work, and a work, moreover, that calls for indefatigable industry, untiring perseverance, and consummate patience. The first dawn of a great discovery may be the work of chance. Its details never are. We ask but one thing of those who join us to-day, and that one thing is work. Not to make resolutions for work on possible contingencies (such resolutions are worthless), but to work under any circumstances. Act in the living present. And, further, we do not merely ask you to work now; but your profession claims as her right your devoted work for the remainder of your days. Not merely to "get up" what is already known—for in that case what value will your life have been when you are dead and gone?—but to find out something that is not known—to leave some marks that may sustain your individuality and hand down to posterity a little more than you received, a contribution the result of your own work; to try and forge a few links in the grand chain of progress? Do you suppose for one moment that discovery is limited to a small handful that the world pleases to call "men of genius." I am afraid you will suspect of more enthusiasm than becomes the sober office of a teacher. I do not say that the best directed labour can ever supply what nature has refused; still it remains an experiment uniformly sanctioned by time, that with-

out unwearied toil, obstinate perseverance, and submissive resignation, neither the theory nor the practice of any art or science can be fully acquired; and that, without them, genius is a bubble and talent a trifle. Or do you think I am setting before you a somewhat too exalted view of our profession? I hope none will say it is a too exalted view. You cannot aim too high; it is easy enough to aim too low. Believe me, an object of lofty pursuit, even if it be one of quite impossible attainment, is not altogether unworthy the ambition of the truly scientific man; or, at any rate, it is better to aim at what is out of your reach, than be always supposing everything is out of your reach. Though you may not be able to scale the summit of the volcanic cone, you may yet reach its heaving flanks; and, though you cannot decompose its loftiest fires, you may yet study the lava they have melted and the products they have sublimed. Because you fail in doing all you wish, it is poor philosophy that says, do nothing at all. I would not have you for one moment think I am undervaluing the practical work of our profession, the cure of disease, the greatest of all human work. To make the lame to walk, the blind to see, the deaf to hear, and the dumb to speak: that is a noble work, indeed. It is divine! Godlike! To sit in the dead of the night at the bedside of one who seems to be yielding up her life in a last long breath at the very moment when she is giving a life, a breath, to another—to sit there, I say, and guard and fan that flickering life of a precious mother until it again burns brightly:—it is a noble work!

Then, further, I would note, true happiness does not merely consist in taking in a stock of knowledge, but of perpetually giving it out as you take it in. We should all be not merely learners, but teachers. You cannot fulfil the great purposes of your being, unless you are perpetually showering out from yourself whatever you possess. That is the true law of your existence, and all Nature is the sermon on the text. Just look at the clouds soaring in their beauty in the field of Heaven, bearing proudly in their pregnant bosom the full blessings of the rain, floating in such matchless grace, pleasing the eye with their many tints and varied charms. Is that, think you, the end of their creation? No, even they have a work to do. They are there to water the earth, to make it very plenteous, to cause its seeds to bring forth, to open rills and streams for man, and to preserve life. And, unless development is to cease (which God forbid), your hands will have to do the work. Trading, as you will, for a time on others' discoveries, do you not regard it as a work of common honesty so to arrange matters that others some day may trade on yours. To set before you science, as a history of development, has been my aim to-day. I have endeavoured to show you how a rapid succession of great discoveries has kept up the interest of the first impulse vigorous and undiminished. No funeral rites have ever been got ready for research, discovery, or development. And surely their grave need not be dug now. That is the lesson of the past. What an intense, what an ever present, sap and vitality we trace in this record of development. No ugly gaps have been permitted; no idle intervals to interfere between the most gigantic and dissimilar forms of inquiring energy. So glorious a past can promise nothing but a future as illustrious. The same powers, the same influences, that have created men like Harvey, Hunter, and Jenner, are still at work, at work to-day, and will enable us to produce others whose works shall be as splendid and their names as durable, as sublime.

And just gather up into a few words, the work, gentlemen, you are entering upon to-day. To store your mind with whatever is already known for diagnosing the various forms of disease with which you may be brought into contact; to make yourselves conversant with all the changes those diseases may undergo; to be ready, without loss of time, to apply the best remedies modern science has suggested for the cure or relief of the disease, and to propose such hygienic measures as may possibly prevent a repetition of the sickness. But, above all, to aim at being yourselves discoverers. Each for himself aiding this great work of medical progress. Each one ready when the call shall come, and come it will, to pay back again to the Just and Almighty Ruler the talent or the talents *lent* him, but only *lent* him; and ready—mark this—to pay them back with usury. This is your work; go and do it.

BEQUEST.—The Treasurer of the Huddersfield Infirmary has received £500 under the will of Miss Agnes Hopkinson, of Broalee.

INTEMPERANCE AND SUFFOCATION.—On Saturday last the borough coroner for Liverpool held an inquest on the body of a man who, on Friday last, was found suffocated in a yard in Lawrence Street, with a large piece of meat sticking in his throat. During the day he had been drinking very much, and it was believed that he attempted to swallow the meat whilst in a state of intoxication. The jury returned a verdict of Accidental Death by Suffocation.

COMPARATIVE PATHOLOGY.

GENERAL REMARKS UPON ITS IMPORTANCE: WITH REFERENCE MORE ESPECIALLY TO DISORDERS OF THE NERVOUS SYSTEM IN ANIMALS.

It will be readily granted that pathology should not be limited to the study and classification of the abnormal changes which occur in the human body. It is plain enough, by the nature of the case, that our work must be chiefly in this direction. But it needs no argumentation to shew that the doings of disease in any one department of the animal kingdom must have important bearings on the diseases of Man. And, paradoxical as it seems at first glance, diseases of brutes have important bearings on those of man, from the very fact that the manifestations are unlike. A pathological process in a highly developed animal may have its apparent obscurity lessened, if we study it as it occurs in an animal of comparatively simple organisation.

It is remarkable how little work has been done by medical men in the direction we indicate. The section devoted to the diseases of the lower animals in the *Transactions of the Pathological Society of London*, occupies a very small part of the volume. We think it fair, however, to acknowledge the zeal with which one member of that Society, Dr. Crisp, has for years worked at general pathology. We require more work on the subject. Aitken says, "The diseases of the lower animals are not sufficiently studied by us. The diseases of plants are almost entirely neglected. Yet it is clear that, until all these have been studied, and some steps taken to generalise them, every conclusion in pathology, regarding the nature of the propagation and dissemination of specific, miasmatic, and even of parasitic, dietic, and enthetic diseases, must be the result of a limited experience from a limited field of knowledge."

To the end that our work be widened without being rendered vague, it is most desirable that the well educated veterinarians should be recognised by us as a fellow-worker in one part of the very same field in which we ourselves are working. The time has surely gone by when his sole mission is to be considered that of a treater of the diseases of dogs, cats, and horses. Whilst his practice will be confined in such limits, he should be one of us in his character of a scientific investigator of the pathological changes to which animals of all classes are liable. With his help we shall obtain a broader basis for the induction of pathological laws; and he will gain also, for his profession, a nearer interest in things which concern humanity at large.

Let us take a specific illustration. Although we may have the very faintest interest in the personal welfare of dogs, the subjects of chorea, from the dog's point of view, if we may so speak, we and the veterinarian have a common interest in the settlement of the disputed questions on the locality and nature of the pathological change of which choreal movements are symptomatic. Most of our readers will agree with "Stonehenge," that "Chorea, or St. Vitus's Dance, is a disease of the nervous system with the exact nature of which we are not acquainted." Here, then, are difficulties which embarrass both the veterinarian and the medical man; and here is a task which we both have to undertake. Now veterinarians tell us that chorea in dogs frequently follows the distemper; and many physicians believe that chorea in the child is a result, direct or indirect, of rheumatism. It would, then, be most desirable to institute a parallel study of these two diseases, in order to learn whether or not, in spite of their obvious differences, they have not some points in common. But we have a suspicion—it is only a suspicion—that the distemper is not one disease, but that several diseases are included under that name. Our doubts receive their justification from the fact that eminent veterinarians differ very much in their opinions as to the nature of the great malady of dogs. This remark is not intended as a reflection on those whom we wish to call fellow-workers. Their difficulties are obviously greater than ours. Besides, saying nothing of the retort which they might make by the well-known proverb, "Doctors differ"—we need not complete the proverb—they may instance that not very long ago medical men confused measles with scarlet fever. Nevertheless, without at all begging the question, we may fairly ask that the pathological appearances in the distemper be compared and contrasted with those which autopsies on children dying of measles, scarlet fever,

or small-pox, etc., shew. Is there bronchitis? does the throat suffer? is there nephritis? is there ulceration of Peyer's patches? and, above all, can we, from an observation of numerous cases, classify the appearances so as to point to particular exanthems? To quote Aitken again, "It is not yet clearly established how far the bodies of animals may not be a soil for the propagation of diseases communicable to man." We should not expect, if an exanthem do occur in a dog, that the appearance will be quite like those found in a man, who dies of that exanthem. We know that small-pox in the cow differs from (in the midst of its essential agreement with) small-pox in man. And it may be that scarlet fever or measles manifests itself differently in the dog and in man.

Again, we should like to know if the fits which are so fatal in distemper are symptoms of uræmia? Is the urine albuminous? And, for the benefit of those who suppose chorea to depend usually on embolism, we may ask, "Does distemper, which often leads to chorea, sometimes damage the heart's valves?" Nay, is there not here an opportunity of settling some questions at this very time in dispute? We scarcely dare write what is in our minds. For an eminent veterinarian hints that he who would kill a diseased dog—as the received euphemism is "put it out of its misery"—is in a condition not very far removed from that of one who would kill a child. But when we put it that there is in the dog the opportunity of searching for the pathological changes of chorea at any stage of the disease, without waiting for its natural termination, it is not that we love dogs less than others do, but that we love our own kind more than we love dogs.

As already implied, we do not suppose that the affection which in the dog goes by the name of chorea is quite like that which in man is called chorea. We have, as in all other things, to note differences, as well as to trace resemblances. It is not, *à priori*, likely that the movements in the dog's chorea and the movements in the child's chorea should be identical. The very obvious differences in the conformation and uses of the limbs in the two imply, of necessity, differences in the nervous systems of the two; and it is unquestionable, that these differences will assert themselves in disease.

The last few remarks insensibly lead us to speak of comparative physiology as it is illustrated by diseases of animals. We have one more illustration to give. When in man the corpus striatum (and perhaps part of the adjoining cerebral hemisphere as well) is injured, there results a well-known form of paralysis—hemiplegia; and occasionally, in severe cases, soon after the attack, there is turning of *both* eyes, and of the head, from the side paralysed. Now, in dogs there is a disease or symptom called "turnside;" and in sheep a similar one, called "gidd". These symptoms are usually the result of lesion of one side of the brain. "Stonehenge" says of the dog afflicted with "turnside", "The moment he attempts to walk, he begins to turn round."

An interesting case of turnside is quoted by Youatt from M. Leblanc; there was disease of the surface of one cerebral hemisphere. Cows are subject to a similar, or rather to an identical symptom; in the cow, as in the sheep, the cause is usually hydatid. But Youatt relates a case in a cow of rotation, the result of injury to the brain inflicted by another cow. The autopsy shewed that the horn of the attacking animal had penetrated "deep into the brain, and almost to the base of it." The great interest of this case is, that it is a link betwixt the "experiments of disease" and the experiments of physiologists.

It is well known to the physiologist, that rotation (*mouvement de manège*) follows experimental injury to various parts of the encephalon in lower animals. The symptom presents differences according to the particular part injured. It comes to be an interesting question, whether the *complete* form of hemiplegia in man is not, as Vulpian and M. Prevost of Geneva suggest, the analogue of rotation. Possibly a nearer comparison would be betwixt unilateral spasm and rotation. It is plain that the hemiplegia (or hemispasm) in man is not quite like the rotation of animals. A man does not turn round when he has lesion of one side of the brain, as an animal sometimes does; but, if we accept the above-mentioned hypothesis, a man is now and then rendered the subject of *rudimentary* rotation by disease. In man, each side of the brain will have comparative independence of the other side, as the comparative independence of the limbs of the two sides of the body implies. It is difficult, M. Vulpian says, to produce distinct hemiplegia in the lower animals. This accords with the observations of veterinarians. Youatt never saw palsy limited to one side in the ox, and states that "few cases of hemiplegia occur in the horse." He adds, "It would appear singular that this should be the most common form of palsy in the human being, and so rarely seen in the quadruped." But, leaving explanations, we may indicate that it is desirable to observe the different effects produced by disease of one side of the brain in different animals—turnside, gidd—and to compare them with the rotations produced by experimental lesion and with hemiplegia and hemispasm in man.

By such observations, we shall doubtless learn much as to the relations which the two halves of the brain have to one another in the different members of the animal kingdom.

It will doubtless have struck our readers as strange, that dogs are very subject to chorea, but that of this disease, to use the words of Youatt, "we know nothing in cattle." Both dogs and cattle are subject to rheumatism. It may possibly be, that there is no constitutional disease in the ox analogous to distemper, of which chorea in dogs is usually either a complication or a sequela. Mr. Blaine calls distemper catarrh; and he has suggested that the complications—palsy, fits, and chorea—are the results of metastasis. Translating the word metastasis into the meaning of transference of morbid matter from the structures of the nasal cavities to the veins of the cerebrum, this hypothesis, from so distinguished a veterinarian, deserves respectful consideration; but it occurs to us that another explanation may be held. In the two animals—the dog and the ox—the arterial system of the head presents important differences; and it may be, that those who hold the hypothesis that arterial embolism is the cause of chorea, will urge that the extensive *rete mirabile* of oxen will stop the emboli. There are other obvious differences besides those implied by the different domestication of the two animals; but the points we have indicated are especially worth working out. We may add what Youatt says of chorea in horses. "A few, and very few, cases of it in the horse are recorded." There is no *rete mirabile* in the horse. He says, however, that *stringhalt*, "an affection resembling it," is sometimes met with in this quadruped.

Again, tetanus is rare in dogs. Mr. Youatt only saw four cases in forty years. Mr. Blaine, it would seem, never "met with tetanus, except in three instances, among many thousands of dogs diseased." Mr. W. C. R. Martin, from whose article on "the Sheep" we quote the above, writes: "We have never seen a case of tetanus either in the dog, the cat, or any of the canine or feline animals in our menagerie; indeed, we may apply our observation to the *carnivora* generally." Mr. Martin—he was one of the scientific officers of the Zoological Society of London—adds, "Nor has the scope of our observations been limited." We are not clear on the point; but our impression is, from reading, that tetanus is comparatively frequent in the sheep, ox, and horse. Youatt writes, "Tetanus is one of the most dreadful and fearful diseases to which the horse is subject." But he says nothing about the relative frequency, in comparison with its frequency in other quadrupeds. Even if it be more frequent in the horse than in other herbivora, this may be plausibly accounted for by the practice of shoeing horses; for Youatt says of tetanus in cattle, "*Working cattle* are most subject to tetanus, because they may be pricked in shoeing." (The italics are ours.) Are we not at least bound to inquire if different *classes* of animals are not liable to different forms of disease?

THE ELEVENTH REPORT OF THE MEDICAL OFFICER OF THE PRIVY COUNCIL.

I.

THE Eleventh Report of the Medical Department of the Privy Council Office has just been published by the Government printers, and may now be obtained at a very moderate cost.

In the present number there is not so much as usual that will interest the general public; the contents are principally devoted to the discussion of matters which belong to the medical practitioner and the jurist.

As regards the medical portion to which we refer, the volume treats of matters which may be held to fall under the description of advanced Chemical Researches, being a continuation, by Dr. Thudichum, of work done by him in former years, and the report of the results of experiments which he has made during 1868. Undoubtedly this report is very deep; in fact, it is so deep that to none but a very advanced chemist would it be thoroughly intelligible.

Next we have a further report from Dr. Burdon Sanderson on the inoculability of tubercle. This comes more within the general scope of a medical practitioner's reading, and is, therefore, of more general interest than Dr. Thudichum's elaborate treatise. Dr. Sanderson's work, during the past year, has been, as he says, to amplify and elaborate the pathological results comprehended in his former report; to confirm what was left imperfectly established; to elucidate what was obscure; and to endeavour to bring the inquiry into more direct bearing on the most important of all etiological questions—that of the origin and development of tuberculosis in man.

In addition to the above main medical features of the book, there is a large portion of the work devoted to the discussion of the question whether the so-called Contagious Diseases Act should or should not be

extended to the civil population. But in the present notice we intend to confine our further consideration to those parts of the report which relate to the progress made in the inspection of vaccination, and (to use the words of the report) those parts which relate to general sanitary administration, and to the additions to sanitary law.

The state of Public Vaccination is only to be gathered from the reports of the inspectors of the Privy Council, and is illustrated by the amount of money which was distributed in the shape of awards under the fifth section of the Vaccination Act. It appears that during the year £2,753 2s. was distributed amongst 345 public vaccinators, and that of this number 129 received first-class gratuities. But when we take into consideration the fact that the work of 1,749 public vaccinators was examined, we are led to suppose that the work of 1,400 of them was not good enough to ensure for them a gratuity from the Parliamentary grant. We cannot but deprecate this apparent want of diligence on the part of the public vaccinators, more especially in the present day when the enemies of vaccination are striving all in their power to upset one of the most beneficent pieces of work ever performed by a government, and to prevent, by unfounded assertions, and by wilful misrepresentations of the consequences of vaccination, the ignorant portion of the people from availing themselves of the benefits which are offered to them without cost. We hope that, when the next yearly report of the Privy Council appears, we shall find that considerably more than one-fifth of the vaccinators who shall have had their vaccinations inspected will have received gratuities from the Government.

The question of vaccination direct from the cow (as it has been called) has, both in medical and in lay papers, been pretty freely discussed at no remote date; and the health department of the State seems also to have taken some notice of the matter, for there is in the report a paragraph on the subject in the following words.

"With reference to this branch of the service, my Lords had their attention drawn to a system which is in vogue in some parts of the continent, for maintaining continuous sources of lymph-supply for the human subject by keeping a succession of calves inoculated with the specific contagion; and their Lordships had a report prepared for them by Dr. Ballard on the arrangements which are in use abroad for this so-called 'animal vaccination.' Further information, however, is requisite before any final opinion can be formed on the question of making more or less use of the system for purposes of our National Vaccine Establishment; and therefore on the present occasion the subject cannot be written of in detail."

The general Sanitary Administration seems to have consisted, according to the report, in inquiries into local outbreaks of disease in Walton-le-Dale, Thetford, Bootle, Clifton Hampden, Barnet, Luton, and Dunstable; but the report does not give sufficient particulars to enable us to estimate the amount of advantage accruing from this expenditure of the public money. There is, however, in the book (in the appendix) a report by Dr. Ballard of Islington, giving a very interesting statistical account of the sickness treated at the public expense in that parish; and one great feature in this matter is that it has been communicated to the Government by the compiler without his receiving any fee, though it is impossible to look at the paper without directly recognising the fact that such information could only have been gathered at a great cost of time and trouble, and, we should also think, at some expense. This matter is, however, worthy of more than the hurried notice which we can only give it on this occasion.

Mr. Simon states that an important addition was made to the sanitary laws of the country during the year 1868 by the passing of the Pharmacy Act. He states that the statute is chiefly directed against the evils attaching to the practice of pharmacy by unqualified persons. But though this was so, yet some of its provisions appear to have been such as to require amendment, as was done by a short Act passed in the session of Parliament just closed. It, however, will no doubt prove of great benefit; for, as Mr. Simon says, it enacts in effect "that the keeping and sale of poisons generally should be subject to regulation under the Act." And Mr. Simon further says: "It also affirms an important principle in regard to the adulteration of drugs, by enacting that the provisions of the Adulteration of Food Act of 1860 shall be extended, *mutatis mutandis*, to the sale of drugs." This, undoubtedly, if rigidly enforced (though how it is to be effectually carried out during the want of such an officer as a public prosecutor, we cannot clearly see), will be of great public benefit.

DEATH FROM BEESTINGS.—An old gentleman named Taylor, while picking up some fallen apples in his garden at Monkthopton, near Bridgnorth, happened a few days ago to stumble against a stand on which two beehives were placed, and overset them. The enraged insects immediately swarmed around him, and stung him about the head so severely that he died the next day in great agony.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 2ND, 1869.

A SKULL AND A BOOK.

THERE is in the Museum of the Bristol Royal Infirmary a book which, in a feebler key, might almost claim comparison with the old yellow volume which Mr. Browning's genius has made so famous. The incidents which it relates are all in a more vulgar walk of life; but our great poet is one of the last who would have allowed that circumstance to interfere with his perception of the intensely human interest which this book possesses.

The book in question is made up of a collection of documents concerning the death of a village girl, and the subsequent execution of a young man for her murder. The story in itself contains nothing very startling, and it becomes of extraordinary interest chiefly because the zeal of the collector has furnished the means of realising the facts with a most unusual degree of clearness. The originals are all here, and in due order; and we seem, in looking over these strange papers, to gain a personal familiarity with those concerned almost equalling that which we feel towards Pompilia and Caponsacchi.

The book is bound in leather made of human skin, and is gilt-lettered

Cutis Vera
Johannis Horwood.

The pun thus perpetrated is almost horrible in its quaintness, but it is entirely in keeping with the rest of the work. On the first page is the bill of the binder, who, it seems, had no scruple in accepting thirty shillings in hard cash for his repulsive share in the completion of this unique work. Then follow portraits of the "murderer" as he appeared at his trial, and afterwards when on the dead-house table. There is a plan, in colour, of the village lanes and fields where the tragedy was enacted, with little coloured figures representing the victim and her friends, and her assailant with his. There is the account of the trial; the surgeon's notes; the judge's sentence; a portrait and biography of the judge; the warrant for execution; the poor parents' appeal; the convicted lad's address to his companions; the details as to his last moments; the funeral sermons; the phrenologist's report on his cranial development; with disquisitions on the case by the local philanthropists of the day. Lastly, so great was the interest excited, not only in the crime, but in its mode of punishment, that printed lists of all who had preceded the murderer to the Bristol gallows during the last thirty years were prepared, and original copies of them are here preserved.

There are also in the museum other documents than those on paper. The skull of the woman, with a trephine-hole in it, hangs close by, and still shows traces of the inflammation which caused her death. There is also the skeleton of the man, and over his temporal bone is marked "organ of murder". We are sorry to add, that there are the night-cap and the rope.

It is almost needless to state that the pair were in some sense lovers. They lived near to each other; and the lad, deeply annoyed at repeated refusals to meet his wishes, had often threatened the girl what he would do if she gave him cause for jealousy. One afternoon in January 1821, the girl was out walking with two men, and was crossing a little brook in a hollow, when a stone thrown by an unseen hand from a height above struck her violently on the forehead. Her would-be lover and two other young men were at the time standing on the hill-side. The distance between the two parties was nearly forty yards; but the evi-

dence is fairly conclusive that his was really the hand which threw the stone. Those present at the time, when they found that the girl had been knocked down by the stone, and her head cut, declared that it was a shame to do such things; but no one seems to have thought of accusing the assailant of an attempt at murder. The girl, by name Eliza Balsam, walked to the Bristol Infirmary and back repeatedly during the next few days, to have her head dressed; and the man remained at his home, and at his daily work. One morning, Mr. Richard Smith, the senior surgeon to the Infirmary, saw the girl with a bandage on her head in the waiting-hall; and, having inquired what was the matter, advised her to come in, or, indeed, insisted that she should do so. He well knew, he states, how dangerous slight injuries to the head sometimes proved. The girl consented most reluctantly. It was on January 31st that she was admitted. For a few days she did well; but on February 10th she was feverish and restless, had headache, and the wound was inflamed. Mr. Smith now called a consultation with his five "brethren" in office, and the same day the seat of injury was trephined. A small quantity of matter was found between the dura mater and bone, and some relief was at first afforded; but a relapse occurred, and seven days later the girl died of arachnitis and cerebral abscess.

When Mr. Smith found that his patient was going to do badly, he at once communicated with the authorities; and, when she became worse, he made a second application. The arrest of the stone-thrower was decided upon. Two stalwart constables, whose names are given, were told off for this duty; and Mr. Smith was enjoined to secrecy—an injunction which he clearly thought almost an insult, as he knew what was necessary in that way quite as well as the justices. "The next morning," he writes, "they brought me word that the capture was effected."

A day or two after his arrest, Horwood was taken into the hospital ward, and confronted with the injured girl. She turned her face from him, and refused to look at "the villain who had murdered her". He repudiated her statement, and appears to have exhibited but little either of fear for his own fate, or of sympathy with hers. By way of a salutary lesson to him, he was then taken to the surgeons' consulting-room, and shown the skeletons of two murderers which were kept there.

After a considerable interval (April 14th), the trial came on. The surgeon went into the witness-box with the girl's calvaria in his pocket; but, on second and better thoughts, he abstained from showing it, believing that it might possibly excite prejudice against the prisoner. Its exhibition was not, however, necessary. No doubt could be entertained that the stone had been, directly or indirectly, the cause of the deceased's death; and the probability was very great that the prisoner had thrown it. The girl had shown great fear of him; had stated that he had frequently solicited her virtue, and threatened her with violence. Her mother deposed that she believed that he had once thrown vitriol on her daughter's dress. He had a bad character; and thus, in spite of a technical objection raised by his lawyer, a conviction followed.

The evidence, as recorded in the newspaper report, is curiously meagre. It is impossible to ascertain even the dates of the several occurrences, for the witnesses do not by any means agree. The girl's own statement had been that the prisoner met her in a lane, took up a large stone, and struck her; whereas the evidence of others gives a most different account of the event. The counsel for the defence does not appear to have drawn any attention to these discrepancies; nor does it seem that he thought it worth while to suggest that possibly the girl died of the surgeon quite as much as of the injury. No modern barrister would have missed the chance in this direction which was open to him. We have no proof that any serious efforts were made to procure a mitigation of the sentence of death, although amongst the populace there was, as Mr. Smith states, a somewhat strong feeling in favour of the convict, under the impression that he had not been an intentional murderer.

Before the day of execution, this rough sensual fellow underwent a radical change of character. He addressed an exhortation to his fellow-prisoners in the chapel, and left a dying request that certain sermons on his fate should be preached in his native village. He confessed to

having thrown the stone, but averred that he intended only "to punish", and not to kill. On the evening before his last day, he expressed his conviction that "he should meet the dear girl in heaven within a few hours". These circumstances no doubt increased in all the feeling of sympathy for him. He appears to have been treated with the utmost kindness and consideration; but these sentiments, although perhaps obtaining him a few privileges, did not lead, on the part of those chiefly concerned, to any doubt as to the propriety of hanging him. On the drop, with everything arranged, and his own last signal only wanting, he was allowed to stand an awful twenty minutes, whilst "engaged apparently in prayer".

The sentence was not complete when the execution was over. Part of it was, that the body should be "anatomised." Against this part his poor parents appealed; and the original letter is preserved in which their solicitor begs the favour of its remission, in order to the tranquilising of their feelings. This appeal was addressed to Mr. Smith, who had a claim to the body; and was by him submitted to his "brethren" for consideration, and, as might have been expected, was refused. An opportunity for dissection in those days was not to be lost. The body was "anatomised", and Mr. Smith gave several interesting lectures on it to the gentlemen of Bristol; after which the skeleton was prepared and articulated, and the skin tanned.

Mr. Smith has added to the collection of documents some manuscript notes of his share in the case. In addition to the facts we have already quoted, he records with a sort of triumph the manœuvres which were requisite for getting the body safely removed from the prison to the hospital. This mission he was obliged to undertake himself; for he had, unfortunately, given the governor of the jail a receipt for the body before it was removed, and thus "taken the thorn out his foot, and put it into my own." With the body in a hackney-coach, he drove up to the Infirmary door, summoned two of the porters, and hurried it in. A soldier and a woman passing by looked at the strange burden, and seemed much astonished; but, fortunately, no one took further notice. Mr. Smith was here evidently animated by the true spirit which enriches museums; he enjoyed every act in the task which he would have us believe that he disliked. Indeed, we should gather from his almost gleeful account of it, that the whole affair was to him a source of excitement by no means unpleasant. No doubt he was a kind-hearted, humane man; but he also enjoyed work thoroughly; and, if we may venture a guess, it would have keenly disappointed him to have missed any stage in the case, from the admission of the girl into hospital to the final completion of this unique book. We cannot help admiring his character, in spite of a thought that he might have tried a little to get the poor fellow off by a suggestion that the injury was very trivial, and the death an unexpected consequence. He is particular to state that he had no share in showing the skeletons to the prisoner; and his resistance of the temptation to exhibit the skull in court is worthy of all praise. He reminds us a little of Browning's advocate for the defence of Count Guido, who was beside himself with delight at a murder case which offered him the chance of distinction and of profit. Mr. Smith's zest in the matter, however, sprang not in the least from hope of money reward, but quite naturally from his instinctive interest in human nature and all transactions which concerned it. This interest very naturally rose yet higher when the transactions were public in their sphere, and tragic in their quality. He was a man of vigorous life, who no doubt threw himself heart and soul into everything he undertook. The study of his character is not the least attractive feature in the book; which is, in fact, a chapter in autobiography of a most valuable and unusual kind.

The case seems, as we have already hinted, to have attracted the greatest possible interest in the Bristol public. The book contains reports of several sermons, copies of verses, etc., and, amongst other curiosities, a letter from Mrs. Schemmelpenning. There are also specimens of the placards which were posted about the streets on the execution-day, warning the crowds to avoid the bridges and the river-side. It seems, from some allusions, that the poor wretch, before his trial, had been encouraged to hope that he should get off, by having heard,

or thought he heard, one night, some of his quondam friends, who had witnessed the transaction, assure him from certain tree-tops which overlooked his cell, that they would not say anything to hurt him.

Several important medico-legal questions suggest themselves in connexion with this remarkable case. In the first place, it might be argued by some, that hospitalism caused her ill symptoms; and that, if Mr. Smith had allowed the girl, as she wished, to continue an out-patient, her wound might have done better. Mr. Smith would have been very indignant at such a suggestion; but in our day we are used to it. Secondly, and much more importantly, we have to ask, Did the girl really die of the injury, or of the surgeon's interference? The opponents of trephining will probably favour the latter hypothesis. The surgical notes are very meagre; but it seems clear that, at the time when the girl was trephined, and for some days afterwards, she had no paralysis, and enjoyed full consciousness. Her evidence was taken afterwards. On most careful inspection of the skull at the seat of injury, one can just find a small crescentic fissure in the outer table. To say that there is depression would be to exaggerate; and in the inner table there is no trace of injury. Yet, in all probability, the operation was quite indicated, and was decided on with no less judgment than courage. It is not every surgeon in the present day who dare use the trephine in an important case at so early a period. It is not every surgeon who would recognise in headache, feverishness, and ill condition of external wound, a warrant for using the trephine. Many would wait for other more pronounced and utterly hopeless symptoms. The under surface of the skull shows a margined patch of bone, which had clearly been inflamed, and in contact with pus. The margin is detected with difficulty; but it is there. In our opinion, trephining gave her a chance, and the only chance she had.

The notes of the *post mortem* examination do not inform us definitely whether there was an abscess in the substance of the hemisphere, or only pus in the arachnoid cavity; but we suppose, from some expressions, that the cause of death was cerebral abscess. The dates seem to be these. The stone was thrown on January 26th. Eliza Balsam was admitted into hospital on January 31st, trephined on February 10th, and died February 17th. At the time of admission, there was a wound above the right temple large enough to admit the tip of a finger; and the outer table was indented. The girl is stated to have been "much relieved by the escape of a quantity of matter on removal of the bone".

A point which impresses one very strongly in this case, though it concerns law-makers rather than surgeons, is the circumstance that punishment was awarded on account, not of the action and its intent, but of its results. Had the girl recovered, nothing would have been said about the matter. No thought of taking the lad into custody seems to have occurred to any one until the girl became dangerously ill. It seems not to have been thought worth while to do anything less than hang. If the girl lived, let her assailant go scot-free; if she died, let him die too. This unjust apportioning of punishment to results, rather than to acts, occurs constantly at the present day; but we do not remember to have met with so definite an example of it as we have here. It is clear to any one that the lad's guilt was complete when the stone left his hand. It mattered not whether his aim were good, nor what the results might be: the deed and the *animus*—the moral responsibility—would be the same. It might be more difficult to prove intent, if the stone missed; but this would be the only real difference.

There can be little doubt that in the present day Horwood would not have been hung, and equally little doubt that he would have been punished in some way. A stone thrown at a distance of forty yards is such an uncertain method of murder, that it could scarcely count as such at all. Then there were two companions at the lad's elbow, and it is not likely he would have attempted murder under such circumstances. It was clearly his bad character, his vitriol-throwing, the coarse language which he had used, and so forth, which hung him. To this was doubtless added an old-fashioned sense of the propriety of repaying like with like; and taking the life of one who had, wantonly at least, caused the loss of life in another. On the whole, in reviewing the case, we feel a strong

conviction that there is a better sense of justice in the present day than was displayed at this interesting trial. We commenced by asserting the wealth of this strange book and its story as a mine for the delineation of human character, and for speculating on human motives. For manifest reasons, however, we have not dwelt upon its capabilities in this direction, but have rather confined our attention to the facts which illustrate the surgical practice and medico-legal habits of a generation which has passed away. With the other and higher suggestions of the story, this is not the place nor ours the pen to attempt to deal.

DR. CAYLEY has been appointed Physician to the North Eastern Hospital for Diseases of Children.

DR. RICHARDSON will give a lecture on Chloral and Methylal at 12, Hinde Street, on Tuesday next, at 5 P.M.

THE surgeons of Moravia have lately held their annual assembly—the third of the kind—at Brünn.

An Asylum for Foundlings is about to be established in New York, by the Good Sisters of Charity.

FRAU HENRIETTA HIRSCHFELDT has, by permission of the Prussian Government, commenced practice as a dentist (for women and children) in Berlin. Frau Hirschfeldt studied dentistry at the Dental College of Philadelphia, and passed, it is said, a brilliant examination.

THE cholera appears, from the latest accounts which have reached us, to be still prevalent in Persia. At Teheran, where it has been for some time, it is now abating; but other places in different parts of the country, which were free, are now suffering from the disease.

DR. AUBERT-ROCHE, in a report on the sanitary state of the labourers on the Isthmus of Suez, says that, while in 1859 the population was only 150, it has now reached 42,400—more than half being Europeans. Except in a year when cholera prevailed, the mortality has remained steadily at 1 per cent.

It is said by the *Wiener Medizinische Wochenschrift*, that the German professors, Oppolzer and Chelius, were asked by M. Nélaton whether they would accept an invitation to Paris, to take part in a consultation on the state of the Emperor's health; but that no definite invitation was given.

MEMORANDA FOR STUDENTS.

THE following lines by one of the foremost students of the present day seem to us to express very beautifully the sentiments which should pervade an introductory lecture, and which should be kept in mind by a student at all periods of his career, but especially at its beginning.

Now hands to seed sheet, boys,
We step and we cast; old Time's on wing,
And would ye partake of harvest joys,
The corn must be sown in spring.
Fall gently and still, good corn,
Lie warm in thy earthy bed,
And stand so yellow some morn,
For beast and man must be fed.

Old Earth is a pleasure to see,
In sunshiny cloak of red and green;
The furrow lies fresh: this year will be
As years that are past have been.
Fall gently, etc.

Old mother, receive this corn,
The son of six thousand golden sires;
All these on thy kindly breast were born,
One more thy poor child requires.
Fall gently, etc.

Now steady and sure again,
And measure of stroke and step we keep,
Thus up and down we cast our grain;
Sow well if you'd gladly reap.
Fall gently, etc.

T. CARLYLE.

THE LATE DR. F. W. GIBSON.

AT a recent weekly meeting of the Guardians of the Poor of the parish of St. Pancras, it was resolved unanimously: "That our attention having been called to the death of Dr. Gibson, we desire to express our sympathy and condolence with the friends of the deceased gentleman at so sad and irreparable a loss of so great and good a man."

EMPLOYMENT OF SOLDIERS ON CIVIL WORKS.

THE best results are reported to have followed the employment of European troops in the construction of hill roads in India. The moral, physical, and pecuniary advantages to the men cannot be over-estimated. Why not carry out some plan of this kind at home? It would be a step towards lessening the need for contagious diseases acts. The state of compulsory idleness in which our soldiers are for the most part kept is one which is indirectly injurious to health, as well as to morals.

SUFFOCATION FROM IMPACTION OF A PLUM-STONE IN THE LARYNX. A CHILD, four years old, ate some plum-tart for dinner on Wednesday week. He went to play about afterwards, but in the course of the day was taken ill with difficulty of breathing, and was carried to St. Thomas's Hospital, where he died. A *post mortem* examination revealed a plum-stone lodged in the larynx.

COMPULSORY VACCINATION.

DR. PEARCE of Maddox Street, and Mr. R. B. Gibbs, have been again making themselves ridiculous at a public meeting in Limehouse. The prophylactic effects of vaccination should not be confused with the question of compulsory legal interference. Dr. Pearce is more than foolish when he makes statements at a popular gathering to the effect that vaccination is harmful, sows the seed of consumption, and other "most loathsome diseases." After this we are not surprised that a working-man actually exhibited a child which, he said, was "all over small bladders" from vaccination.

INFLUENCE OF FORESTS ON CLIMATE.

IN a paper lately read before the Geographical Society, is to be found some interesting information on this subject. Trees prevent evaporation of the water, and allow it to collect and remain as a source of permanent springs. When the trees are removed, the water runs off the land more quickly (not being retained and allowed to drop down gradually by the leaves), and is rapidly got rid of by the main streams. It also washes away the soil, and thus tends to exhaust fertility; but the most obvious effects are sudden and destructive floods, and injurious droughts in lands where there have formerly been good and equable supplies.

SPREAD OF CHOLERA IN INDIA.

THE outbreak of cholera in India has not been checked, but, we regret to say, is continuing to spread. It is now prevailing at the stations of Sangor, Tubbulpore, Allahabad, Cawnpore, Lucknow, Fyzabad, Agra, and Morar. Letters from India by the last mail (August 24th), mention that already two hundred men and officers had succumbed to the disease. The Sanitary Commissioner, with the Government of India, has left Simla for the infected districts; and Dr. Lewis, of the Queen's Army Medical Service, who was specially deputed, together with Dr. Cunningham, to inquire into the nature and origin of cholera in India, is pursuing his investigations in the same localities. Dr. Cunningham is making observations on the disease in Calcutta. It would probably well repay the Government of India if there were more labourers of the same character in the districts where the disease is rife—scientific men trained in all the modern means and appliances, chemical and microscopic, for investigating the pathology of this fatal malady, and with time at their disposal for careful and prolonged observation; for it is next to impossible for the surgeons who are engaged night and day with the care of cholera patients, to find either the time or composure indispensable for scientific inquiries.

HEALTH OF THE PREMIER.

WE are glad to know, from a reliable source, that, although Mr. Gladstone still, on medical advice, declines to add any avoidable engagements to his necessary and most onerous duties, yet his health may be considered fully re-established. He is no longer under medical treatment, and is strong enough to take exercise most freely.

EXPECTED OPERATIONS AT THE HOSPITALS.

IN another part of the JOURNAL we give a list of the operations expected to be performed at some of the large London hospitals during the ensuing week. As usual, there will be a field-day at most of them—a second but more impressive “introductory” to the first year’s student.

BABY-FARMING AND BABY MURDER.

A WOMAN, named Anne Cumings, aged 25, has been convicted of abandoning an infant in Brompton Road. Two letters of hers were opened, having been returned through the dead-letter office, and were found to be appointments for meeting persons with a view to obtain babies to farm. The prisoner was sentenced to five years penal service. It appears that she was in the habit of systematically exposing babies. She was in the employment of a woman who kept a baby-farming establishment. Babies were entrusted to her care ostensibly to be nursed, but really to be got rid of in any convenient way.

THE PARISIAN MEDICO-LEGAL SOCIETY.

IN recently concluding its session, this Society appointed certain of its members to investigate, during the vacation, the following questions: Poisoning by croton-oil; the application of photography, drawing, and various processes of mensuration, to legal medicine; the resistance of newly born children to asphyxia; and tattooing. Messrs. Devergie, Mayet, Mialhe, Raynal, and Roucher, were appointed to investigate experimentally all questions relating to poisoning by phosphorus.

DEATH FROM SWALLOWING DAMSON-STONES.

IN the JOURNAL for last week, we called attention to the case of a young man who died from ulceration of the intestine about thirty-six hours after the first symptoms. No cause in that case was assigned. The following is interesting in connection with it. At an inquest, held on September 24th, on the body of S. J. Anthony, a girl aged 10 years, the mother stated that on the previous Monday she was, when sent to bed, “to all appearance in perfect health.” She soon complained of feeling sick; and, on being taken out of bed, vomited freely. Another attack soon occurred; and she was freely purged, and complained of thirst. Some weak brandy and water was given her. The symptoms continued till about two in the morning (Tuesday), when she went to sleep. At nine A.M., she seemed much better, and was thought to have recovered; but about eleven o’clock all the symptoms recurred. Dr. Morrison was sent for, and prescribed some medicine, which, however, was soon vomited by the child. About two o’clock, the child became much worse, and the mother went herself for the doctor; but on her return she found the child was dead, about sixteen hours after the first symptoms. She had had no pie or pudding, but probably had bought some fruit. Dr. Morrison made a *post mortem* examination, and found that the patient was the subject of phthisis. The lungs were much tuberculated. The mucous membrane of the intestine was inflamed, and lodged in a fold were two damson-stones. The irritation set up by these, in his opinion, brought on diarrhoea, which was the immediate cause of death. A verdict was returned to that effect. It is not stated that in this case there was any perforation of the intestine, and the evidence as to phthisis complicates it; but the sudden onset of the attack, the apparently complete recovery for a time, and then sudden collapse, fit in with the record of the other case. No loss of sight is mentioned in the report; but it is said the child was “delirious” and “insensible.” There was no evidence to show how long the stones had remained in the intestine.

CONGRESS OF HUNGARIAN NATURALISTS AND PHYSICIANS.

A HUNGARIAN Medico-scientific Congress was held on September 5th, at Fiume, under the presidency of Baron Vecsey, who opened the proceedings with an address. Among the readers of papers were, Dr. Domini, on various climatic, meteorological, and sanitary questions, with special reference to ships; Dr. A. Bódogh, on the Darwinian hypothesis; Dr. T. Balogh, on the influence of nature on peoples; etc.

SUSPECTED SLOW POISONING WITH LEAD.

A WOMAN named Colvill, residing at Castletown, Isle of Man, has been committed for trial on the charge of attempting to poison her husband with white lead. Suspicions were first entertained by Dr. Wise, the surgeon whom the man consulted. Colvill had during the early part of the year been repeatedly under care for symptoms not easy of explanation, and at length lead was suspected. Dr. Wise very properly communicated with the authorities, and circumstances came out which tended to confirm his opinion. The woman had purchased lead, and had tried to buy arsenic also. It seems probable that, by Dr. Wise’s prompt action, a murder has been averted.

ACCIDENTAL POISONING BY CORROSIVE SUBLIMATE.

A MOTHER and three children have been poisoned at Bromley-le-Bow. They had partaken of a pudding which the mother had made, as she thought, of flour; but she had taken a packet from a shelf containing a white powder. They were all very soon seized with burning pains. A dog which drank of the water in which the pudding was boiled, writhed on the floor and soon died. The children, aged 11 and 8, are in a very dangerous condition. The powder was found to contain corrosive sublimate. It had been obtained by the husband, who is a dog fancier, and who used it for skin-diseases in dogs.

EXTRAORDINARY RECOVERY AFTER SAW-WOUND OF THE SKULL AND BRAIN.

A CASE, almost incredible, of extensive wound of the skull by a circular saw is recorded in the *Pacific Medical and Surgical Journal*, May 1869. It was under the care of Dr. C. A. Folsom. The patient was a man, 40 years of age. The wound extended from just above the nose in front to the occipital protuberance behind, and measured nine inches. It was rather on the left side of the middle line, and passed (on measurement) a depth of three inches into the brain, and was thought to reach the base of the skull. The two halves of the skull fell apart more than an inch, and a tourniquet was applied round the head to hold them together. The brain-substance was not sensitive. The scalp-wound healed nearly by first intention. There were no symptoms of any sort. No medicine was given. In three weeks the man got up, in six weeks resumed his occupation, and has continued at it for five years. The saw was a large one, revolving very rapidly. The man scarcely felt the cut. There was no concussion; no shock to the brain.

DEATH FROM CONCUSSION FROM A BLOW WITH A STONE.

A VERDICT of manslaughter has been returned by the Coroner against two boys at Carlisle for causing the death of a man aged 60, by a blow on the head from a stone thrown at him. The old man was a fruit-seller in Carlisle streets. He had been much provoked by the boys, and was chasing them when one of them threw the stone at him. He staggered when struck by the stone, fell heavily, and in a few minutes was dead. Dr. Elliot of Carlisle reports a most careful *post mortem* examination, in which nothing important was disclosed excepting a fatty heart. The case is of much importance. Did the man die of excitement or of concussion of the brain? Cases of sudden death from mere concussion are exceedingly rare, almost unknown, and here the concussing force was a comparatively slight one. We understand by “concussion” the results which follow from mere shake of the contents of the cranium without lesion. The head could not have been much shaken in this instance. The cause of death may be plausibly suspected to have been cardiac syncope, induced chiefly by mental excitement.

THE FENIAN BURKE (?),

THE man who was taken to King's College Hospital on Wednesday night, and is alleged to be the notorious Fenian Burke, is suffering from a severe compound fracture of the skull, and is not expected to recover.

DEATH OF AN INFANT FROM NEGLECT.

IN a local paper we find a long account of a case of death from neglect at Carlisle. The mother was a prostitute, and had lived for four months with her baby in the workhouse, where she is said to have treated it well. She afterwards went to a brothel with her child, from which she took it to another lodging, where it died, at a little less than six months old. The child was treated for thrush, and is said to have had sores on its head reaching to the periosteum; but there seems no doubt that it died chiefly from want of food, for the intestines and stomach were almost empty. The mother seems to have carried on her usual business after she left the workhouse, and the mistress of the brothel had charge of the child in the mother's absence. It is perhaps just an open question in this case as to how far the mother was influenced by the brothel-keeper. The verdict gives the mother the benefit of evidence insufficient for a conviction.

SEA TRANSIT OF CATTLE.

THE Contagious Diseases (Animals) Act, says the *Gardener's Chronicle*, has power to deal with the subject of proper transit for animals by sea and rail. The *Chronicle* hopes that what is done will be done thoroughly, and doing this thing thoroughly means, we are told, "providing a stall for every two oxen, and a pen for every dozen sheep, with appliances for the reception of food and water;" and this will very materially increase the expense of transit (and indirectly, we suppose, the price of meat to some extent). This, however, will not touch the purposeless brutality of the men who have charge of the animals. Mr. W. Bridges Adams suggests for the transport of cattle by sea the construction of an immense vessel, a sort of self-moving enlarged Bermuda Dock. He says there would be no difficulty in making it "perfectly unsinkable," well ventilated, and steady, so that cattle should not suffer from crowding, bad air, sea-sickness, or starvation, as they do at present.

PUNCTURED WOUND OF SKULL AND BRAIN.

A CASE of death from puncture of the skull and brain is reported from Waddam's Pool, Staffordshire. A child was playing on the sofa with a table-knife (said to be a small one) in his hand. He fell off the sofa, and the knife entered between his right eye and the nose to the depth of about two inches. It stuck fast in, requiring some force to pull it out. The child was attended by Messrs. Horton and Tanner. No symptoms occurred till the next afternoon, when he became delirious, gradually sank, and died. A child was admitted not long ago into the London Hospital who had fallen on a garden-rake. One of the spikes entered in the right parietal region, causing a punctured fracture. There were no symptoms of cerebral irritation till the third day, when convulsions suddenly come on, and the child died.

CONVICTION OF A PRETENDED SURGEON FOR PROCURING ABORTION.

AT the Central Criminal Court, on Friday, September 24th, Henry Timson, aged 52, a respectable-looking man, described as a surgeon, and William Henry M'Grath, aged 21, described as a clerk, were indicted, the former upon the charge of feloniously assaulting Rosina Bush, and the latter with inciting, procuring, and assisting him to commit that offence. The prisoners were tried at the last sessions of this court upon the same indictment, but the jury, after a very long trial, were unable to agree upon a verdict. M'Grath was a married man, his wife being cousin to the prosecutrix, and the latter was living in the same house with them at Woolwich in the latter part of last year. On September 1st last year, all the family were out except herself and the prisoner, and the latter called her into his bed-room, and she was seduced by him—this being, as she stated, the first and only time when such an occurrence had taken place between them. A few months afterwards she

discovered herself to be pregnant, and although it appeared that she did not actually know what was the matter with her until the prisoner M'Grath informed her, and told her to go and see Dr. Timson, and she would soon be all right. In consequence of this she and her mother went to the house of Timson, who practised as a medical man at Woolwich. He took prosecutrix into a room, where he acted in the manner suggested by the prosecution; and on the following day the girl was delivered of a still-born child, which was taken away by the prisoner Timson. The prisoner M'Grath appeared to have made a communication to a police-serjeant to the effect that he could give some information relating to the murder of a child two months before. This led to inquiries, and both prisoners were taken into custody. Mr. Lilley, on behalf of the prisoner Timson, endeavoured to show that he had done nothing more than he was justified in doing as a medical man. Mr. Justice Brett summed up the evidence very carefully, and the jury almost immediately returned a verdict of Guilty against both prisoners. The learned judge, in passing sentence, addressing Timson, said he had been convicted of an atrocious and abominable offence, and no man who was acquainted with the present state of society, and had the means of ordinary information, could fail to know there were many persons who with some acquaintance with medicine, but who had fallen into difficulties, had carried on for gain that abominable trade which had now brought him to his present position, and which led to misery and crime. It should be known that no medical man carrying on the business in which he had been engaged would be allowed to escape without a terrible punishment whenever he was brought to justice and convicted. The sentence upon him was—and it was the sentence which he (Mr. Justice Brett) would pronounce in every like conviction before him—that he be kept in penal servitude for ten years. M'Grath was sentenced to seven years penal servitude.

SCOTLAND.

THE REPRESENTATION IN PARLIAMENT OF THE SCOTCH UNIVERSITIES.

OWING to the appointment of Mr. Moncreiff to the office of Lord Justice Clerk, the seat for the Universities of Aberdeen and Glasgow will necessarily become vacant. Mr. Gordon's friends have again requested him to contest the seat, and will, no doubt, secure for him large support. No other candidate has, we understand, yet appeared in the field; neither is Sir William Stirling Maxwell likely to come forward, as has been elsewhere stated. It is understood that Mr. Rutherford Clerk declines offering himself in the Liberal interest. It is also said that Dr. Lyon Playfair, M.P. for the Universities of Edinburgh and St. Andrew's, is a candidate for the vacant office of Master of the Mint. If successful, Dr. Playfair would require to vacate his seat in Parliament. In that case Sir W. Stirling Maxwell may become a candidate for the Universities of Edinburgh and St. Andrew's.

BLOCK V. VILLAGE HOSPITALS.

A CORRESPONDENCE is taking place in the columns of the *Scotsman*, between Professor Syme and Sir James Simpson, in reference to the best mode of building the new Royal Infirmary. Mr. Syme advocates a large building, and is sanguine as to the results of disinfectants for preventing any casual evils. Sir James, on the contrary, urges his well known views, and discredits the antiseptic plans which, he asserts, have been tried repeatedly and have failed. He urges that during two years, 1867 and 1868, carbolic acid has been extensively employed, and that the mortality from amputation instead of diminishing has risen from 40 to 53 per cent. He concludes an able letter by the following proposition—

"That, in the construction of our new Infirmary, the great disinfectants and antiseptics that we should alone depend upon are abundance of space, abundance of light, and, above all, abundance of fresh, pure, and ever-changing air to every patient in every ward in the hospital—a result that will probably be attained most cheaply and certainly by leaving the present Watson's Hospital, with its numerous class-rooms, bed-rooms, etc., for the administrative part of the institution, and erecting upon the ground above and below this central building a series of village or villa hospitals or wards, furnished with all the latest and best sanitary improvements."

THIRTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in LEEDS, July 27th, 28th, 29th, and 30th, 1869.

SECTION A.—MEDICINE. *President, W. T. GAIRDNER, M.D.*

Thursday, July 29th, 1869.

Certain Forms of Paralysis Depending on Idea. By J. RUSSELL REYNOLDS, M.D., F.R.S.—The object of the paper was to show that some of the most serious disorders of the nervous system, such as paralysis, spasm, and other altered sensations, may depend on the morbid condition of idea, or of idea and emotion together. Such symptoms, it was said, often existed for a long time, and resist many different kinds of treatment, and disappear entirely upon the removal of the erroneous idea. Instances were given of the acute effects of idea, emotion, and startling intelligence. The severity of some symptoms was also described as arising from mental emotion and disturbance, though there was no genuine pain. The resistance offered by these maladies to the ordinary treatment was illustrated; but in the cases adduced nothing had been done but practically to counteract the exaggerated notion of the patient, and to compel him to use the voluntary power which remained to him, but which had become for some time practically inoperative. Incurable cases were mentioned, and also the sort of diagnosis to be formed under peculiar circumstances. Earnest dealing with such cases was recommended, and the holding out of a confident expectation that if certain plans were adopted a cure would follow. He believed that there were means for remedying these cases, but the treatment could be much better applied in hospitals than in private practice.

Dr. ANSTIE (London) asked if Dr. Reynolds intended the group of interesting and very real affections which he had mentioned to be continuous with hysterical paralysis in persons subject to disorders of the nervous system, similar to what was called hysteria in females, or to a larger or smaller group; and did he regard the subjects of ordinary hysterical paralysis as equally liable to those disturbances of which he spoke, as proceeding from an ideal source—disturbances in the direction of pain, or merely some new arrangement of the so-called hysterical phenomena?

Dr. BANKS (Dublin) called attention to a case which recently came under his observation. A lady, about 38 years old, had been sixteen years bed-ridden. Her lower extremities were perfectly powerless. She had not attempted to put her legs under her for years. She was prepared for a life such as she had been leading, and had made all the arrangements which people make when they are doomed for life, having her birds, books, and animals about her. She had a good appetite. For years it was supposed that she laboured under paralysis of the rectum. She had no power of expulsion, and three times in the week her mother removed the contents of the rectum. She had been under the care of the late Dr. Graves, by whom every means had been employed. From the moment he (Dr. Banks) saw her, he endeavoured to impress upon her that, if she followed simple rules and regulations, she would perfectly recover. It was to some aperient that she gave the credit of her recovery: this was simply a rhubarb pill with a small quantity of the extract of nux vomica. But within two months after he saw her, and after he had the power of inspiring her with hope, she began to recover. Two or three years had now elapsed since her complete recovery, and now she was able to walk miles. Another case he had heard of from Sir H. Marsh, showing the influence of mind over the power of motion. That was a case strictly of hysteria; but the lady had been paralysed for years. She was a great devotee, and was told that on a certain day prayers were to be offered up for her recovery; and on that day she got out of bed and walked. He believed a stronger case could not be mentioned of the power of mind over bodily disability.

Dr. ALBUTT (Leeds) had scarcely understood from the title of the paper the kind of cases which the author was going to bring forward; but the subject was one of great interest to himself, for he had had the same sort of experience. The conclusion at which he had arrived was, that the word hysteria, if to be used at all, needed farther definition. As at present used, it was likely to lead astray. He was quite sure that in a very large number of cases, by the use of the word hysteria, the medical man not only injured the patient, but damaged his own power to cure. He started with the idea that the case was a mental or moral business, whereas it might be, and often was, something of a very different kind. There was paralysis which formed certain physiological groups of which the patient must have been previously ignorant. For

example: in an ordinary hysterical patient, they might well be one of the cases called hysterical paraplegia; yet, he had seen three or four lately in which there had been a truly hemiplegic condition, and the result of the treatment had led him to put these latter in the same category as those which Dr. Reynolds had described, though he had not been able to refer them to imitation. One of them was a case of common hemiplegia of two or three years standing, which recovered in the same number of months, under treatment by hope. Another case he had seen on the previous day, of a railway accident, where the symptoms were partial hemiplegia of one side, with convulsion, but where there probably was not organic disease. It was the occurrence in weakly women and others, of paralysis in physiological groups, and not in fanciful groups, which showed him that there was something more than merely imperfect or perverted volition in some of these cases. How far did Dr. Reynolds think imitation sufficed to explain such cases. He thought there might be an unstable condition of the nervous centres causing a group of nervous symptoms, with no organic disease on the one hand and no moral perversion on the other.

The PRESIDENT said that every line of Dr. Reynolds' paper, or almost every considerable point in it, had struck home to his own experience in similar cases; and he concurred in a very large amount of what Dr. Reynolds had said. The class of railway accidents to which he had alluded presented a singularly interesting group; and, no doubt, in assimilating them to the class of hysterical women, he had hit the right idea. He was quite right in saying, also, that, when the disorder manifested itself as either hysteria or mere paralysis, the difficulty was unsupportable in determining how far it was aided by the kind of voluntary condition of the patient. But, now and then, there occurred cases of a different kind, where it was impossible to consider that there should be such yielding. A gentleman came direct to his house from a railway accident. He walked into the room and sat down in a chair and began to tell his story, but he had not gone on half a minute before he began to cry like a child. He was a strong man, with nothing peculiarly emotional about him, but suffering under the severe mental shock of this accident. He (Dr. Gairdner) made such a rough examination as assured him he did not think there was anything seriously wrong, and asked him to go on with his story. He went on, but he was stopped by another outburst of tears. In a few days he came back, and apologised for appearing to want to make much of his case. He (Dr. Gairdner) kept him in view for a week or two, but he kept coming back, and he said he had been always a large passer of urine, having drunk a good deal of water. Since the accident, the quantity of urine had increased enormously, and the case had become one of diabetes insipidus; when last he (Dr. Gairdner) heard of him, he had not returned to his normal condition.

Dr. CHARLTON (Newcastle) said that Dr. Reynolds' description of the progress of cases of railway accident much corresponded with his own experience. There was another sort of fallacy which, although it existed to a great extent in hysteria, existed to a still greater extent in railway accidents, because there was the prospect of compensation which made it likely that the patient simulated a great deal. He had seen several cases of the gradual progress of paralysis of this kind, where, after the most careful tests, he had found himself thoroughly deceived—where he had given an opinion to the railway company that the people were seriously injured, and the moment the compensation was paid over, the individual began to recover. He once went with two or three medical men in his neighbourhood to see a patient of this kind, and they put him through every test. There the paralysis had occurred from the beginning, but it was exactly of the sort Dr. Reynolds had described; the same evening that the patient got his £2,000 compensation, he got upon his horse and galloped around his farm, and he had been quite well ever since. There were also cases in which an individual did fancy himself injured, and his became a case of ideal paralysis. In railway accidents there was always the greatest difficulty, because it was necessary to guard against a double motive and incentive for deceit. He believed the patient often deceived himself, and that a species of paralysis, such as occurred in hysteria, did actually take place at the time.

Dr. BASTIAN (London) thought that in the case of increase of urine, mentioned by Dr. Gairdner, the symptoms had been produced in a way different from that mentioned by Dr. Reynolds. One means should be borne in mind, which might account for those symptoms after shocks. He had had the opportunity of examining the spinal cord of a man who had died after a fall from a height of 16 or 20 feet, and had received a shock not much more severe than might be incurred in a railway accident. He was paralysed immediately afterwards, but lived six months; and, in a *post mortem* examination, there were found ruptures of the spinal cord in various regions. As the result of those primary ruptures of the grey matter of the cord, there followed certain secondary degenerations

of the cord. Those degenerations, as was now well known, in the anterior column, took a downward direction, and in the posterior column they went upwards. In the case in question, there were continuous traces of degeneration passing upwards in the anterior column and downwards in the posterior, those tracts going through to the medulla oblongata. It was quite possible that lesions of that kind might occur in that way, and when those degenerations did occur it was possible that they might be cured. Various cases had been put on record by French observers, where paralysis, which had gone on so far as to produce contraction, had been cured, and the spinal cord restored. The experiments of Schiff and others showed, that after a certain time the functions could be restored, and the process of degeneration of the spinal column appeared to be precisely the same, and there would, therefore, be the same chance of restoration.

Mr. SCATTERGOOD (Leeds) said the class of cases which Dr. Reynolds had defined seemed to throw light upon a number of cases recorded in history, in which cures appeared to have been effected by pilgrimages to the shrines and the interposition of monks, but it was now more than probable that they were only cases of ideal paralysis. With reference to Dr. Reynolds' remarks as to the parallelism of cases, something similar occurred in another field. There were instances of injection of morphia having relieved pain speedily, and, in particular instances, a repetition of the injection with pure water on the following day gave the same relief.

Dr. FOX (Scarborough) said, as to diseased conditions with reference to ideas, he would mention an interesting case which occurred during his student life, in Edinburgh. There was a man in the hospital subject to diabetes, and in the bed adjoining him was a boy with a deformity. That boy appeared to be shocked by the amount of urine which his neighbour was passing. All of a sudden he thought his urine had increased, and it proved to be a case of diabetes insipidus, the result of a certain diseased condition produced by idea.

Dr. REYNOLDS said that, with regard to the question as to the relation the class of diseases which he had described had to what others called hysteria, he had endeavoured to avoid mentioning the word hysteria, but he thought there was something to be expressed by it. As to hysterical paralysis, the cases which he had regarded as good examples of it, had invariably occurred after hysterical convulsion. In the cases which he had described, there had been no convulsive movement whatever. The paralysis had crept on slowly. There had been no spasmodic feeling about the throat, nor the awkwardness of some hysterical people, nor the stupidity of others. There had been nothing of that which was most characteristic of those cases, viz: involuntary spasmodic movement; and it had been produced irrespectively of hysterical convulsion. As to the treatment in genuine cases of hysterical paralysis, usually electricity was rapidly successful. But it was not so in the cases of which he had been speaking. In them, electricity had been applied for a long time, but it was useless; but simple moral treatment had proved useful. As to Dr. Gairdner's remark about the flow of urine after a shock of this kind, the nervous urine passed by these patients bore a very close analogy to the chronic passing of urine by nervous people. It was not his experience to find alterations of this kind as a chronic condition after an accident. He had found that meluria came on after an accident in violent railway collision, but the injury there was not in the upper part of the spine, but in the lower. As to the case of diabetes, it was the first thing which attracted attention; it continued for four or five months, and, two months later, sugar appeared in the urine and continued.

On Some of the More Recent Methods of Treating Certain Diseases of the Skin. By T. MCCALL ANDERSON, M.D. (Glasgow).—He commenced by referring to the use of a solution of acetate of soda, (20 grains to ounce of water) as a local application in lupus exedens and in strumous ulceration. He then pointed out the value of the application of lint spread with melted emplastrum hydrargyri in cases of lupus erythematodes. The use of coverings of vulcanised India-rubber in certain cases of eczema, psoriasis, pruritus senilis, prurigo, ichthyosis, callositas, and many obstinate localised eruptions, was next discussed; and Dr. Anderson pointed out that the remedy acted by excluding the air, keeping the parts warm and at a uniform temperature, and promoting the secretion from the cutaneous glands which are retained so that they macerate and favour the removal of the epidermis. Lastly, he quoted a number of cases illustrative of the value of the internal administration of tar and carbolic acid, especially of the latter (which he prescribed in doses of from three to ten grains, thrice daily), in the treatment of certain cases of chronic eczema and of psoriasis.

Mr. HORTON (Leeds) spoke of the great success of gutta-percha caps in cases of scalp-diseases, and said he thought tar was more extensively used than Dr. Anderson was aware of. He knew practitioners who had used it extensively during the last twenty or thirty years, both internally

and externally, and it had had good effect. In skin-disease of the hand, he had treated it by strapping it with soap-plaster, the success of which in producing absorption where there had been thickening of the skin was remarkable.

Dr. ALLBUTT (Leeds) asked, whether, in prescribing acetate of soda as a remedy for lupus, the important distinction had been made between mere serpiginous ulcerations and ulcerations dependent upon the previous existence of dermic tubercles. The former was not rebellious under treatment, the latter so terribly so, that a cure by a solution of acetate of soda would indeed be a boon. For his part, in true lupus he found no remedy so speedy, effectual, and comparatively painless, as the actual cautery.

Dr. MYRTLE (Harrogate) thought that in these cases the best caustic to apply was common nitrate of silver, and to rub it in as if the patient had no feeling. His experience was, that that would check the ulcerative process more effectually and leave far less marks. As to elastic applications, one of the best he had found was the new preparation, the elastic collodion of the *British Pharmacopæia*; and he had also experienced the good effects which Dr. Anderson had described of the ordinary gutta-percha cloth.

Dr. JOHN LANG (Southport) mentioned cases of lupus which occasionally were sent to the Convalescent Hospital at Southport. He described the masses of ulcerations in the face in some of the cases, and he said, after three weeks of treatment the ulcers had healed up. One man, from the Midland Counties, had been there three years in succession.

Dr. ANDERSON, in reply, said, with regard to affections of the face, no doubt a distinction must be drawn between strumous lupus and lupus exedens, or lupus vulgaris. In all these cases, up to a certain point, he thought soda would be found successful, but he must confess it was not likely to prove as successful in some cases as in others. He quite agreed with Dr. Myrtle that, if caustic was to be used in cases of lupus (and often that was absolutely necessary), none was so likely as solid nitrate of silver. Although recently he had been trying the actual cautery, he did not think the results were as certain as from the use of the nitrate of silver, but the patient suffered much more from the use of the nitrate of silver than from the actual cautery.

On Hydro-Therapeutics: the Resources of Harrogate Specially Considered.—By A. S. MYRTLE, M.D., (Harrogate).—The author spoke of the antiquity of hydro-therapeutics (absurdly named hydropathy), and referred to the causes of its failure, and to the Utopian views of some of its advocates. He maintained that it should not on that account be set aside by the profession; but that it should be taken into the fold of rational medicine, and used in proper cases—the hydro-therapist to supplement, not to supplant, the regular attendant. He then gave an account of some of the physiological and therapeutical effects of a well-regulated water treatment.

Dr. BANKS (Dublin) said it was well known that hydropathy generally was associated with a kind of quackery which they were bound to denounce. Still, he had frequently sent patients to those establishments, believing in the great good which was sometimes done by them. But, in recommending patients to places where mineral waters were drunk, they ran no such risk as they did in giving a recommendation to an hydropathic establishment. He knew many patients who, having gone to hydropathic establishments, never again resorted to the advice of the legitimate physician. They were there converted to some form or other of quackery.

The PRESIDENT said an important distinction was to be drawn between hydropathic establishments and mineral watering places. Dr. Myrtle had scarcely done justice to his own position by treating them both in one paper. A hydropathic establishment was necessarily a large investment of capital subject to risk, and it must be made to pay. It was of the very nature of a commercial transaction. A private company, or an individual doctor, sank several thousands of pounds in a large hotel, and they must make it pay, so that the temptation to the introduction of quackery was enormous. There was that in connection with hydropathy which did not exist in the case of mineral waters at all. They were quite justified in viewing hydropathic establishments with suspicion; nevertheless, he thought Dr. Myrtle was quite right in saying that they fulfilled their duty to their patients better by not altogether discountenancing water establishments, but allowing them to get what legitimate good they could from them, with a caution as to the possible evil of quackery. If he (Dr. Gairdner) were asked about going to hydropathic establishments, he never resisted it if he thought it would do any good, but he would say—let them remember that a hydropathic doctor was an innkeeper. The interest which he had was not that of the physician, but the interest of an innkeeper, and he was biased by that fact.

Dr. CHARLTON (Newcastle) observed, that in this country we had to boast of our practical liberty, but a little more paternal government

would do no harm if it only could apply its power to these hydropathic establishments. They ought all to be under the inspection of a Government officer, who would see that they were in the hands of proper persons. He would, as much as possible, avoid those people who kept the grand water establishments, and, as the President had said, let it always be borne in mind, that by some means or other they must be made to pay the company which set them up.

Dr. FOTHERGILL (Darlington) said that in his district there were many people who could not afford to go to watering places, and yet to put them under the influence of iron-waters would do them much good. He spoke of the success with which, under such circumstances, he had administered the iron largely diluted, and said he had seen results flow from it as good as might have attended a visit to a watering place.

Dr. MYRTLE thought he had done his best to make it appear that he was not a hydropathist. He wished to rescue certain chronic cases from the hands of the quack—cases in which he conceived that valuable aid and treatment could be given. He knew only one hydropathic establishment to which he would send a patient. He used wet pads and also suffusion in cases of fever, but he trusted he used them with judgment.

ASSOCIATION INTELLIGENCE.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT MEETINGS.

THE next meeting of the above Branch will be held at the White Hart Inn, Reigate, on Thursday, October 7th. The Chair will be taken at 4 P.M., by Dr. STILWELL of Epsom.

Dinner at 6 P.M.

Papers, etc., will be read by Mr. Hunt, Mr. Langton, Mr. Kelsey, and the Honorary Secretary.

HENRY T. LANCHESTER, M.D., *Hon. Secretary.*

Croydon, September 27th, 1869.

SOUTH MIDLAND BRANCH.

THE thirteenth autumnal meeting of the above Branch will be held on Wednesday, October 6th, in the Board Room of the Stamford and Rutland Infirmary, at 2 P.M.: WILLIAM NEWMAN, M.D., President, in the Chair.

Gentlemen intending to read papers or cases, are requested to send the titles forthwith to Dr. Bryan, Northampton.

J. M. BRYAN, M.D., Northampton } *Hon. Secs.*
G. P. GOLDSMITH, Esq., Bedford }

Northampton, September 1869.

SHROPSHIRE ETHICAL BRANCH.

THE annual general meeting of the above Branch will be held at the Lion Hotel, Shrewsbury, on Wednesday, October 6th, at 2 P.M., to elect a President and other officers for the ensuing year, and for the transaction of other business. The President—J. W. ROE, M.D.—in the Chair.

Dinner at 3.30 P.M., for 4 punctually.—Tickets, to include dinner, dessert, and waiters, 7s. 6d. each.

Gentlemen intending to read papers, or to be present at the dinner, will oblige by communicating their intention, at their earliest convenience, to

JUKES STYRAP, } *Hon. Secs.*
EDWYN ANDREW, }

Shrewsbury, September 25th, 1869.

WEST SOMERSET BRANCH.

THE autumnal meeting of the above Branch will be held at the Clarence Hotel, Bridgwater, on Thursday, October 21st, at 5 P.M.; H. J. ALFORD, M.B., President, in the Chair.

Gentlemen intending to be present at the dinner, or to read papers after, are requested to give notice to the Honorary Secretary.

W. M. KELLY, M.D., *Honorary Secretary.*

Taunton, September 22nd, 1869.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE first meeting of the above Branch, during the present Session, will be held at the Midland Institute, Birmingham, on Thursday, October 14th, at 3 P.M.

T. H. BARTLEET, *Honorary Secretary.*

Birmingham, September 26th, 1869.

CUMBERLAND AND WESTMORLAND BRANCH.

THE autumnal meeting of the above Branch will be held at the Globe Hotel, Cockermouth, on Wednesday, October 13th, at 12.30 P.M.; M. W. TAYLOR, M.D., President, in the Chair.

Gentlemen intending to read papers or cases are requested to give notice to the Honorary Secretary.

HENRY BARNES, M.D., *Honorary Secretary.*

Carlisle, September 22nd, 1869.

CORRESPONDENCE.

PHYSICIANS AND SURGEONS.

SIR,—In the sketch of a reorganisation of the medical profession which you print under the title of "Physician and Surgeon", you appear to contemplate the extinction of a certain class of the profession—that of young physicians. If, according to the summary definition which you quote, a consulting physician is one who is consulted, it is evident that the class must be formed of mature and experienced practitioners, and that it is idle for any one to set out with the object of being a consulting physician from the first. Now this may very possibly be for the good of the profession at large; but it is well that the matter should be clearly understood, in order that young men and their friends may be prevented from wasting a very large amount of capital.

Let us take the case of two young men aged 18, one of whom is to be a general practitioner; the other, according to the fond ambition of his parents, a consulting physician. The former need not spend more than two years and three-quarters at a London hospital; he may then comply with (or evade) the provisions of the Medical Act by taking a situation, which, whether it be called that of pupil or assistant, enables him at least to live. Thus the whole period during which he is dependent on his father is not more than three years; and the whole capital invested in his professional education is, perhaps, £400. Now let us take the future physician. He is sent to one of the old Universities, or in some way pursues general or scientific education before entering on medical studies. When he does so, he aspires to one of the more difficult diplomas, and takes five or six years, if not more, in arriving at his first degree. He must then visit the continental schools, say for another year. Finally, he returns to his own school, having already consumed twice or thrice as much time as his less ambitious compeer, and having invested a capital of not less than £1,000, and perhaps (if he have been at Oxford or Cambridge) as much as £2,000. Now, it might be supposed on general principles, he will reap the interest of this outlay in higher remuneration; but what is the fact? He is offered some appointment, such as that of assistant-physician, pathologist, or curator, which brings much credit, but is either purely honorary, or else paid about as well as the work of a day-labourer. If he be fortunate, he may earn as much as a skilled mechanic. Of private practice, of course, nothing need be said. He is forbidden by etiquette to undersell the chiefs of his profession, and prevented by his years from competing with them in quality. He offers to the public the name of an untried man at the same price for which they can purchase the opinion of Dr. Gull or Sir William Jenner. He must then continue to draw upon his capital; and, as the parents of such ambitious young men know well, it will not be at a lower rate than £200 a year. How long this outlay is to last must, of course, vary; but well informed persons have declared that, for any one but the son or nephew of a great man, ten or twelve years are necessary, even in cases of ultimate success, to establish a remunerative practice. This involves an additional outlay of about £2,000; and evidently a worse investment of capital, commercially speaking, could hardly be made. The only cases comparable are those of the price paid for a commission in the army, or the expense of an Oxford education to a curate who earns £80 a year. In both these cases, the real return expected and received is not money, but social consideration; and the position of a physician formerly held out the same inducement. That was when there was a wide gulf between the physician and the apothecary. But, while you have raised the one, there can be no doubt you have lowered the other, socially speaking. Levelling up means levelling down; and the more the general level of the profession is equalised, the more will its general status become one perfectly respectable and honourable, but distinctly below that of the learned and travelled physicians of former days. All this is very likely no evil. It may be in harmony with that simpler state of society which many of us hope to see; but it seriously affects the economics of the profession. With the present rate of pay and the future *status*, capital could hardly be worse invested than in becoming a consulting physician.

What is the alternative to those who have chosen or are about to

choose this profession? Either they will use the capital which would have enabled them to "wait for practice" in buying a general practice or partnership, which will yield an immediate return; or else they will become (pardon the supposition) *specialists*. These, at least, need not wait long for patients. But now, sir, if either of these alternatives is adopted, who will be the losers? The losers will be, first, the managers of hospitals and medical schools, who will have to do without the cheap labour now paid for in expectations, or else to pay for it in money; secondly, the students, who will have to remunerate the teachers, who now serve them almost gratuitously; and, thirdly, the readers of medical books, for I am told it is the men who are waiting for practice that write books and make researches. If these classes of persons are satisfied, all will be well; if not, medical reformers should think twice before they equalise all branches of the profession. As to the title of "Doctor", that is a minor matter, and it might be well that it should either be dropped altogether, or else borne by physicians and surgeons equally.

I have spoken so freely, that I must request you to consider my name as meant for your private information, and subscribe myself yours, etc.,
September 1869.

ACADEMICUS.

* * * Our argument concerned titles only. A young consulting physician clearly gains little or nothing by the title of "Doctor" in a day when numbers not in consulting practice use the same. Would he lose anything if the title were yet more widely diffused? The young consulting surgeon has always been content to use the plain "Mr." The fact that he is intending for consultation practice, and that he is qualified for it, will usually be found out by those concerned. We cannot see that it can be conveniently indicated by any title.

APHASIA.

SIR,—I venture to send you the few following ideas which have lately occurred to me regarding the subject of aphasia, together with some short remarks in reference to the *localisation* of speech.

After careful consideration, I have come to the conclusion that aphasia is a disease very closely allied to locomotor ataxy, and that the want of speech in the former results from a want in the power of co-ordination, just as much as does the uncertain gait in the latter; or, as Dr. Clifford Allbutt would express it, the defective speech in aphasia and the extravagant gait in locomotor ataxy both result from a loss of consciousness of the relations in space between the body and the medium. In aphasia, the patient is able to make a noise with his throat and produce both high and low notes, but he cannot utter words to express what his mind wishes. He makes an attempt to speak, but finds from some cause or other he is unable to do so. The tongue is not in the slightest degree paralysed, but only like a boat which has been deprived of its rudder, incapable of being steered. So in locomotor ataxy, the legs are not paralysed, but only incapable of being moved in the direction the person wishes. Dr. Brown-Séquard relates a case of aphasia in which the patient was unable to express "yes" by lifting up one finger, and "no" by two, although told to do so; or, in other words, where the patient evinced clear signs of being afflicted with a kind of locomotor ataxy.

Speech appears to me to result from the mind connecting certain things with certain sounds produced by certain movements of the mouth and tongue. Those born deaf are incapable of speech, owing to their want of appreciation of sound; but they can express their thoughts by writing and by certain movements of the fingers and hands. They have the capability of speech, but, from want of the faculty of hearing, it cannot be called into action. In these cases the mind is perfect in every particular, consequently I believe the capability for speech is perfect also. Again, those who are born blind, or become so from some accidental cause shortly after birth, are longer, I believe, in learning to speak, owing to their being unable to perceive what movements of the mouth produce the several sounds. Speech, in my opinion, is simply reason directing the motor nerves of the tongue. We see in the child the mind first coming into play, and then speech following: without the first existence of the mind, speech is impossible. Speech cannot come before the mind exists to appreciate different sounds and surrounding objects, so that in those cases where there is a decided deficiency of brain, or helpless idiotcy, speech is absent. If we attempt to localise speech, then we ought to assign some spot for noise also, because speech consists simply of various modifications of sounds. The mouth acts in speech as does the larynx in singing. The mouth makes, by instruction, various embouchures, through which air is forced and various sounds produced. The mouth may be formed for the letter,

but no speech is produced till there is an ingress or egress of the breath. In some cases there appears to be some difficulty in directing the movements of the lips and tongue, and consequently an incorrect pronunciation is given to the words spoken. We find this more especially in French words spelt with the "ien", and in Scotch and German ones containing the "ch." If this faulty pronunciation arose from other than a simple want of proper education, some deficiency in the spot assigned to speech ought to be made out. For my own part, I should say that the disease which we term aphasia resulted from a want in the co-ordinating power of the brain, and that the *post mortem* changes were likely to be found, as in locomotor ataxy, in the posterior columns of the spinal cord.

I am, etc.,

F. P. ATKINSON, M.D., etc.

Bessborough Gardens, S.W., Sept. 1869.

THE FATAL CHLOROFORM CASE AT CROYDON.

SIR,—I enclose you a short account of the case of death from chloroform which occurred at the Croydon General Hospital on Wednesday, the 15th of September last.

C. F., a married woman, aged 52, was admitted on August 28th. Just previously, she had lost a large quantity of blood. Upon examination, it was found that she had on each ligamentum patellæ a tumour of the size of a large orange. From the history of the case, which dates many years back, they evidently had been inflamed bursæ, the contents of which had gradually become solid from fibrinous deposit. The one on the right knee was ruptured from a blow; this was the cause of the loss of blood. Perfect rest in bed, with the heel raised, and cotton steeped in styptic colloid applied to the wound, was the treatment pursued. The case was well watched from this time up to Thursday, September 9th, when fluctuation was felt above the original wound. The parts sloughed, and emitted a most offensive sanious discharge. On Sunday, September 12th, there was a return of hæmorrhage, but inconsiderable in amount. To cleanse the wound and stop the unhealthy ulcerative process, it was resolved to apply nitric acid to the wound; and chloroform was administered for that purpose on Wednesday, September 15th. Dr. Skinner's apparatus was used, and the drop-bottle, which, by inversion, holds about half a drachm. This was replenished three times. Altogether, two drachms of chloroform was the quantity inhaled. From three to four minutes elapsed before the stage of excitement came on, which lasted three minutes longer. There was no third stage of complete insensibility, such as usually occurs, for the proper performance of a surgical operation; but she died instantly, without the slightest warning, immediately after muscular action. Marshall Hall's method, the Silvester method, and galvanism, were severally had recourse to. The last gave some slight hope of benefit, as the arms were raised, and the hands applied to the mouth; and the diaphragm acted twice, with two corresponding acts of inspiration. But this did not continue; and further efforts at resuscitation were, with regret, abandoned.

I am sorry that a *post mortem* examination was not allowed.

Croydon, September 1869.

I am, etc., J. S. JOHNSON.

FARADAY'S REPLY TO THE BROTHERS DAVENPORT.—He replied to an invitation of the Messrs. Davenport: "I am obliged by your courteous invitation; but really I have been so disappointed by the manifestations to which my notice has at different times been called, that I am not encouraged to give any more attention to them, and therefore I leave those to which you refer in the hands of the professors of legerdemain. If spirit communications, not utterly worthless, should happen to start into activity, I will leave the spirits to find out for themselves how they can move my attention. I am tired of them."—A few weeks later he replied to another different invitation: "Whenever the spirits can counteract gravity or originate motion, or supply an action due to natural physical force, counteract any such action—whether they can pinch or prick me, or affect my sense of feeling or any other sense, or in any other way act on me without my waiting on them, or, working in the light, can show me a hand, either writing or not, or in any way make themselves visibly manifest to me—whenever these things are done, or anything which a conjuror cannot do better, or, rising to higher proofs, whenever the spirits describe their own nature, and, like honest spirits, say what they can do, or pretending, as their supporters do, that they can act on ordinary matter whenever they initiate action, and so make *themselves* manifest—whenever by such-like signs they come to me and ask my attention to them, I will give it. But until some of these things be done, I have no more time to spare for them or their believers, or for correspondence about them."

THE POOR-LAW MEDICAL SERVICE

OF

GREAT BRITAIN AND IRELAND.

THE INQUIRY AT ST. PANCRAS WORKHOUSE.

THE report of Mr. Montagu Bere, who was appointed as Commissioner to inquire into the conduct of Mr. Harley, was read to the Board of Guardians on Monday. It was necessarily a long one. In the course of it, he says he "thinks that Mr. Harley was very injudicious in the language which he used, and that such language afforded foundation for these charges being made." The charges were chiefly two—one, general, that he was appointed with the definite object of reducing the number of inmates of the Infirmary; and the other, a special one, with reference to the improper discharge of certain patients. The patients were four in number, three of whom had been discharged as *well*, and the fourth would have been so, but the nurse pointed out the man's condition, and the word was altered to *better*.

Anne Daly had to be treated in the Workhouse for ten days after dismissal. She was suffering from albuminuria, and her condition was such as to attract the attention of Dr. Markham, in making his inspection of the Workhouse; yet she had been sent out as *well*.

Wright was admitted into the Workhouse the day after he was discharged from the Infirmary, but he had taken a long walk on the day of his discharge. He was found to be suffering from consolidation of one lung.

Bishop sent for a doctor on the evening of his dismissal, and was found to be suffering from "consolidation of one lung, with bronchitis and some pleurisy." When Mr. Harley sent him out he believed him cured as to the complaint for which he was admitted, "rheumatism of the hands."

Mary Allen, within ten days, was attacked with erysipelas, and died; but the evidence was very conflicting as to whether her discharge in any way hastened the attack. It was undoubtedly proved that she had overexerted herself before the erysipelas appeared. The Board, however, "felt bound to record their view that Mr. Harley committed an error of judgment" in sending the mother and children out before they had well recovered from scarlet-fever.

The occurrence of four such cases in about three weeks after Mr. Harley's appointment would certainly lead to the supposition that Mr. Harley was over zealous in clearing the Infirmary of cases which, to say the least of it, were but doubtfully fit for discharge.

In the first case, albuminuria, easy of detection, existed, and had been overlooked. In the second, it is quite possible that the mischief occurred after dismissal, owing to a long walk. In the third, probably a well-marked disease of the lung was overlooked. In the fourth, the patient was only just recovering from what was supposed to be scarlet fever, and was scarcely in a condition to be sent out, though the subsequent attack of erysipelas may not have been in the least dependent on such dismissal.

Altogether, it seems to us pretty evident that such injudicious clearing of the Infirmary wards, whether or not to show that the building was quite large enough, and the erection of an additional one unnecessary, could not too quickly be put a stop to for the sake of the patients concerned, and, in the long run, the ratepayers' pockets.

OBITUARY.

GEORGE GREAVES, ESQ., OF MANCHESTER.

MR. GREAVES was a student at St. Thomas's Hospital, where he obtained a silver medal for surgical proficiency. He became a member of the Society of Apothecaries in 1828, and of the Royal College of Surgeons in 1829. He was medical officer to the Chorlton Union Hospital for thirty-two years, first as house-surgeon, and subsequently as consulting medical officer. He may truly be said to have devoted the best years of his life to the improvement of all matters connected with the administration of relief to the sick poor. It was owing in a great measure to his influence and exertions that the guardians decided on erecting the pavilion hospitals at Withington, considered among the best, for their size, in the kingdom. In 1865, when typhus raged throughout Hulme and Chorlton-on-Medlock, and the staff of hired nurses proved altogether insufficient, he procured the attendance of several of the nursing sisters from All Saints Home, Margaret Street, and laboured with them most indefatigably, day and night, amidst the

crowded fever wards of the hospital. A paper which he addressed to the guardians drew public attention to the fact that Manchester was in a most unhealthy condition, from causes which were easily preventable provided that suitable sanitary measures were adopted. Indeed, his efforts for the sanitary improvement of the city and neighbourhood were unceasing. As certifying surgeon under the Factory Act, he ever strove to do good both to master and workpeople. He was an active member of the Manchester Sanitary Association and of the Statistical Society. His death was caused by phlegmonous erysipelas, the result of purulent absorption. He inflicted a slight wound on his left thumb while putting in a suture after the amputation of a leg at the Withington Hospital. After three days he became seriously ill, and sank exhausted five days afterwards, having previously overworked himself and taken far too little rest. He had just passed his sixty-third year, a period of life which he had always expected would greatly try him.

He was a strong opponent of the system of wet-nursing, being of opinion that, as a general rule, it was simply setting the life of one child against that of another, and was, besides, a direct encouragement to vice. These views he embodied in several pamphlets, which had an extensive circulation. He was also the author of *Hints to Certifying Surgeons under the Factory Acts*, *Observations on the Laws Referring to Child Murder and Criminal Abortion*, *Homes for the Working Classes*, *Our Sewer Rivers*, etc.

His funeral, which took place on the 12th instant, at Chorlton-cum-Hardy, was attended by most of the Poor-law guardians, the hospital surgeons, and such of the officials of the workhouse as could be spared from their posts. He died, even as he lived, in the consistent discharge of his duty, and the earnest endeavour to do good. "Blessed is that servant whom his Lord when He cometh shall find so doing."

JOHN WARD, ESQ., OF BODMIN.

MR. WARD died at Reading on September 7th, in the house of his son, aged 72 years, forty-five of which had been spent in the active and successful exercise of his profession at Bodmin. He went to that town in 1823, on his appointment to the surgeoncy of the Cornwall Rangers Militia, a post which he held until within a few months of his death. Among the many other professional offices he filled, we may mention that he was Senior Surgeon of the East Cornwall Hospital, and for years of the County Prison. He was also a very old member of the British Medical Association. In practice, he was skilful, prompt, and energetic, and had wonderful tact in obtaining and keeping the confidence of his patients, many of whom were the highest in rank and wealth in his native county, who, equally with the poorest, looked upon him as a personal friend, not less than their trusted adviser. Socially, he was held in great respect, and was the senior magistrate of his borough and a justice of the peace for Cornwall.

A STRANGE STORY has got abroad in Edinburgh recently in regard to an aged female pauper in the St. Cuthbert's Poorhouse. The woman has been an inmate of the Poorhouse for many years, and was blind. Not long ago she was attacked with a very violent pain. It lasted for the whole of the night, and part of the following day. At last it reached its height; the poor woman for a time was left in a state of semi-prostration; but to her delight, as soon as the pain had passed off, she found that her eyesight had been restored! One can imagine the astonishment of one of the officers, when, shaking him heartily by the hand, she said—"I have often shaken hands with you before; I have often heard your voice and spoken to you; but never have I seen your face till this morning!"—*Inverness Advertiser*.

SUDDEN INSANITY OF TWO BROTHERS.—A strange incident is reported as having taken place in West Cornwall. At Trewedna Farm, Perranarworthal, there lived a respectable family named Martin, consisting of the father, his wife, and two sons—Henry and James, aged respectively 30 and 27 years. At the death of their father the farm fell into the hands of the sons, who have made the farm flourish. James, however, was taken ill through overwork, and he proceeded to Penzance with the intention of going to Scilly by the Little Western steamer for the benefit of his health. On the day of the starting of the steamer a gale sprung up, and the boat, having proceeded as far as the Land's End, was obliged to return. Henry, meanwhile, became greatly alarmed about his brother's safety, and proceeded by train to Truro railway station to make inquiries. Scarcely had he got there before the West Cornwall train arrived, and he saw his brother looking out of one of the carriages. The sudden surprise, acting on his previously agitated state, drove him mad, and his brother has since shown such symptoms of insanity that they are both placed under restraint and the care of a surgeon.

MEDICAL NEWS.

THE SOCIAL SCIENCE CONGRESS.

SIR STAFFORD NORTHCOTE ON STATE MEDICINE.

THE Thirteenth Annual Meeting of the National Association for the Promotion of Social Science, commenced on Wednesday last, with an Address from the President, Sir Stafford Northcote, Bart., M.P. In the course of the address, the President, speaking on sanitary matters, said:—It is much to be regretted that we have not as yet a thoroughly well-organised department of the government charged with the duty of superintending our sanitary system. There is, I am convinced, abundance of work for a Minister of Health, and I believe that such an officer would be able amply to justify the expenses which the department would occasion by the services he would render. We must remember that there is the broadest distinction between government interference with private enterprise and government support of private enterprise; and we must not confound the creation of public offices for the promotion of important objects with the absorption of all dealings with regard to those objects by the state. The time is probably at hand when three new ministries must be created: a Ministry of Health, a Ministry of Education, and perhaps (though on this point I speak with diffidence) a Ministry of Justice. The present day, however, is the day of Royal commissions; that of ministries is yet to come. More than one such commission is now inquiring into questions affecting the public health. The most important is that presided over by Sir Charles Adderley, which is considering the consolidation of our very complicated sanitary laws, and the completion of our system of sanitary organisation. Those who are in the habit of paying attention to the connection between the growth of national habits and the growth of national language, will not have failed to notice the recent introduction among us of the phrase State Medicine, a phrase absolutely new to many of us, and perhaps still imperfectly understood by the general public. Let me, by way of giving an idea of what it is, quote the list of subjects which, as a committee of the General Medical Council informs us, have been suggested as proper for the examination of candidates desiring to take out a diploma in State Medicine, and to enter the public medical civil service. They are: Forensic Medicine, Toxicology, Morbid Anatomy, Psychological Medicine, Laws of Evidence, Preventive Medicine, Vital and Sanitary Statistics, Medical Topography, and certain portions of Engineering Science and Practice. State Medicine, in short, as a member of the Committee well expresses it, consists in the application of medical knowledge and skill to the benefit of communities, which is obviously a very different thing from their application to the benefit of individuals in private or curative medicine. We are all of us aware that medical men are continually being called upon to perform public duties which lie wholly beyond the range of their private practice. They are called on to give evidence in courts of justice as to the nature of injuries, the causes of death, the sanity or insanity of individuals, the presence or absence of poisons, the wholesomeness or unwholesomeness of articles of food, of water, of the vapours occasioned by particular kinds of manufacture, and so on. They are, or may be called on to act as coroners, as inspectors of the sanitary condition of workhouses, of prisons, of ships, of barracks, and of various public buildings. Their advice is required in relation to the purification of rivers, the drainage of towns, the regulation of burials, the repression of contagious and infectious diseases both among men and among animals, quarantine, vaccination, and numerous cognate questions. In fact, it is difficult to assign a limit to the demands which the state might with advantage make upon the time and intelligence of a well-organised medical civil service. These remarks naturally suggest two reflections. In the first place, we seem to want a body of men able to withdraw themselves without inconvenience from the engrossing demands of private practice, and to devote themselves to the especial study of the public questions which require medical attention. To a certain extent, of course, it is desirable that all medical men should study those questions; and upon some of them it is necessary that they should be prepared to give opinions as cases arise. But the physical powers, even of medical men, are limited; and it is impossible that a doctor in large private practice, with all the anxieties which such practice necessarily entails upon him, should give to questions of a public character the time and consideration which their importance demands. In the second place, when we have got our Medical Civil Service, how are we to turn it to the best account? This is undoubtedly a question of great difficulty, and one which must lead us into other fields of inquiry, for it connects itself very directly with the whole question of local organisation, and of the relations between the central and the municipal authorities of the country. If

we are to have an organised medical staff spread over the face of the land, some kind of local organisation will be required for it; the machinery cannot be wholly worked from London. The solution of this problem will, I hope, be materially assisted by the labours of the Royal commission now sitting under the presidency of Sir C. Adderley; and, should it be solved satisfactorily, the result may be important in more ways than one; for a good system of local organisation for one purpose will greatly facilitate the establishment of a good system for other purposes. Few greater advantages could be conferred on England than a well-considered framework of local self-government, charged with the administration of most of those matters of which this association takes cognisance,—of justice, of health, of education, of charitable trusts, and so forth,—subject to due control by the supreme central power. I should have been glad, had the time permitted, to make some remarks upon the sanitary questions which have been raised in British India, and upon the measures which have been taken for the improvement of the public health there. But I should be tempted into too wide a field; and, though I am well aware of the great interest which the members of this association feel in all that relates to the social condition of our Eastern empire, and of the personal labours there of one whose name I need not mention in the present assembly, for I am sure it is in all our hearts, I must exclude India altogether from the field of my observations.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, September 23rd, 1869.

Andrews, Arthur, Colney Hatch
Harris, Andrew, Manchester
McGill, Arthur Fergusson, King's College Hospital
Palmer, William James, Great Yarmouth
Sherratt, James Swindells, Granby Street, N.W.
Wilke, Oscar Adolph Gotthilf, Winchester Street, Pimlico

The following gentlemen also on the same day passed their first professional examination.

Bailey, Henry Bennett, Guy's Hospital
Clarke, Frederick Howard, Guy's Hospital
Deeping, George Davidson, Guy's Hospital
Thornton, Philip, London Hospital

MEDICAL VACANCIES.

THE following vacancies are declared:—

ARDREE UNION, co. Louth—Medical Officer and Public Vaccinator for the Collon Dispensary District.
ARTHOG SLATE QUARRIES, Barmouth, Merionethshire—Surgeon.
AXBRIDGE UNION, Somerset—Medical Officer and Public Vaccinator for District No. 1: applications, 4th Oct.; election, 5th Oct.
BRISTOL DISPENSARY—A Resident District Surgeon: applications, 2nd Oct.; election, 4th Oct.
CHICHESTER INFIRMARY—Assistant to the House-Surgeon: duties early in October.
DOLGELLY UNION, Merionethshire—Medical Officer for the Barmouth District.
HARTLEPOOL—Admiralty Surgeon and Agent.
HORNCastle UNION, Lincolnshire—Medical Officer for the Tetford District: 5th Oct.
HULL GENERAL INFIRMARY—Resident House-Surgeon: applications, 18th October.
KIDDERMINSTER INFIRMARY—House-Surgeon and Secretary: applications, 12th Oct.
LEEDS GENERAL INFIRMARY—Resident Medical Officer: applications, 4th Oct.; election, 7th Oct.
LIVERPOOL, Parish of—A District Public Vaccinator.
MALTON (Yorkshire) DISPENSARY—Physician.
MIDDLESEX HOSPITAL—Demonstrator of Anatomy.
MONAGHAN UNION—Medical Officer for the Scotstown Dispensary District.
ROSCREA UNION, co. Tipperary—Medical Officer for the Workhouse: election, 14th Oct. Medical Officer for the Ballybritt Division of the Roscrea Dispensary District: date of election not yet fixed.
ROYAL SOUTHAMPTONSHIRE INFIRMARY, Southampton—Surgeon.
ROYAL ISLE OF WIGHT INFIRMARY, Ryde—House-Surgeon: applications, 5th October; vacancy, 3rd Nov.
ROYAL SURREY COUNTY HOSPITAL, Guildford—House-Surgeon: applications, 5th Oct.; duties, 26th Oct.
ST. BARTHOLOMEW'S HOSPITAL—Resident Physician.
ST. MARYLEBONE GENERAL DISPENSARY—Physician.
SEVENOAKS UNION, Kent—Medical Officer for District No. 6.
SOUTHAMPTON INCORPORATION OF THE POOR—Dispenser.
SPALDING UNION, Lincolnshire—Medical Officer and Public Vaccinator for the Gosberton District.
SUSSEX COUNTY HOSPITAL, Brighton—House-Surgeon: applications, 3rd November; election, 24th November.
SWANSEA INFIRMARY—House-Surgeon: applications, 24th Nov.; election, 1st Dec.
THORNE UNION, Yorkshire—Medical Officer for the Workhouse.
UNIVERSITY OF ABERDEEN—Three Examiners for Graduation in Medicine; election, October.
WIGAN UNION, Lancashire—Medical Officer and Public Vaccinator for the Wigan District and the Workhouse: applications, 21st Oct.
WIRRAL UNION, Cheshire—Medical Officer for the Upton District.

BIRTHS.

THOMPSON.—On September 22nd, at Oakley Square, St. Pancras, the wife of John Thompson, L.R.C.P. Ed., of a son.
WHITLING.—On September 17th, at Croydon, the wife of *H. Townsend Whitling, Esq., Surgeon, of a daughter.

MARRIAGES.

HUGGINS, William H., Esq., of Highgate, to Maria, eldest daughter of Henry A. Rawlins, Esq., Surgeon, of Kentish Town, on September 16th.
WATSON, George Samuel, Esq., of Thaxted, Essex, to Ellen, youngest daughter of *Charles TRISTRAM, Esq., Surgeon, of Tunbridge Wells, on September 15th.

DEATHS.

COLLINS.—On September 16th, at The Beeches, Chew Magna, Somerset, aged 44, Henrietta Jane Heaven, wife of *Charles Howell Collins, Esq., Surgeon.
DICKSON, Edward Thompson, Esq., formerly Surgeon R.N., at St. Heliers, aged 76, on September 15th.
HARMER.—On September 23rd, Alexander James, infant son of *W. Milsted Harmer, M.R.C.P.E., North Grove House Asylum, Hawkhurst.
LIPSCOMB, John Thomas, Esq., Surgeon, at St. Albans, aged 77, on Sept. 25th.
*WARD, John, Esq., Surgeon, of Bodmin, at Reading, aged 72, on Sept. 7th.
WRIGHT, John James, M.D., aged 52, at Malton, Yorkshire, aged 52, on Sept. 21st.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopædic Hospital, 2 P.M.
WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

FRIDAY.—Clinical Society, 8 P.M. Dr. W. H. Day, "On the Hypophosphates of Iron, Quinine, and Strychnia, in Nervous Exhaustion"; Dr. Clapton, "On the Effects of Copper upon the System"; and other papers.
WEDNESDAY.—Obstetrical Society of London, 7.30 P.M., Council Meeting. 8 P.M., Dr. W. Martyn, "Case of Triplets"; Mr. J. T. Mitchell, "Case of Ruptured Uterus"; Dr. V. Saboia, "On the Treatment of Ovarian Disease by the Injection of Iodine."

EXPECTED OPERATIONS AT THE HOSPITALS.

KING'S COLLEGE HOSPITAL, Saturday, October 2nd, at 1.45 P.M. For Cicatrix from Burn; Excision of the Knee; for Fistula *in ano*; for Necrosis of Humerus—by Mr. Wood. Excision of the Knee and for Fistula *in ano*—by Mr. Smith.
MIDDLESEX HOSPITAL. Amputation of the Leg; Excision of the Elbow; Excision of the Tongue—by Mr. Moore. Amputation of the Arm; Radical cure of Hernia—by Mr. Nunn. For Double Cataract—by Mr. Hulke.
ST. MARY'S HOSPITAL. Operation for Diseased Elbow-joint; Amputation of the Thigh (?)—by Mr. S. Lane. Operation for Cataract—by Mr. Walton.
LONDON HOSPITAL, Wednesday, October 6th. Excision of Elbow-joint; Removal of Necrosis—by Mr. Jonathan Hutchinson.
ST. THOMAS'S HOSPITAL, Saturday, October 2nd; and Wednesday, October 6th. Operation for Ununited Fracture of Humerus; Removal of Large Tumour from Back of Neck, under Trapezius Muscle; Lithotomy; Removal of Vesical Calculus in Female; Probable Amputation of Foot; Operation for Cleft Palate; some Operations for Necrosis.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE statement made last week, that Dr. Bristowe had been appointed Medical Inspector of Prisons, was an error.

THE LONDON HOSPITAL ELECTIONS.—Mr. Rivington, as Dean of the London Hospital Medical College, has directed our attention to the fact that an expression used in our notice last week of the election of assistant-surgeons, is capable of misapprehension. He informs us that the Medical Council was not consulted by the House-Committee, and had therefore no responsibility in the matter. The conferences to which we referred were with individual members of the staff only.

THE ACTION OF MERCURY.

SIR,—With due deference, I beg to submit that the experiments on the poor dogs in Edinburgh have entirely failed to prove that mercury and podophylline exert no action on the liver. When a tube is inserted into the biliary ducts, it must of necessity produce a certain inflammatory action, which will, of course, extend to the liver, and check healthy secretion. Besides, think of the restraint, the want of exercise, and the irritation of a foreign body in contact with the sensitive internal organs.

If a child, in teething, passes motions from the bowels, very loose and very white, a few grains of hydrargyrum cum creta, which is not purgative, produce biliary stools in a few hours, and much more consistent, which is not the action of purgatives. In jaundice, also, blue pill alters the secretion of the liver, and changes the chalky motions into dark brown.

September 1869.

I am, etc.,

E.

CEREBRATION UNDER DIFFICULTIES.—Our readers will be familiar with the anecdote of the practical joker who caused a discharged soldier to drop the dinner he was carrying home, by calling out the word "Attention". *Punch* last week gave an illustration of a city merchant who is blissfully reposing in a country church. Being disturbed by the official who brings round the collecting-bag, he automatically responds, as he is accustomed to respond to the railway guard when dozing in the train, "Season Ticket". An anecdote is narrated of a railway porter, who, when similarly disturbed in church, called out lustily, "Change here for," etc. These anecdotes, however apocryphal, seem to illustrate reflex action in its higher development.

EFFECT OF LIGHT ON COMBUSTION.—Mr. Tomlinson read a paper at the British Association on the Effect of Light on Combustion. He found by experiments on candles in dark rooms, and in day and sun-light, that increase of temperature led to increased consumption and *vice versa*, but not to any material extent; and that direct or diffuse sun-light has practically no action on the rate of burning of a common candle.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Sept. 22nd; The New York Medical Gazette, Sept. 11th; The Parochial Critic, Sept. 22nd; The New York Medical Record, Sept. 11th; The Boston Medical and Surgical Journal, Sept. 9th; The Aberdeen Free Press, Sept. 21st; The Madras Mail, July 21st; The Indian Medical Gazette, August 16th; The Croydon Chronicle, Sept. 18th; The Birmingham Daily Post, Sept. 24th; The Middlesex Chronicle, Sept. 25th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. Lister, Worthing; Dr. W. Wadham, London; Mr. W. H. Davis, London; A Subscriber, London; Messrs. Fannin and Co., Dublin; Mr. F. Wright, Stamford Bridge; Dr. Packard, Philadelphia; Mr. J. A. McBride, Cirencester; Mr. Kemp, Nelson, New Zealand; Mr. Swindell, London; Dr. Richardson, London; The Secretary of the Clinical Society of London; Mr. E. C. Hulme, London; Dr. H. C. Bastian, London; Sir D. Corrigan, Bart., M.D., Dublin; Dr. Rutherford, London; H. G., Hull; Dr. Bruce, Crimond; Dr. J. Walker, London; Mr. W. F. Morgan, London; Dr. Dickson, London; Dr. J. Brown, Bexley Heath, Kent.

LETTERS, ETC. (with enclosures) from:—

Mr. F. Le Gros Clark, London; The Secretary of the Royal Hospital for Diseases of the Chest, London; Dr. E. D. Mapother, Dublin; Mr. G. T. Brown, London; Mr. J. R. Thompson, Bournemouth; Mr. T. Watkin Williams, Birmingham; Mr. T. Q. Couch, Bodmin; Dr. J. K. Spender, Bath; Dr. George Johnson, London; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Lomas, London; Dr. Treutler, Kew; Dr. Elliot, Carlisle; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. Blanc, London; Mr. G. Gaskoin, London; Dr. James Russell, Birmingham; Mr. T. H. Bartleet, Birmingham; Dr. R. Liveing, London; Mr. C. H. Collins, Chew Magna; E., Newcastle-upon-Tyne; Academicus; Mr. Whitling, Croydon; Dr. Styrap, Shrewsbury; Mr. Bradley, Manchester; Dr. Stone, Manchester; Dr. A. Davidson, Liverpool; Mr. E. Garraway, Faversham; The Medical Officers and Lecturers of the Middlesex Hospital; The Principal and Professors of King's College; The Medical Officers and Lecturers of St. Mary's Hospital Medical School; Dr. A. Leared, London; Mr. W. Rivington, London; Dr. D. McVeagh, Coventry; Dr. J. S. Bristowe, London; Dr. F. J. Parsons, Yeovil; Dr. C. Hilton Fagge, London; Mr. J. Sampson Gamgee, Birmingham; Dr. C. R. Drysdale, London; Mr. F. Smith, Jersey; and Mr. Draper, York.

BOOKS, ETC., RECEIVED.

The Various Theories of the Relation of Mind and Brain reviewed. By George Duncan. London: 1869.

Compulsory Vaccination. By H. Blanc, M.D., F.R.G.S., etc. London: 1869.

The Fourth Annual Report on the Sanitary Condition of Merthyr Tydfil for 1868.

By T. J. Dyke. Merthyr Tydfil: 1869.

Additional Testimonials in favour of W. R. Saunders, B.L., M.D., Candidate for the Chair of General Pathology in the University of Edinburgh.

Elements of Chemistry: Theoretical and Practical. By William Allen Miller, M.D., D.C.L., LL.D. Part III, "Organic Chemistry". London: 1869.

A System of Surgery: Theoretical and Practical. Edited by T. Holmes, M.A. Second Edition, with Illustrations. Vol. I: General Pathology. London: 1870.

The Mechanism of Dislocation and Fracture of the Hip. By H. J. Bigelow, M.D. With Illustrations. Philadelphia: 1869.

LECTURES

ON THE

PRINCIPLES OF SURGICAL DIAGNOSIS:

ESPECIALLY IN RELATION TO SHOCK AND
VISCERAL LESIONS.*Delivered at the Royal College of Surgeons of England.*

By F. LE GROS CLARK, F.R.C.S.,

Hunterian Professor of Surgery and Pathology in the College; Surgeon to
St. Thomas's Hospital; and Examiner in Surgery at the
University of London.

LECTURE VI.—LESIONS OF ABDOMEN (CONTINUED).

*Intestinal Obstruction from Various Causes.—Internal and External
Strangulation: Symptoms and Signs.—General Observations on
Hernial and other Obstructions.—Fatality of Operations for Hernia,
and its Causes; Practical Conclusions.—Foreign Bodies in the
Stomach and Intestines.*

LESIONS OF THE PELVIC VISCERA.

*Fractures of the Pelvis and their Complications.—Rupture of Bladder;
Is it always Fatal? Effects: considerations suggested thereby.—Rup-
ture or Laceration of Urethra: Causes and Symptoms.—Traumatic
Lesions of Rectum.—Shock in Pelvic Injuries, and in Certain Morbid
Conditions of the Uterus.—Recapitulation.—Indications Premonitory
of Dissolution or Convalescence.—Conclusion.*

MR. PRESIDENT AND GENTLEMEN,—It would be difficult to meet with a more apt illustration of the remark with which I commenced this course of Lectures than in the subject of intestinal obstructions. The essential conditions under which such obstruction from strangulation occurs, whether internal or external, may be identical, yet one class of cases is assigned to the physician and the other to the surgeon. But the diagnosis of these conditions in the two classes is by no means equally simple; and the surgeon has the advantage in the presence of tangible and visible signs, which rarely admit any equivocal interpretation. So obscure, indeed, are the symptoms, in many instances, by which internal strangulation can be recognised, so as to identify either its locality or its proximate cause, that it has been the effort of the physician to place himself, as nearly as possible, on a par with the surgeon, by exploring the abdomen, in the hope of obtaining the aid of physical signs to guide him in his diagnosis. And I cannot pass by this remark without a tribute to the memory of my late colleague, Dr. Brinton, whose sagacity and philosophical acumen in the investigation of this obscure but interesting subject, have an appropriate and enduring record in his admirable posthumous work on *Intestinal Obstruction*.

The indications by which obstruction in the bowels is recognised, whatever its source or position, may be classified under two heads, viz.: general and local; and it is upon the combined presence of both that the surgeon founds his diagnosis of strangulated hernial protrusions. It is for this reason, and because such general symptoms and local signs rarely co-exist under other circumstances, that the diagnosis of strangulated rupture is usually so simple, as to leave the surgeon without excuse for overlooking its presence and neglecting the appropriate treatment. But, *separately*, the local signs and general symptoms are inconclusive. The presence of a tender swelling in the groin is suggestive of various conditions which have nothing in common with rupture, such as inflamed glands, abscess, malignant tumour, undescended testicle: and many circumstances may, either separately or in combination, produce constipation and persistent vomiting, besides the strangulation of an external hernia; such as intus-susception, internal strangulation, a malignant tumour, stricture, impacted feces, and other causes: but the presence of a tender swelling in the groin, accompanied by the characteristic pain and sense of constriction across the epigastric or umbilical region, together with constipation, vomiting, and the history of a hernial descent, may be regarded as conclusive. It is true that there may be many disturbing causes in operation which modify the symptoms or complicate the diagnosis. Even simple inflammatory swellings may be attended by constitutional symptoms somewhat resembling those which characterise rupture; but such coincidence is accidental: or perplexity may arise from the concurrence of internal strangulation with an irreducible hernia: and occasionally the local signs are inconsistent in character and intensity with the general symptoms; as where a mass of omentum

is the solitary occupant of the sac; and still more so in the not infrequent complication of the presence of a small recent intestinal protrusion behind an old and irreducible omental rupture.

The symptoms which characterise internal strangulation and recent hernia are very closely allied, and for the obvious reason that these conditions are in all essentials identical, differing only in the accidental circumstance of locality. Some of these symptoms are due to the compression to which the bowel is subjected, and these are the earlier and more acute; such as pain, which is both topical and more or less general over the abdomen, and often assumes the character just now referred to, of a sense of painful dragging and constriction across the umbilical region; rejection of the contents of the stomach, excited immediately anything is swallowed; tenderness in the swelling if external, or at some particular spot if internal. Small recent herniæ are most liable to strangulation; and in such cases the strangulation is usually most acute: but the topical signs are much modified in old ruptures; for the accustomed descent of a hernia renders it less susceptible of pain, and may lead to its being overlooked even when the general symptoms have declared themselves. Indeed, when acute local indications usher in strangulation in an old hernia, the explanation is probably to be found in the accidental addition of a small knuckle of intestine to the ordinary omental contents of the sac,—a form of rupture which, as I have already remarked, is frequent, especially where the omentum is adherent and therefore irreducible. I would observe that this occurrence may mislead the inexperienced operator; for the intestinal addition is often very small and entirely hidden, until sought for; and its return, during or immediately prior to an operation, accounts, as I believe, for the apparent anomaly which I have met with, of symptoms of acute strangulation coincident with the presence of unconstricted omentum only in a sac.

At a later period the character of the vomit becomes altered, as the point of departure of the reflected stream recedes from the stomach. But this feature—fecal discharge by the mouth—characterises a stage distinct from that in which the mechanical irritation of constriction is the cause of sickness: the regurgitant vomit is the consequence, as already explained, of obstruction and accumulation in the intestine; and the rapid development of this sign is, to a certain extent, a measure of the distance from the stomach of the seat of strangulation.

The prostration which marks the latter state of strangulation is very variable as to its period of access; the chief conditions influencing it being the position and tightness of the constriction, the treatment of the patient, and his general power. The pinched and anxious countenance, the parched tongue and hiccough, are added to the usual symptoms of earlier collapse: in fact, the state of the sufferer is identical with that which accompanies gangrene, though the actual annihilation of vitality in the strangulated bowel have not taken place. And this period brings relief to the patient, both as regards the acuteness of his suffering and the continuance of vomiting: but the apparent amendment is fallacious, and is in fact the harbinger of death.

General peritonitis is not usual in internal strangulation or in hernia: and the pain and tenderness which attend these lesions is due to this cause only in exceptional instances. Death usually results from prostration, consequent on the shock of a persistent violence done to the bowel, aggravated by the depressing influence of constant vomiting and inanition. Perforation of the bowel and extravasation of its contents are followed by collapse, and, if the patient survive sufficiently long, by peritonitis, as in rupture from violence.

It is well known that the late Dr. Brinton opposed the previously received hypothesis that intestinal regurgitation is dependent on antiperistalsis, and substituted his own theory, that those particles of the liquid contents of the bowel "which are in contact with the inner surface of the tube, are propelled onwards by the muscular contraction of its wall. And this propulsion is necessarily accompanied by a backward current in those particles which occupy the axis or centre of the canal". I believe this explanation to be correct in most instances; but I doubt its accuracy in all. For, unquestionably, regurgitant vomiting does occur sometimes when there is no obstruction to account for the mechanism of Dr. Brinton's explanation. But, whatever the cause of such regurgitant action may be, there can be no doubt that, combined with constipation, this sign is of great value, especially when the period of its occurrence is considered in relation to the question of time as applied to other symptoms, and also to the topical evidence afforded by distension, tympanitic resonance or dulness, and similar physical signs. Thus, fecal vomiting occurs, for an obvious reason, at an earlier period in obstruction of the small intestine than of the large; and the delay is protracted beyond what the larger interval of space would account for, by the necessity, as pointed out by Dr. Brinton, that an extreme degree of distension of the lower end of the ileum must exist before the ileo-cæcal valve can be thrown open.

The course and progress of the symptoms marking the *fatal* tendency

of insuperable obstruction, vary very much in different cases; and, other things being equal, the rapidity with which the more acute symptoms merge in collapse is a measure of the rigidity and tightness of the strangulation, whether external or internal. The first sign of *pain* may be an index of the probable course the attack will take. If sudden and intense, the strangulation is correspondingly acute; and this characteristic is more often found in recent and small herniæ;—a class of cases, therefore, demanding the speediest relief by operation. Yet, the kind of pain of which I am speaking is also present in sudden extravasation of the contents of the bowel from ulceration; and I have met with cases in which it was impossible, at an early period, to assign the agonising suffering to its true source. But the collapse is earlier in ruptured bowel; and the pain is more continuous, and not of that paroxysmal type which accompanies obstruction, and is synchronous, in its periods of access, with the peristaltic movement of the intestine, which may be noticed even externally.

The seat of internal strangulation may be often conjectured,—in some instances identified,—by the physical signs of *distension*, *dulness* on percussion, and the visible and tangible *movements* of the bowel. But these signs are more valuable in their bearing upon the large than upon the small intestine; for the tympanitic distension of the colon may define the actual locality of the obstruction.

It is with obstruction of the small intestine that the surgeon usually has to deal; and in these cases indications of strangulation are generally more acute and earlier in reaching their culmination: the pain is more intense, the vomiting earlier; and there is a peculiar sense of distressing constriction across the umbilicus: whereas, in colic obstruction, the seat of suffering is often localised in the right iliac fossa.

In diagnosing the seat of obstruction, some importance has been attached to the quantity of *urine* secreted, which is usually less in proportion to the proximity of the seat of strangulation to the stomach; and under these circumstances it is assumed that the intestine itself pours out fluid more abundantly. The many exceptions to this rule in great measure negative its diagnostic value; though unquestionably there is, as might be expected, a relation between the quantity of urine secreted and the amount of watery vomit, which I have known to be, in some instances, almost incredibly abundant.

Irremediable *paralysis* precedes gangrene, and is often, by itself, a cause of fatality, even when relief has been afforded by operation. Indeed, every practical surgeon knows that it is one of the chief difficulties with which he has to contend after liberating the strictured gut; and it is a condition which tests his forbearance in the after-treatment of his cases. This consideration is one which should exercise its influence in determining him not to delay affording relief by operation when his decision is required. A rapidly distended bowel is most obnoxious to paralysis; and I believe that paralysis with its usual concomitant, distension, is a ripe source of fatality in strangulated intestine.

The question of surgical interference in internal strangulation is necessarily influenced importantly, if not entirely ruled, by the special diagnosis. The performance of a serious operation, in itself threatening to life, has its only justification in the more menacing character of the disease for the relief of which it is undertaken: and in internal strangulation it is very difficult to decide on the chances of spontaneous relief, even when the diagnosis as to the nature and seat of the constriction is determined. These two circumstances constitute, in fact, the bar to operating, as a rule, in these cases: viz., the obstacles to forming a correct diagnosis; and the uncertainty which invests the prospects of the patient, even when the nature of his malady is ascertained. An early operation is not justifiable; a late one is useless: and under either condition the operator may fail in accomplishing his purpose. These considerations govern the decision of surgeons in the majority of such cases: and my own conviction is, that abstinence from interference, as a general if not universal rule, is judicious: for, judging by the *post mortem* examinations which I have made and witnessed in cases of internal strangulation, or of sudden obstruction from other causes, I should say that a large majority would have been irremediable, even had gastrotomy been performed: either the seat of the constriction was inaccessible, or its consequences were beyond repair.

A few remarks more especially applicable, severally and in succession, to Intestinal Obstruction and to Hernia, must close the present brief allusion to this extended subject.

In forming a diagnosis of the site of intestinal obstruction, from whatever cause, its position, if low down, may be indicated by the quantity of fluid which the bowel will receive, or even by the length of tube which may be passed into it; but I cannot say that confident reliance can be placed on these guides, which may be rendered deceptive by the presence of accumulated *fæces* in the bowel, and from other causes. It is certainly only in obstruction of the large intestine that complete constipation is prolonged, sometimes through many weeks;—

the distension becoming very great, and not infrequently accompanied with peristaltic activity in the small intestine, in its fruitless effort to pass onward its contents. In obstruction of the smaller bowel, from whatever cause, the symptoms are more acute, and the cases are more rapidly fatal.

I just now remarked that regurgitant intestinal vomit is not necessarily dependent on positive obstruction: the arrested peristalsis may be negative or passive. Thus, after relief of strangulation by operation, stercoraceous vomiting may continue for a time, and yet the patient may recover. The following is a typical instance of this condition. A middle-aged female was admitted under my care with acutely strangulated crural hernia; the intestine was deeply congested and of dark port-wine colour. On the fourth day after the operation the belly was tumid and tympanitic; the colon could be traced, and the vomit was stercoraceous. Prolonged friction over the abdomen and an injection were employed, after which the bowels were relieved, and she recovered. This condition was, doubtless, due to the persistent paralysis of the intestine, which is, in many instances, irrecoverable, and the cause of death. I have seen this state induced, apparently, by cold, exhaustion, or suppressed secretion, and characterised by gaseous distension and offensive vomit. Such instances of persistent constipation, with vomiting, I have examined *post mortem*, without discovering mechanical obstruction from any cause: in other similar cases relief has been obtained, without any evidence, so far as could be gathered from the character of the dejecta, that *fæcal* accumulation had caused the obstruction. This paralysed condition of the bowel is not infrequently relieved by long-continued friction, castor-oil being employed as the medium of its more effectual employment.

A condition of partial obstruction from stricture may become complete, in consequence of the contracted canal becoming accidentally plugged by some part of its contents. The suddenness of the attack may induce the belief that internal strangulation is the cause of the constipation; especially as aperients merely aggravate the symptoms, without affording any relief, whereas the lower bowel may be unloaded by an injection. Two cases of this class have come under my notice and partial care. In one, that of a middle-aged female, there was complete constipation for a fortnight before death, with the exception of an evacuation which was obtained by injection. The iliac regions were tumid and hard; perspiration was abundant; urine high-coloured; constant stercoraceous vomiting for the last twenty-four hours. The small intestines were found to be much distended with gas and fluid *fæces*: the same condition prevailed in the large intestine, as far as the junction of the transverse and descending colon, at which spot a large ulcer involved the whole calibre of the bowel; and the part was so contracted that an orange-pip, which plugged the orifice, could not pass. In the other instance, occurring also in a female of middle age, the previous health had been good, and no suspicion of disease existed until within less than a month prior to death. Obstinate constipation was present, although an injection brought away *fæculent* matter: all ingesta were returned, and the vomit occasionally had a stercoraceous character: the abdomen was tumid and tympanitic, but not tender; and much rumbling with violent pain came on in paroxysms. A long tube was passed without assisting the diagnosis: the patient died exhausted. The autopsy betrayed evidence of commencing peritonitis. The whole alimentary canal was greatly distended, as low as the termination of the sigmoid flexure of the colon: here, close to the upper part of the rectum, was a contraction which would not permit fluid to pass downwards: but when water was poured in below, a dark shrivelled body was washed out, resembling a raisin. In neither of the above cases was the acute suffering of internal strangulation present: but in many respects the symptoms were so nearly allied to this condition as to bring under discussion the propriety of gastrotomy; which, however, I discounted in both.

It is scarcely necessary to remark that, in such cases as the above, and in others in which obstruction is consequent on various causes, the evacuation obtained by injection is due entirely to the clearing of the lower bowel; and is not to be accepted as any indication that the obstacle to peristalsis, whatever that may be, has been removed. The favourable signs on which dependence may be placed are, ability to discharge foetid gas from the bowel; subsidence of sickness and abdominal tension; the varying position of any localised fulness, hardness, or resistance; the diminishing intensity and shifting site of the pain; and cleaning tongue: some, or even all, of these symptoms may be present, before any solid relief from the bowels is obtained.

Obstructions in the rectum are rare, except from the presence of accumulated and indurated *fæces*; *i.e.*, apart from the constrictions which constitute genuine stricture;—a form of disease which, I may remark, is often spoken of as more common than, so far as my observation has enabled me to judge, it really is. My experience relative to

the presence of foreign bodies in the rectum is in accordance with that of our President, who remarks that he has been rarely called upon to interfere in such cases: but I have met with some remarkable instances of protracted constipation, dependent, apparently exclusively, upon the accumulation of hardened feces in the rectum, giving rise to distressing symptoms, resulting from enormous distension of the abdomen. The longest period of constipation that I have relieved by breaking down the solid hindrance, is six weeks; the belly of the patient, a young man, being larger than that of a pregnant female at her full time. Complete relief speedily followed the removal of the induration by manual disintegration and repeated injection. I may add that, in one case of imperforate anus on which I operated a long time since, this process was required periodically for many years, in consequence of the constant tendency to fecal accumulation in the *cul-de-sac* in which the rectum terminated at some considerable distance from the manufactured anus; the communication between the two being by the intervention of a canal which it was difficult to keep open. The diagnosis of this form of obstruction is usually simple, if the obvious precaution of making an examination *per anum* be not overlooked or neglected.

Many sources of obscurity may invest the diagnosis of strangulated hernial tumours; though, as I have remarked, the existence of symptoms of constriction, combined with the external presence of a tender swelling where a hernia usually occurs, rarely leaves the nature of the malady in doubt. A hernia may be rendered irreducible by its size or distension, or by adhesions, or by the presence of thickened omentum, without strangulation: or symptoms of constriction may exist for a time, as I have already noticed, and disappear without apparent change in the physical characters of the tumour, in consequence of the temporary descent of a small knuckle of intestine. I have also found such supplementary rupture contained in a perfectly distinct sac.

Various complications which are, however, comparatively rare, may perplex the operator; but, with well-pronounced symptoms of strangulation, he should not be deterred from pursuing his exploration, until perfectly satisfied that there is no strangulated rupture within his reach. The size of a hernial protrusion cannot always be measured by the magnitude of the tumour, which may be augmented, in the crural variety, by the presence of enlarged glands, or by thickened and infiltrated tissues, or by an accumulation of fluid in the sac. The history of a hernial descent may likewise mislead the surgeon, if he expect that violence is an essential element in its production. I have known acute strangulation in a recent rupture succeed an apparently trivial exciting cause, such as the act of rising in bed. But in such instances the force applied acts at great advantage directly upon the abdominal contents.

The impulse on coughing, said to be propagated to a strangulated rupture, is sometimes spoken of as the means of distinguishing an inguinal from a femoral hernia: but the fact is that, in such constriction as produces symptoms of strangulation, no such impulse is communicated to the contents of the sac: the position of the neck of the sac is the chief reliable guide. The exact seat of stricture is not an important point to be ascertained before operating; and in most instances it is conjectural, if any deviation from the normal or ordinary disposition exist.

Sometimes a hernial descent may take an unusual course, as where an inguinal rupture spreads itself between the layers of the oblique muscles. I remember being consulted in an instance of this embarrassment, occurring in a young man, in which the form, position, and other local signs were very suggestive of a diffused parietal abscess: but the history and general symptoms left no doubt on my mind that the tumour was hernial, and I advised an immediate operation. The protruded bowel was spread out beneath the aponeurosis of the external oblique muscle; and its congenital form and sudden descent accounted for this peculiarity.

Even in the after-treatment of hernial operations the symptoms may suggest to the surgeon that he has overlooked some strangulated bowel; whereas, the explanation may be the formation of an abscess in near relation to the seat of operation, especially if a conduit for drainage have been neglected, by attempting primary union of the entire length of the wound. But these complications and sources of perplexity are too numerous to admit of further illustration, or, indeed, of more than a cursory notice.

Any part of the movable contents of the abdomen may be found in a hernial sac. I operated on one case in which the cæcum, with its vermiform appendix, was so placed. The stomach, and even the distended fundus of the bladder, have been found occupying a hernial sac: but the special symptoms by which such rare occurrences may be identified are not clearly defined; nor, indeed, is it of any importance that they should be.

Age is no bar to this accidental strangulation of a rupture, nor to its successful relief. The oldest patient on whom I have operated was a

lady of eighty-four: the youngest a male infant of eleven months. In both instances the usual symptoms were strongly pronounced, and the stricture was very firm: in each the patient made a good recovery.

In association with this subject I may call attention to the fatality, and its causes, in operations for hernia.

1. In reviewing my hospital experience, extending now over more than a quarter of a century, I cannot recall any instance where I have operated, in which I could reasonably attribute a fatal result to the operation, although my habit is, with rare exceptions, to open the sac.

2. I have never had occasion to regret operating too soon; but very often to deplore that the opportunity has not been afforded to me of operating earlier. In all doubtful cases the patient should have the advantage of an exploratory operation.

3. Acute general peritonitis is rarely the cause of death: but patients die most often exhausted, and without rallying from the intestinal paralysis and prostration induced by the antecedent strangulation and vomiting: or the contents of the sac may slough.

4. Such antecedent condition is not to be measured, as regards its intensity, by time: in many instances, a hernial descent of a few hours' duration may be so tightly constricted as to entail an irrecoverable condition of the bowel: whereas, in others, the persistence of strangulation, in a minor degree, for two or three days, may not seriously imperil the vitality of the intestine.

5. Inflamed and sloughing omentum may cause death, whilst the bowel remains pervious.

6. The most serious complications are entailed by rough and unskilled employment of taxis:—consequences which not only directly aggravate the risk to the patient, but likewise enhance the difficulties attending careful and well-directed efforts to afford relief. That hernia is a ripe cause of death, is attested by the Registrar-General's Report; for he assigns to this cause an average death-rate of eight hundred annually.

The conclusion which I draw from these facts is, that delayed operation is the most prolific cause of fatality in strangulated rupture; and that the operation itself, including opening the sac, is not, when necessary, a dangerous proceeding. On these grounds I cannot refrain from insisting on the importance of early operative interference in strangulated hernia; and from expressing my conviction that the danger attending the exposure of the interior of a hernial sac and its contents is, in great measure, imaginary. When the constriction is sufficiently firm to necessitate operation, there is, in my opinion, no increased risk in opening the sac, unless, indeed, the descent be very recent, and the stricture can be easily and securely divided externally. But I am persuaded that, in many instances, the peril of the patient is seriously augmented by refraining from so doing: for the surgeon remains in ignorance of the actual condition of the contents of the sac; and the products of congestion and inflammation are shut up within the peritoneum, and left to work their deleterious influence on this susceptible serous cavity.

Although the recorded cases of foreign bodies being introduced by the mouth, and lodged in some part of the alimentary canal, are remarkable for their variety and extraordinary nature, their comparative rarity affords but scanty opportunity to individual surgeons to add importantly to the list, or to our acquaintance with the indications by which a correct diagnosis may be formed.

When foreign bodies, thus introduced into the mouth, are arrested within reach of the finger, or are within sight, as in some instances which I related in my last lecture, or when pins or fish-bones stick in the fauces or gullet, the proper course for the surgeon to adopt is at once indicated. Respecting the minor form of injury here alluded to, I may repeat that the sensation produced by the presence of a pin or a fish-bone in the throat often long survives its removal; and the representations of the patient may thus mislead the surgeon.

Many solid and indigestible objects pass the alimentary canal, producing but trifling and temporary inconvenience, or no inconvenience at all, such as the stones of fruit, or even coins. But pointed bodies, such as pins and needles, often create prolonged suffering before they are discharged. The irritation which they produce may occur at any part of the canal through which they pass, from the pharynx, where they are sometimes arrested, to the rectum, from which they have been occasionally removed. Whilst I write, I have a young woman under my care, in whose œsophagus the presence of a pin has created the most distressing irritation; and dysphagia, accompanied with profuse expectoration and constitutional disturbance, are apparently in part dependent on this cause.

In the intervening space, the stomach or some part of the bowel is frequently transfixed by these delicate bodies, which thence find their way to the cutaneous surface, and are discharged. The effects produced by this spontaneous perforation are very various, according to

the accounts of different observers: sometimes they pass through the entire course of the bowel, as I have known, without producing any irritation; at other times they give rise, especially when they are numerous, to extreme pain, coinciding apparently with the period of their perforation of the stomach or intestine, and occasionally causing death by inflammation of the peritoneum or by being retained. In most cases where we are called upon to remove pins or needles from beneath the skin, there is a distinct history of their piercing the surface, though it may be at a distance from the spot where they present themselves; but occasionally the absence of such history and other circumstances point to the conclusion that they were most likely swallowed unconsciously with the food. A little girl was brought to me last year, whose parents had noticed a conical prominence in the left hypochondrium, for which they could not account. Feeling persuaded that it was a foreign body, I divided the skin, and removed a needle. I infer that this was probably swallowed, from the position at which it presented itself; and, as the child was well cared for, being the daughter of affluent parents, the fact of its introduction through the skin would probably not have been overlooked. In a youth who was admitted into the hospital with injury to the spine, of which he died, a blackened pin was found imbedded in the left lung, lying lengthwise close to the anterior edge. There was no trace of aperture of entrance, and it was adherent to the lung-tissue. This might also have perforated the stomach, and found its way through the diaphragm to the lung. A pin, with its head on, is not readily driven through the skin.

Larger objects, such as knives, forks, or spoons, have passed through the entire length of the alimentary canal without destroying life, but necessarily producing more or less severe suffering, especially if the body be pointed. We have on the table some specimens from our museum belonging to this class, but in which the patients were not so fortunate. This (1140) is a knife, or rather the remnant of one, taken from the stomach of a man who had swallowed it some months previously. The handle is dissolved—in fact, digested; and the blade has been partly destroyed by oxidation. Again, here (1184) is a dessert-spoon, which had been swallowed by a lunatic, and, after traversing the small intestine, finally lodged in the cæcum. This patient also survived his feat for a considerable time, I think some months.

In other instances, such objects have caused death by perforation—sometimes early, sometimes late—and consequently fatal inflammation. Occasionally they are felt through the abdominal parietes, and, under these circumstances, have been extracted by incision, or after spontaneous ulceration of the superficial textures. If retained, deteriorated health results from the constant irritation and functional disturbance of the organs of digestion, caused by the presence of the foreign bodies; and, if fatal inflammation do not ensue, the patient sinks exhausted.

When I was, on a certain occasion, dining with a party of medical gentlemen in the country, the following professional anecdote was told and authenticated by one of them. At a convivial meeting, an individual present undertook not only to drain his glass, but likewise to eat it. He accordingly proceeded deliberately to masticate and swallow it. The consequences were much suffering and constipation, which nothing relieved; and he was sinking into a state of exhaustion. Being a keen sportsman, the ruling passion, strong in death, prompted him to express a desire once more to be raised from his bed, dressed, and lifted on to his horse; and he insisted upon this apparently hazardous whim being gratified. The jolting motion, however, to which he was subjected, was the means of saving his life. The obstructing mass shifted its position, and was soon afterwards discharged, to his permanent relief. There is nothing improbable in this account, and the above is not the only instance in which this absurd eccentricity of glass-eating has been enacted with impunity.

When local abscess results from the entanglement and retention of any small body within the intestine, the issue of the case depends upon the position of such abscess. The lower part of the rectum is the most frequent seat of local inflammation arising in this way, and terminating in suppuration; and probably the occurrence of abscess, succeeded by fistula, is more often attributable to this cause than is apparent, in consequence of the material source of irritation escaping, and thus eluding observation. In one instance, I remember discovering quite a nest of orange-pips in a rectal abscess; and was enabled, after laying it freely open, to trace the aperture by which they had escaped from the bowel; one of the seeds occupying, at the time, the ulcerated opening.

Another not infrequent seat of abscess, from the lodgment of small foreign bodies, is the vermiform appendix of the cæcum; and these cases are usually fatal. The diagnostic signs of such an accident are by no means clearly defined. The peritonitis is generally limited, at an early period, to the neighbourhood of the seat of mischief, the right iliac fossa; but may afterwards extend. In most other respects, the

symptoms are similar to those which indicate strangulation of the bowel in some part of its course. The early localisation of pain in the region of the cæcum, the history of the attack, and the absence of an external hernia, would suggest the mischief referred to, but only in common with other internal sources of inflammation, especially where constipation is present. The size of the large intestine, when healthy, usually permits the ready passage of objects which have passed the portal of the ilio-cæcal valve.

An interesting case is recorded by our President, Mr. Quain, in which hæmorrhage into the abdominal cavity was the cause of death. On examination, *post mortem*, it was found that the blood was derived from the common iliac artery, which had been perforated by a pin, which lay in a small abscess communicating with the vermiform appendix. (*Diseases of the Rectum*, p. 326.)

The conclusions, as regards diagnosis, to be drawn from a record of cases belonging to the general category under consideration are, unfortunately, not very satisfactory. In a collection of such instances in the *Guy's Hospital Reports*, accumulated by Mr. Poland with his usual indefatigable industry, this able surgeon speaks of the symptoms, induced by the presence of foreign bodies in the alimentary canal, as vague and uncertain, and as affording no satisfactory clue to their situation, nor even reliable proof that the patient's narration of his case can be depended on. The symptoms may, in fact, partake of all the characters which appertain to simple inflammation of any part of the canal, resulting from any other cause: and this may terminate in perforation, collapse, and death. Or, again, the foreign body may become impacted in the intestine, and cause permanent obstruction which, in the resulting symptoms, is undistinguishable from obstruction by internal strangulation, or consequent on other causes, such as internal concretions or morbid growths.

One physical sign is mentioned by observers, which I have not had the opportunity of witnessing; it is that, when the object swallowed is partially or entirely composed of iron, the excreta are coloured by the admixture of ferruginous matter. No doubt this is a valuable corroborative evidence of the correctness of a diagnosis founded upon the representation of the patient, and the concurrent existence of other signs and symptoms of the presence of a foreign body in the stomach or bowels. That metal will waste by oxidation, as well as digestible material disappear by solution, we have demonstrative proof in the preparation before me, to which I just now directed attention.

[To be concluded.]

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

TOXIC ACTION OF QUININE.

By EDWARD GARRAWAY, Esq., Faversham.

I WAS called last month to a lady, aged 40, in previous good health, who had been suddenly seized with oedema of the face and limbs, accompanied by an unusual erythematous rash. She had considerable uneasiness in the præcordia, and was in a state of great alarm. Certainly there was sufficient cause, for she was greatly disfigured, and her arms felt ready to burst. Her idea was, that she had been poisoned by a white powder, which she had procured at a chemist's, in mistake for quinine, and of which about a grain had been taken in a glass of wine. I taxed her with having eaten fungi, shell-fish, decomposing cheese, and other unwonted articles of food, but she pleaded guilty to none of these things. On bringing me the remains of the white powder, it proved to be pure sulphate of quinine. I repudiated the idea of this having done her any harm. After three or four days, the oedema and the rash subsided, but the skin of the face scaled off, and there was peeling of the hands and feet, as after scarlatina. My patient remaining somewhat enfeebled, I, unreflectingly, ordered a quinine mixture, by way of tonic. Two hours after taking the first dose—two grains—she sent for me, exclaiming, "Oh, you have poisoned me with quinine again". To my infinite chagrin and mortification, all the former symptoms recurred.

I doubt if I have omitted prescribing quinine any day for the last twenty years—in this locality it is largely needed—and this is the first instance in which I ever recognised any ill effect, beyond headache, resulting from its administration.

ABSTRACTS OF INTRODUCTORY ADDRESSES

DELIVERED AT

THE METROPOLITAN AND PROVINCIAL SCHOOLS,

On OCTOBER 1st, 1869.

ST. MARY'S HOSPITAL.

THE Introductory Address was delivered by Dr. CHEADLE on October 1st, at 8 P.M.

After offering a cordial welcome to the students, and expressing a hope that their time at the Hospital would prove—as he believed it would, in spite of lectures and examinations—one of the happiest portions of their lives, the recollection of which, in after days of ceaseless occupation, amidst the cares and struggles of life, would never fail to call up a crowd of pleasant associations, the lecturer remarked that there, as at school or college, the daily meetings, the common pursuit, the constant intercourse, lead to an intimacy between the pupils which, in congenial natures, ripens into lasting friendship. “For myself I can say that all my best and dearest friends have been secured, not from amongst the acquaintances of home-life, not even from among relations, but from the ranks of schoolfellows, and fellow-students at the University and the Hospital. And this is true not only of the students: the teachers also, if their relations with their pupils be of that cordial character which I think you will find them here, gain now and again a warm friend, and an earnest fellow-worker in scientific investigation.” After reminding his audience that the duty which he had to perform was one which necessarily became more arduous every year, since the hundreds of introductory addresses which had already been delivered seemed to render it impossible to say anything more on the subject of medical education, Dr. Cheadle proceeded to show the great evil which resulted from the want of preliminary instruction in natural science. Men come to a hospital to learn what they ought to have been taught at school. The time allowed for medical study was, therefore, too short for all that had to be pressed into it; and the result was that clinical work was neglected, and the practice of medicine actually learnt—if learnt at all—after the examinations were passed.

“In the usual course of what is called a liberal education, men grow up ignorant of the simplest truths connected with the phenomena of the material world, and notably so of the structure and working of their own bodies. I should not, I think, greatly exaggerate if I said that nine out of every ten men of ordinary education would be unable to explain the doctrine of chemical equivalents, or the function of respiration, or the circulation of blood. In my own case, for example, when I began the study of medicine towards the end of an University career, having enjoyed all the advantages of education under able men, I found myself utterly destitute of such knowledge as could be directly of service to me in my new pursuit. I knew something of French; but of German, which I soon perceived would be of the greatest use to me, I could not read the alphabet. For anything I had been taught to the contrary, earth, air, fire, and water, were the four elementary bodies. Why the food I swallowed should not enter my lungs, or the air I breathed my stomach, I had no information. I found myself completely bewildered by strange words, strange ideas, incomprehensible explanations—lost in a new country where I met no friends, where I could recognise no landmarks. At an age when I ought to have gone through all the drudgery of elementary work, I had to commence again with the merest rudiments of natural science. There was surely something wrong in all this. I think we are bound to teach every man a reasonable amount of precise knowledge of the world in which he is appointed to live, where the phenomena take place according to fixed laws, in obedience with which all his work has to be done. He ought surely to be acquainted with the properties of the materials he has to work with, and the conditions under which that work has to be accomplished. And the deficiency affects the medical profession more nearly than any other. Not only do the students suffer directly from the lack of previous scientific training, but, unless the public have some reliable acquaintance with the leading truths of elementary science, it is impossible for them to judge for themselves what can be true in medicine, and what is unwarrantable assumption; they are necessarily superstitious and credulous; they become the easy dupes of imposture, and thus rogues and charlatans obtain success which is the due of honest men. A knowledge of the rudi-

ments of natural science, too, adds a charm to our passage through life—every thing we see on the way, on every side, exhibits some wonder of the present, or tells some strange story of the past; stimulates curiosity, and suggests ideas full of pleasant and seductive speculations. The Universities have fairly acknowledged the claims of natural science, and the rewards they offer will not fail to attract a sufficient number to the special study. We may hope that this spirit will spread more widely, and penetrate deeper still into the lower centres of instruction; but the hearty recognition of the subject in every school and college as one of the most important branches of ordinary general education, is a change which time has yet to bring about. Such reforms are necessarily gradual. We need hardly be surprised at the slow progress which takes place, but rather wonder at the advance which has been made, when we consider the amount of prejudice which had to be overcome. Formerly science was regarded as identical with sorcery and magic; and at the beginning of the last century the members of the Royal Society were commonly looked on as a pernicious set of men, and indeed openly denounced on the ground that they neglected the wiser and more discerning ancient philosophers, and depended too much on their own unassisted powers; and that a philosophy, founded on experiment, would lead to the overthrow of the Christian religion, and even to a denial of the existence of God. And such prejudice has not quite died out at this day. I remember hearing one of the distinguished men of our time relate how, thirty years ago, he was looked upon in society with suspicion on account of the pursuits in which he was known to be engaged, and men whispered to one another that he was a dangerous man, of unsound views—a geologist. Happily things are so far altered now that even the clergy wield geological hammers without distrust, and are cordially helping to fathom the secrets of the material world with microscope and test-tube, in the sure belief that the search after truth can never be antagonistic to a sound Christianity.”

The lecturer then proceeded to explain the value of the study of the ancient languages, warning his hearers that a superficial knowledge of the classics was apt to engender a vain pedantry, without conferring that art of expression which it was the especial function of languages to teach. Medical students generally learned only just enough to enable them to understand scientific nomenclature; and thus it happened that, while medical literature contained many works of pure and classical English, medical writings were too frequently diffuse, obscure, crowded with irrelevant matter, often a confused mass of technicalities, through which the reader pores his way with labour and weariness. The authors remember that art is long: they forget that life is short. He entreated them, therefore, for their own mutual protection, to cultivate the art of expression. If a plain English term conveyed the idea, let them use it instead of some far-fetched Greek or Latin compound; and study conciseness, how to state the points of a case in a few words, and those the right words in the right place. Beyond conferring facility and exactness of expression, and affording a key to technical nomenclature, an acquaintance with the dead languages would help the student of science little in these days. The discoveries of the ancients have long since been surpassed. “He may, indeed, find inspiration in contemplation of the earnest striving after truth which, distinguished the giant intellects of Greece, to urge him forward on the same quest; but he will find no new truth in their writings; the mine has been ransacked, the gold extracted, and tested, and appropriated long ago. We necessarily have more information than the men of old. There is no more conceit in assuming that we are wiser than our forefathers, than there would be in a man assuming that he is wiser than when he was a child. The truths discovered in Nature are not lost, but stored up. Each generation inherits the accumulated knowledge of all which preceded it—starts where the last left off, and thus, as Dr. Temple has, I think, put it, the world gains experience, and grows wiser and better informed as it grows older. We cannot, indeed, tell whether it is still in childhood, or approaching maturity, but we know, from its vigour and continued development, that it has not at any rate entered upon an effete old age.”

After showing the value of mathematics in training the mind to precision of thought and accuracy of statement, and enabling it to follow out with ease and certainty an intricate series of dependent phenomena, and of modern languages in affording access to the results of the labours of scientific men in other countries, Dr. Cheadle passed from the subject of preliminary education to the special course of study at a medical school. He expressed a hope to see the day when all teaching in general science should be relegated to the Universities, or to separate institutions, if necessary, and the medical schools entirely devoted to instruction in physiology, pathology, and the application of the other sciences to the arts of medicine and surgery. Urging the necessity of a thorough knowledge of anatomy, chemistry, and physiology, he exhorted them above all to cultivate clinical medicine in the Hospital

wards. The power of diagnosis could only be attained by long and careful observation of disease.

“ ‘Old experience doth attain
To something like prophetic strain.’ ”

“ But the only way of rendering experience fruitful, is by cultivating a practical acquaintance with all the various means which have been devised for the detection of morbid changes in the body—the use of the microscope, the stethoscope, the ophthalmoscope, the thermometer, the laryngoscope. As science advances, these aids to the ordinary senses will become developed more and more, and reveal secrets which we are blind to now, because we have not the light by which to read them. Thus, the thermometer, for instance, was applied to the purpose of clinical investigation, as early as the sixteenth century, by Sanctorio, a physician of Padua, who used it to find the temperature of the body in fevers. It could disclose nothing then, except that the fever was more or less; and so fell into disuse again. To us, it tells, by the light of further knowledge, of wear and tear going on, of waste of tissue, of approaching danger, of returning convalescence.” After pointing out the great facilities afforded by the institution of special departments for the treatment of particular classes of disease, where the students could see collected together for comparison the varied forms of allied affections, he warned them that book-work alone would never fit them for the practical duties of their profession. It would avail them but little to know what tubular breathing or bronchophony, or fluctuation, or a *bruit*, or a friction sound, or any other physical sign might indicate, if they could not recognise these signs when they met with them. A bare knowledge of the significance of the existence of the various cells and crystals, and casts, and other morbid products would be a mere mockery, if they could not infallibly detect their presence to help their diagnosis.

Next came the question: What power would they possess over the evil they might discover? The triumphs of surgery and preventive medicine were palpable enough, and visible on every hand. But with regard to medical therapeutics, the case was not so clear. Not that the good was less real, but medical treatment was less direct, and, in the nature of things, the relation of cause and effect less striking than in surgery. “ We have, indeed, ceased to look upon diseases as distinct entities, to be driven out or destroyed by drugs, as we expel a worm, or extract a calculus, or kill an acarus. We confess that we cannot stop continued fever, or acute disease, but we have learnt how to guide the patient through the mortal crisis, how to sustain the flickering life, how to ward off the fatal accidents which threaten at every stage. We can arrest syphilis, check diarrhoea, modify phthisis, relieve or cure epilepsy. We can control and direct the course of morbid action in a hundred different ways, prevent secondary lesions, remove pain, relieve distress. And, thus, suffering is lightened, and lives saved or prolonged every day. Perhaps this may seem small success to you who, sanguine with all the enthusiasm of youth, half expect to hold the keys of life and death. But we do not possess the elixir of life. We can teach you no magic art. Medicine necessarily waits upon the sister sciences. We must be content with a careful empiricism for a season; and as we learn more of the materials with which, and the mode in which, the tissues of the body are built up, and the series of morbid changes which take place, and as our knowledge of the action of the agents at our disposal upon the various organs and tissues, and secretions, improves, we shall begin to see more clearly how to adapt the means to the end. Formerly, a host of ignorant empirics held sway and reaped reward, while the honest plodders in the work of science were solitary and unnoticed, except by persecuting enemies. Now, a great army of skilful and honest investigators, the most persevering and industrious of men, attack the unknown night and day. Light must come out of their labours; and, although I cannot look forward with Sir James Simpson to a time when all medicines will be pleasant beverages instead of vile pills and potions, morbid growths be melted down, contagious diseases utterly stamped out, and the child born to live a hundred years; yet I confidently believe that you may live to see advances in the art of healing which would appear marvellous to us now, and that by this means the average duration of human life will be materially prolonged.”

The lecturer then proceeded to give some counsel to the students as to the management of time, the cultivation of a careful regard for truth, and a habit of accurate observation and record; and that they should take nothing for granted, but observe for themselves if things were as they had read—concluding thus:—“ I might end my address to you by picturing some bright prospect of the future, of honours to be won, or wealth to be gained, as the reward of earnest study here, and an enlightened practice of your profession hereafter. But I decline to bribe you to exercise the gifts with which God has endowed you by any promise of reward, or to dilate upon failure and disgrace as the sure punishment of idleness and misconduct. I will not appeal to ignoble motives, which have only too much influence in this selfish world

already. Every man, I take it, is born to do his share of the work which is going on, that which he finds he is fit for, and to do it with all his might. Every individual life represents so much force, so much divine fire; if the power be left unapplied, the purpose of its creation is shamefully perverted. There are thousands and thousands of men living in the civilised world, who have sufficient advantages of education, and yet are so utterly useless to the community that no one would be a whit the worse if they all ceased to exist to-morrow. They consume much, and give out nothing in return. These drones of the human hive are to me contemptible and offensive. The possession of sufficient means to live upon is no excuse for idleness, or the being able to earn it by slight efforts, a valid reason for craven-hearted half-work. Every man, whatever his position, can find, as Carlyle puts it, ‘ crooked things enough in his own life, all round him, which he has got to pull straight, and which will task all his strength, however great it may be.’ Your work is to add to science such atoms of truth as you may be able to gather amid the hurry and incessant occupation of professional business. It is to exert all your energies to alleviate suffering and defeat death, being careful always—as becomes true gentlemen—to treat the poor, and the loathsome, and the miserable, with as much care, and more kindness, than the rich patient who fees you highly. And, finally, it will be part of your duty, and one not to be evaded or neglected, to teach more specifically and vividly, and authoritatively, than can be done by any one with mere general knowledge, how drink, and sensuality, and vice of every kind, carry with them each its own form of punishment in disease, and misery, and death—to teach the life-saving knowledge of how to stop contagion, how to prevent disease, and how to foster health—to take, in a word, your own appointed part manfully, on the side of truth and right, in the great battle always going on against evil. And for the rest—let it be. Whether you gain honours or wealth, or not, your chief reward will be to feel throughout that you are playing no coward’s part, but are doing your share of work in the world, and that you are doing it bravely and well.”

WESTMINSTER HOSPITAL.

THE Introductory Address at this Hospital was delivered by Mr. JOSEPH WALKER.

After a few prefatory remarks, congratulating the old students and the members of the staff on returning to the duties of the ensuing session after enjoying the pleasures of the country, Mr. Walker made a feeling allusion to the loss which the Hospital had sustained during the past year, in the retirement of Mr. Brooke, whose name is known throughout civilised Europe and America for his self-registering apparatus; and in the death of Mr. Bruce, whose attainments were of the highest order, whose unwearied exertions in the dissecting-room had probably predisposed his constitution to the reception of the poison which proved fatal to him, and who, had he been spared, would in all human probability have proved a leader, as he was a master, in surgery. In welcoming the old students, the lecturer took occasion to note the renovation which the Westminster Hospital had undergone, and trusted that the improvement would be found not to be limited to the outside alone, but that the internal arrangements would be found to present corresponding advantages to those who were about to enter; and particular attention was directed to the circumstance that special departments had been organised, in which several of the physicians and surgeons undertook to give instruction in particular forms of disease, and in the diseases of special organs. Mr. Walker then proceeded to speak of the high estimation in which the medical profession is held by all classes of the community, and pointed out that no gratitude is so sincere, no remembrance so lasting, as that which follows the restoration to health of a patient whose life has been despaired of. He then dwelt on the importance of recognition, on the part of the state, of the services rendered to it by medical men, and trusted that some responsible head would be appointed, who might render an account to the Houses of Parliament, in person, of the state of the public health. The subject of vaccination, the importance of personal freedom in the case of those who conscientiously objected to it, was adverted to; and the necessity of care in the procurement of healthy virus was dwelt upon.

From this, the lecturer proceeded to speak of the changes and improvements that had taken place in the examining bodies, and reminded his hearers that, if they did not wish to be put to shame by those of the fairer sex who were now entering the profession, they must exert their faculties to the utmost. “ The training of our students should be so thorough, both in the theoretical and the practical departments, that no incompetent man could by any means slip through these examinations. These should be undertaken by men in the full zenith of their intellectual strength, and should be so conducted that the various abilities of

men of different calibre may be developed; a surgeon should mean a man capable of performing every operation which he may be called upon to undertake, and who, at the bedside of a patient, is able to diagnose the disease, point out its peculiarities, prescribe for the disease, and give a fair forecast of the probable progress of each case. Such an examination may be supplemented by one of a higher order for the more distinguished positions in our colleges, but should at least be accepted by the public services; and as long as the representatives of those services consider it necessary to have special examinations, so long is it a standing reproach to the whole profession." The speaker thought that every man should, for some time, as for a year, be compelled to act as an assistant, when the responsibility of serious cases might be shared with an older practitioner.

The students were exhorted to avail themselves to the utmost of the advantages which they now possessed, and so to acquire a thorough knowledge of their profession; since, of all deceptions, that of an ignorant medical man was the most heartless. In particular, they were exhorted to set a high value on the clinical posts and the dresserships, which at a small school were open to every pupil; to attend carefully to the out-patient practice, and the several special departments; to learn diligently the natural and healthy structure of the body, the forms and position of the prominences of the limbs, the sounds of the heart and breathing, and to compare them constantly with the same in disease. The value of maintaining a high character was then dwelt upon, as being the "noblest possession of a man, constituting a rank in itself, and an estate in the general good-will, dignifying every station, and exalting every position in society. It exercises a greater power than wealth; it secures all the honour without the jealousy of fame. It carries with it an influence that always tells, for it is the result of proud honour, rectitude and consistency, qualities which, perhaps more than any other, command the general confidence and respect of mankind. Character is human nature in its best form. It is moral order embodied in the individual; men of character are not only the conscience of society, but, in every well governed state, they constitute its best motive power; for it is moral qualities in the main which rule the world."

CHARING CROSS HOSPITAL.

THE Introductory Address was delivered by Dr. SILVER.

After welcoming old and new pupils, Dr. Silver proceeded to say:—At the present moment, the utilitarian philosophy would seem to be all-powerful amongst us. Everything is judged by its results, be these good or be they bad. And there is a certain party of medical reformers who would introduce what they consider the same test into medical education. They would let the student loose, as it were, to go where he will, to study where he will, when he will, and how he will. They would only reserve the right of examining him at certain intervals, and would finally send him out into the world with the stamp of their approval, no regard being had to his training, but only to his capacity for passing certain examinations. Happily, however, all men are not of this opinion; for some of the most advanced thinkers of the day hold that the *training* is all in all, that *examinations* are very well in their way as supplying a means whereby a trained man may be readily distinguished from an untrained man, and that they thus constitute a valuable safeguard for the unskilled public; but that, after all, our efforts should be concentrated on the process of educating a medical man, not on examining him. The best method of acquiring and utilising experiences is surely a matter for consideration. Now, it is against crude and imperfect rules I have to preach my sermon. I uphold method as opposed to tact. No doubt certain men excel in tact, and in their hands it may be safe, but the exception does not constitute, if it does prove the rule. It is narrated of a famous painter, that, being called upon to give evidence of his skill as a draughtsman, he took the chalk, and, with a single sweep, formed a circle so perfect that when tried by the compasses it was found faultless. Is this any reason why ordinary men should not use compasses when employed on a mechanical drawing? Tact, the result of individual experience, is crude and imperfect, vanishing with the death of the possessor; but the rules of art are immortal, usually susceptible of improvement, but still capable of being transmitted from one to another, and sufficiently well defined to enable the student to be trained in their use.

In every department of science and art our own experience, or that of some one else, furnishes us with rules for our guidance. This being so, it follows that every precaution should be taken, so that no errors creep into our experience or into our observations, and our conclusions from them. Our only sources of knowledge in medicine are two—observation and experiment; but a crowd of isolated experiences are comparatively useless to a man, and certainly cannot be communicated to another; it is

necessary to extract their essence, so to speak, to elicit from them some general principle.

Placed by the bedside of a patient, we are brought face to face with a complicated mass of phenomena which we are bound to analyse; but we must set about the business not at random, but methodically, and herein lies one distinction between the trained and the untrained man: the one proceeds by rule and method, the other at random. Even here at the very outset we run the risk of being drawn aside from the right path and of falling into the pitfall of some fallacy. Observation is a mental act, and, consequently, liable to be tinged in accordance with our mental condition. A man's previous training may be defective, as is not unfrequently the case, or he may have no training at all. If so, he is almost certain to mix up what he sees or hears with what he infers from his observations; or, again, his mental vision may be warped by his fancies, by his feelings, by his prejudices, or by his preconceived notions. Herein lies the great objection to specialism, that it always inclines a man's mind in one particular direction, not in observation only, but also in inference. But the untrained man has still another difficulty to contend with; proceeding by haphazard, not methodically, he is almost certain to overlook some symptom or other, and a single symptom not unfrequently completely alters the aspect of the case. It is sometimes urged, in opposition to the employment of a scientific method, that many of our greatest men of genius have made their discoveries in contempt for logical rules of observation or inference. This may be so apparently, not so in reality; and, even though men of genius can afford to break rule and method, men of more ordinary capacity, we, poor creatures of to-day, cannot afford to do so.

On experiments in medicine, Dr. Silver said:—The great advantage which experiment possesses over simple observation is, that you can make as many experiments as you like, but you must wait for your chance of making an observation. Of experiment in this sense, there is but little in pure medicine. Although the foundation of some of its departments, taking medicine in its widest sense, an obstacle in the way of experiments in medicine is the excessively complicated nature of the phenomena to be studied. To elucidate them, therefore, many separate experiments must be performed; the conditions of each must be varied as much as possible—in short, every precaution must be taken to prevent the accidental from being mistaken for the essential concomitants of the trial. To do this well and with safety requires great experience. Examples of induction from experiment are most common in physiology and pathology. It must not be forgotten that the multiplication of the means of research implies a corresponding increase of the chances of error in their use, and, consequently, the greater necessity for training in him that would employ them. It cannot be helped, but the two do go hand in hand. Increased risk of error cannot fail to follow extended means of investigation, especially in unskilled hands.

But a series of detached and isolated experiences, observations, or experiments are, comparatively speaking, useless, except some principle be extracted from them, and this can only be done by a careful sifting of the facts collected. They must be placed side by side, and compared and contrasted. By this means we can separate the true from the false. We can ascertain how much is inferred, how much observed, and so assign to each its true value. We can also see what is essential or uniformly present, and what non-essential or only occasionally making itself evident.

If we have a sufficient number of facts to deal with, we may now be enabled to make a generalisation of some value. But the bugbear of medicine has been the general principles laid down on an insufficient foundation. But there is still another difficulty in the way of the investigator, and that lies in the very words which he uses. We know exactly what sense a given word conveys to our own minds, but we cannot know what meaning it bears to another. Words are in themselves real powers—by turns our masters, by turns our servants—capable of much evil if wrongly applied. Among medical men the risk of mistake is greatly lessened by a technical language which facilitates the transmission of exact ideas from one to another, but the use of this language among the general public is to be looked upon askance. In common parlance, an artery and a tendon are synonymous and interchangeable, and so on. In another way words are apt to prove our masters. We have been instructed that for such and such a disease there is a certain remedy. Should you be told that a patient was suffering from this disease, you would be apt to prescribe what you had been told was the appropriate remedy. Here you would run full tilt into the error of treating the disease, that is a nonentity, instead of the patient, with whom alone you really have to do. Another objection to our terms lies in the fact of their frequent connection with some long-vanished theory. What notion do such words as tonic and alterative convey to modern minds?

After a brief summary of his remarks, Dr. Silver said: It is at the bedside and in the out-patient room that you must acquire the practical

art of observation; you must acquire principles which are to guide you hereafter, as well as practise the art of reasoning from these principles to isolated cases. For training, are many cases required? I say no. In this all-essential respect you will find a small hospital better than a large one. . . . Men may talk as they please about the superior advantages of a hospital with 500 or 600 beds, but what student can avail himself of that number? Practically, each student, if he is to study the art of observation and inference, must limit himself to a very few cases at one time, and, provided the number of cases be proportioned to the number of students, a hospital with 120 beds is as good as one with 1,200. I may be told of the immense advantages which these large hospitals present in the way of operative surgery, but the practitioner's life is not passed in performing surgical operations.

Above all things, I would encourage practical work on the part of the student; let him cultivate the art of observing and the art of experimenting. Experience and the assistance of others will get rid of the difficulties and fallacies first encountered, and he will thereby acquire confidence, and not confidence alone, but that which entitles to confidence. I have shown you how lying words are apt to mislead a man; it is therefore far better to see things than to hear them described. But as you cannot see everything at once, as in certain cases you must trust to verbal description, you must train yourselves not only in the art of understanding the words of others, but also of communicating your own ideas in exact terms to others. . . . Exactness is with us all in all. Writing is that which will give this; and for our purpose there is nothing like accurate case-taking, for thereby not only is accurate observation fostered, but the transmission of your own impressions to the minds of others is cultivated, and this, let me again assure you, is no slight matter. You will have teachers at your elbow to correct you, should you make a slip.

I have shown that in your process of education training is the great thing to be aimed at. Crude experience is all very well in its way, and its way is to serve as the basis of general principles. But to have a trustworthy experience you must be trained in observation; to utilise it, you must be trained in mental analysis. Simple experience alone may make an empiric; it will not make a scientific practitioner. There are larger hospitals and larger schools in London than ours, but nowhere will you find men more ready and more anxious to aid you in that self-cultivation of which, after all, your education must consist, than here. In these respects we yield to none.

MANCHESTER ROYAL SCHOOL OF MEDICINE.

THE Introductory Address was delivered by Mr. BRADLEY.

"As medicine, especially as it at present stands, is amongst the most conjectural of the sciences, so the inquiry into it is to be placed amongst the most subtle and difficult." Thus Bacon wrote nearly 300 years ago. Since that time most of the wonders of Solomon's house, which he so brilliantly described in his magnificent prophecy of the New Atlantis, have been fulfilled. Arts and sciences that did not then exist have sprung into being and become mighty powers. Still of medicine we may say that, as it at present stands, it is to be accounted amongst the most conjectural of the sciences; but, despite this, the lecturer hoped to show that it is the noblest of them all, for, in the words of the same old grand philosopher, "it takes all knowledge for its province."

Mr. Bradley proposed to glance at the various subjects which it is necessary for a medical man to be acquainted with, and divided his address into two heads—*What students ought now to know, and what they have still to learn.* The different examining boards (would there were but one!) are all agreed as to the necessity of medical students possessing some preliminary knowledge before they are allowed to register, and for this reason have instituted certain preliminary examinations. There are two subjects which stand out prominently from all the rest as absolutely essential, and yet neither of them is made compulsory: these subjects are Logic and Physics. Every one should understand at least so much of logic as thoroughly to comprehend the laws of the syllogism and of induction. Not that the one will teach the student to reason mechanically, or the other to invent; but what they will do is this, they will enable him to judge the accuracy of another's reasoning, the truth of another's induction. In this way logic becomes of the greatest service as mental training, checking a man from forming a too hasty judgment, teaching him to weigh and consider. It teaches us that knowledge is just what we ourselves thoroughly comprehend of truth and reason, and will show us, as Locke says, that "the floating of other men's opinions in our brains makes us not one jot the more knowing though they happen to be true." The value of Physics is much more manifest than that of the former.

"Do not suppose," the lecturer said, "that, in thus urging upon you the study of Logic and Physics, I am in favour of your embracing a vast

multiplicity of subjects as school studies. I am indeed altogether opposed to such a plan, for I regard the end of schooling to be education rather than instruction. Too frequently it is instruction that is considered as all necessary; and in consequence a lad's memory is loaded with a mass of words and facts until a life-long mental dyspepsia is produced, while his intellect all the time is left in a state of chronic starvation. To the old Baconian aphorism, that 'reading maketh a full man', may oft be added as a corollary, 'overmuch reading maketh an empty-headed boy.' Dr. Newman has written some wise words about the folly and injustice of such training, and thus pictures the result to the victims themselves: 'They devour premises and conclusions together with indiscriminate greediness; they hold science on faith, and commit demonstrations to memory; and too often, as might be expected, when their period of education is passed, they throw up all they have learned in disgust, having gained nothing by their anxious labours except, perhaps, the habit of application.'"

Molecular physics, more than any other branch of this great subject, is inseparably bound up with medicine. Since Parrot of St. Petersburg, in 1803, pointed out that if two liquids of unequal density were separated by an animal substance, they would be mutually interchanged, the subject has, under the name, first of osmosis, and then of dialysis, been carefully investigated by Béclard, Matteucci, and still more recently, and much more thoroughly, by Graham. It is by dialysis that we now explain many of the actions of the organism, which were previously vaguely termed *vital*. Thus digestion, respiration, absorption, and nutrition, are now explained. So far as its results go, the breath of our nostrils is the sum of conditions which may be perfectly imitated in our laboratories. The cruorin of the blood, carrying the stimulating oxygen on its back, passes through the minute blood-vessels or capillaries of the body, and everywhere yields up its precious freight to nourish and sustain the tissues; here coming into contact with carbon, which is combined with the tissues in the unstable way peculiar to organic compounds, an alliance is struck up, and combustion, the immediate cause of animal heat, ensues. The carbonic acid thus formed is hurried away in the blood-current to the lungs, where it encounters fresh oxygen patiently waiting for admission on the other side of the pulmonic capillaries: for the second time dialysis, or, as it is in this case termed, the "false diffusion of gases", takes place, and the two are mutually exchanged. Thus is respiration, like Goldsmith's chest of drawers—

"Contrived at once a double debt to pay,
To welcome in the one gas, the t'other take away."

It was not unlikely that it might be for a moment considered that such investigations had materialistic tendencies. Mr. Bradley did not think they had; for, carry the imagination forward if one will, until all the so-called vital forces are reduced to these same physical and chemical laws, what then? Does such a scheme entitle a man to entertain a materialistic view as to life itself? No more than to contemplate the regular working of some perfect piece of mechanism, such as a printing-machine, justifies a man in forgetting that the machine must have had a maker who set it going. There are few ideas that appeal more forcibly to the imagination and the heart than the fact that when God made the world he endowed it with laws so perfect as to need no disestablishing or altering. La Place thought that he had discovered the secret of the universe when he conceived the notion that the worlds were originally in a state of fusion, and that in the process of cooling they naturally became condensed, and commenced those planetary revolutions which they have ever since continued; overlooking the fact that, in this very explanation of a beginning, he demands, as already begun, the existence of both matter and force. "Hath the rain a father? or who hath begotten the drops of dew? Out of whose womb came the ice; and the hoary frost of heaven, who hath engendered it?" It has been remarked with great subtlety of reason that the very arguments which the materialist employs to prove the necessary dependence of mind upon matter, might be urged by the spiritualist to prove that no such thing as matter existed, but that what we call matter is simply an inference of pre-existing mind. "I call the effects of Nature", says Sir Thomas Brown, "the works of God, whose hand and instrument she truly is; and, therefore, to ascribe the action to her, is to devolve the honour of the principal agent upon the instrument, which, if with justice we may do, then let our hammers rise up and boast that they have built our houses, and our pens receive the honour of our writings." Religion has nothing to fear from physics, any more than she has from geology or astronomy, which to many minds once appeared equally at variance with revelation; and the man who would on this account attempt to check the advance of physics would welcome back "the sable throne of night primeval and of chaos old", for it is ignorance and superstition alone that dreads to face the light of knowledge and of truth.

In turning to some of the most important subjects which would occupy the student's attention, the lecturer would advert to a few instances only of the chief advances which have been made in them of late years. It is a very common practice now-a-days to decry the value of lectures on medicine as well as on kindred subjects. Mr. Bradley was strongly of opinion that this is an error. The lecturer gives more condensed and widely gathered knowledge than can be obtained from books; and he was perfectly certain that if the student tried to learn from lectures they would not lose time in attending them. There were two subjects indeed which he believed it would be well to add to the lectures already inflicted upon students—State Medicine and Diseases of the Mind. In regard to the former, many of the grandest triumphs that medicine has achieved have been gained in the pursuit of an improved national hygiene. In the last half century, see what such matters as drainage, sewerage, and an improved water-supply, have done for us. To quote an example; they have prolonged life in many districts from 5 to 50 per cent.; in the town of Ely, consumption alone has been reduced 47 per cent.; in Salisbury, 49 per cent.; in Rugby, 43 per cent. Are these unfruitful labours? State Medicine, indeed, is fast becoming one of the most important branches of our profession, fitness for which is only to be acquired by a special training. If such baubles possess any value, it is in State Medicine, too, that State honours are to be hereafter chiefly obtained; and he could look forward with a perfect confidence to a not far distant time when the Minister of Health shall take his place in the Cabinet along with such mighty potentates as the Minister for War and the First Lord of the Admiralty. In regard to lectures on Mental Diseases, they should be rendered compulsory; for it is almost certain that an early and more general acquaintance with the premonitory symptoms of insanity would often enable us to arrest the progress of a disease now sadly on the increase, and so restore to usefulness and society many a mind that now, for the want of such knowledge, is hopelessly overthrown.

"There is scarcely any science in which grander discoveries await the patient investigator than in medicine: not merely are there small districts remaining blank which require to be surveyed with all the minute accuracy of an ordnance map, but great continents are still left whose discovery shall shed an immortal halo around the memory of our future Columbus. Be this your lofty hope, to add some little light to a subject which, when thoroughly illuminated, shall itself enlighten, as with a perennial sunshine, the dark sorrows of a fallen humanity.

"Such, gentlemen, is a brief sketch of the sort of work which lies before you—truly a great and a noble work, if apprehended humbly and aright. 'Such work,' says Carlyle, 'is of a religious nature; such work is of a brave nature, which it is the end of all religion to be. All work of man's is as the swimmer's; a waste ocean threatens to devour him; if he front it not bravely, it will keep its word. By incessant wise defiance of it, lusty rebuke and buffet of it, behold how it loyally supports him, and bears him as its conqueror along.'

"For your own sakes, for the sake of your own peace and self-respect, I implore you not to trifle with it. Be not content with success in a mere worldly point of view; *this*, a trick of manner, or even the imitation of a manner, or a thousand accidental circumstances, may bring to pass. But be thorough, be honest, be natural. Above all, *know your work*. No words of mine can even dimly portray the agony of self-reproach which otherwise will overwhelm and crush you, when, brought face to face with death, you feel, 'If I now but knew what I ought to know, if I had but used the for ever fled opportunities, this life might not be sacrificed, which now is unavoidably lost.' May God grant that no such feeling ever come home with justice to any of you. Learn, then, to despise the quackery of mannerism, the egotism of self-assertion, the success of ignorance.

"Fix your hopes and your aspirations high; for, though you may fail of the possible perfection you emulate, it is certain that you will fail, for

"The lofty proposition that hope makes
In all designs, begun on earth below,
Fails in the promised largeness."

Still you will lose nothing, but gain much, by the effort.

"Be sure that temptations of all sorts will assail you—temptations to sloth, temptations to folly, temptations to sin; but all yet will be with you, if you but lean on the strong for strength. The old allegory of the Sirens conveys a profound truth when it exposes, in the very sight of the toiling mariners, the bones and carcasses of those former wanderers who had been led astray from the weary fields of barren foam to the pleasant treacherous strand; for it is an eternal truth, that no mere warning of example is sufficient to enable a man, who trusts to his own strength, to resist the temptations of the shore. If need be, lash yourselves to the mast, or stop your ears with wax, and so escape by sheer hard work, as the poor sailors did of old; but if you have anchored your hopes and beliefs on Him, who is able to give us abundantly above

all we ask or desire, then may you, like the sweet singer Orpheus, pass scatheless through all the shoals and quicksands of this treacherous sea of life, safe from the enticing voices of the fair-browed Sirens, in the far sweeter music of celestial harmonies."

NEWCASTLE COLLEGE OF MEDICINE.

DR. WILLIAM MURRAY delivered the Inaugural Address. The subject was, the Inductive Method in Medical Science.

After a short *resumé* of the difference between deductive reasoning and the inductive method of research, Dr. Murray divided the inductive process into three parts; the first consisting in the observation of facts; the second in the generalisations arising out of the contemplation of facts; and the third consisting in the induction of the laws and causes of facts and phenomena. He then went on to show how observation, generalisation, and theory, form the principles on which the science of anatomy rests; illustrating the former by the grand inductive generalisations of Baron Cuvier; and proving the latter by the vertebral theory of the human skull, saying that "it had its origin in an idea started by the genius of the poet Goethe, and had been worked out inductively and deductively by Owen and Huxley in our own day." By means of it, "you need no longer look upon the complicated architecture of the human skull as an unmeaning puzzle, nor upon the distinctions of the spinal vertebræ as useless details of knowledge. On the contrary, you can simplify the refinements of the one, and throw meaning into the simplicity of the other, by referring each to the place they occupy in the grand archetypal vertebra from whose modifications the whole skeleton is formed." In speaking of physiology, he dwelt upon the success which had attended experimental research, and called attention to the experiments of Sir C. Bell, Marshall Hall, and Brown-Séquard, in unravelling the functions of the nervous system. "See how Nature has yielded up her secret plans of action in the hands of each of these experimental inquirers, responding to the experiments of Bell by a revelation of the functions of the spinal nerves, to those of Marshall Hall by attesting the truth of his theory of reflex action, and disclosing to Brown-Séquard with marvellous accuracy the pathway of the currents to and from the brain." The analysis of the phenomena of life was then described and illustrated by an analysis of the process of respiration, showing that it was broken up into functions in no way peculiar to itself. By thus analysing vital phenomena, the known is winnowed out from the unknown; and we are led to see how marvellously little of each phenomena is really vital, and how much purely chemical or physical life must depend on one of two things—either on the correlation of an unknown force with the chemical and physical forces, or simply upon a beautiful and intricate combination of physical and chemical forces under conditions which as yet have only been found in living beings. The science of pathology was then analysed, and the application of the inductive method to *post mortem* examination illustrated; and a distinction was drawn between this and the verification of induction when a *post mortem* examination is made to confirm an opinion arrived at before death. The application of the inductive method to the diagnosis of disease was then shown—first in its simplest form; then in complex cases, where hypothesis and theory must be tried as means of arrival at the true nature of a case.

LIVERPOOL SCHOOL OF MEDICINE.

The Introductory Address was delivered on October 1st, by Dr. A. DAVIDSON. Mr. S. R. Graves, one of the members for Liverpool, presided.

The lecturer began with a reference to the large number of subjects included in the prescribed course of medical study, and the impossibility of the students becoming fully acquainted with all of them. In order to ascertain which of them were the most important and deserved the most attention from the student, they must be considered with reference to his future work as a practitioner of medicine. With this end, they were classed in two divisions, viz., the scientific and the practical. . . . Now, the great peculiarity of the medical education of the present, as compared with former times, was the amount of science that was now taught to the student: and most people attributed the increase in knowledge and skill of the medical profession as a whole, which had taken place in late years, to their scientific training; and desired, therefore, that even more science should be introduced into the curriculum. But there was a minority, including the great names of Graves, Trousseau, and Syme, who thought there was already far too much science taught, and that this was done at the expense of practical instruction. Here, then, was a very important question, not merely suitable for discussion at the general Medical Council, but requiring to be decided on by the student for himself:—Was he to devote a large portion of his time to

science, or was he to be content with studying medicine practically? With the view of arriving at a decision on this, it was necessary to consider what was the value of science to the practical physician. 1. It trained his powers of observation and his judgment. This was of the greatest importance to him. 2. It furnished him with a stock of scientific information on matters with which he was constantly dealing. To the ordinary physician, however, this was of much less use than was usually stated. He was guided far more by the rules of practical experience than by scientific knowledge. It was to the pioneer of medicine that scientific knowledge was chiefly useful—to the man who had the ability and opportunity to apply science to the advancement of medical knowledge, and who was willing rather to devote his life to this, and to teaching, than to establish himself in ordinary practice. The ordinary practitioner had little time or opportunity to do this; and, therefore, scientific information was of much less use to him. And, as to the value of science in cultivating the mind, this would establish its place rather as a part of preliminary education than of professional study. Besides, this training was to be obtained only by a genuine study of science, and not by that process of cramming to which the present system strongly tended.

Turning now to the practical division, and comparing it with the other, it was seen to constitute professional knowledge proper. It was knowledge which the physician must always have in his mind, and be constantly applying all his life to the cure of disease. Its extent was enormous; so that the whole time of the student's curriculum might well be occupied with it, and was the best opportunity for obtaining the greater part of it: for anatomy must be learned in the dissecting-room, and the hospital was the best place for learning practical medicine. The conclusion, then, was that practical knowledge was the main thing; the study of science must occupy a second place, and must never be allowed to interfere with the former. To study science to the neglect of practice, even for the sake of obtaining what was thought a high diploma, was a great mistake. The public knew little of the value of the various diplomas; and both the public and the profession estimated a man more by his general character, etc., by the hospital appointments which he had held, than by the letters which he appended to his name.

There was good reason to hope that, before long, the present confused system of medical examinations and licenses would be swept away: that a thorough preliminary examination would be established (in which might be included the necessary amount of science); and that, as the profession of medicine was essentially *one*, so there would be one single license to practise, granted to the student on his shewing sufficient evidence that he had been well instructed in all the departments of anatomy and practical medicine.

After the address, the following prizes were distributed by the Chairman:—*Scholarship and Gold Medal*—W. S. Paget. *Exhibitioners*—R. Leigh, W. S. Paget, H. Y. Pitts, and J. Matthews. *Medicine*—J. Matthews and R. A. H. Woods, equal, Silver Medals; R. Leigh, Certificate. *Surgery*—J. Matthews, Silver Medal; W. S. Paget, Certificate. *Physiology* (seniors)—H. C. Pope, Silver Medal; H. Y. Pitts, First Certificate; A. R. Hopper, Second Ditto. *Anatomy* (seniors)—H. Y. Pitts, Silver Medal; H. C. Pope, First Certificate; E. A. Fox, Second Ditto. *Anatomy and Physiology* (juniors)—J. Lewtas, Silver Medal; W. Garton and J. B. Lyth, equal, First Certificate; P. W. Hughes, Second Ditto; C. D. Leech, Third Ditto. *Chemistry*—E. C. Jec, Silver Medal; H. J. Molyneux, Certificate. *Midwifery, etc.*—W. S. Paget, Silver Medal; R. Leigh, Certificate. *Materia Medica*—H. C. Pope, Silver Medal. *Medical Jurisprudence*—W. S. Paget, Prize; R. Leigh, Second Prize. *Botany*—J. Lewtas, Prize; E. Phillips, Certificate. *Practical Chemistry*—J. B. Lyth, Prize; E. Phillips, Certificate; Prosector's Prize, H. Y. Pitts.

LEEDS SCHOOL OF MEDICINE.

THE Introductory Address was delivered by Mr. SEATON, on October 1.

He addressed himself to the first year's students, observing that at the root of all medical knowledge lay two sciences, on the study of which they would be required immediately to enter—*anatomy and chemistry*. Without anatomy, no man could be either a competent physician or surgeon. Books and plates would be of great assistance as adjuncts to work in the dissecting-room; a glance at a plate would often be of use in after life; but plates must never stand in place of dissection. If they begin by thoroughly mastering anatomy, their reputation as students was established; and, by the mental training which a knowledge of anatomy necessitated, the other subjects in your curriculum would be rendered comparatively easy. Should they extend their stu-

dies to comparative anatomy, they would find opened up a field of the highest interest. Chemistry afforded a knowledge of the constitution of food, of drugs, and of tissues. There was much in the perfectly definite laws regulating the combinations of matter, which rendered the study of chemistry attractive. There were, no doubt, some departments in organic chemistry which no merely medical student could be expected to grapple with; their teachers will be the best guides as to the subjects of special importance. With regard to physiology, he thought that students would scarcely be expected to acquire a competent knowledge of it during their first session. He was not sure that the plan adopted in the Scotch schools was not the best, where physiology was treated as a separate course, under the title of "Institutes of Medicine", in the second year. Mr. Seaton then noticed the study of botany and materia medica; and observed: "It has of late years been too much the fashion to decry the use of drugs in the treatment of disease, and even a tone of patronage adopted towards them as if they might be all very well in the present imperfect state of our knowledge; but that, by-and-bye, we might be able to do without them altogether. This tendency to undervalue the study of materia medica has, no doubt, been due partly to a reaction against the indiscriminate drugging of a past generation, as well as to a more careful study of Nature's processes for curing disease. But we must be careful that such reaction does not land us in the opposite extreme of undue scepticism; and that, while we are standing aside too patiently watching for Nature to perform a cure, the grim tyrant does not step in to snatch the subject of our studies from our observation. The *vis medicatrix nature* has not yet been found to have any quinine to cure ague, bromide of potassium to alleviate or cure epilepsy; or, above all, to have anything answering to that heaven-sent alleviator of the sufferings of the human race, opium. Had medicine done nothing more than show the varied uses of the latter wonderful drug, it would have established a great claim upon the gratitude of mankind. The introduction of the hypodermic syringe, a few years ago, by Dr. Alexander Wood of Edinburgh, has done much to increase the certainty of effect with which certain drugs, especially opium, can be administered in a concentrated form. It is marvellous to observe in cases where the patient may have been racked with pain, or spent days and nights in wild delirium, how, after the injection of a few drops of a drug under the skin, he falls almost instantly into a tranquil slumber, from which he awakes refreshed, and frequently on the road to cure." Mr. Seaton then remarked that an acquaintance with the subjects he had sketched would prepare the students to enter upon the study of the great practical divisions of the profession, and proceeded to notice the importance of attention to the art of diagnosis. Modern science had put many instruments into our hands for the purpose of effecting this object with greater certainty. Some of these were briefly referred to; and the lecturer remarked: "While carefully cultivating the use of those aids to diagnosis, you will not, of course, neglect the cultivation of your unaided senses. Your eyes, ears, nose, and fingers, have the great advantage of being very portable, and no case is likely to catch you without them, and in a large proportion of cases nothing else is absolutely required. The use of many instruments in the recognition and treatment of disease has an undoubted tendency to create special departments in our profession. Nor can it be denied that the cultivation of particular subjects by specialists has done an immense deal for the promotion of medical science. There does not appear to be any reason why a man may not cultivate a specialty and yet have a very excellent knowledge of medicine and surgery; but it is quite impossible that the same person can be eminent in all. A great physician can scarcely also be a great surgeon; and the converse; and this remark holds true to a still greater degree where the cultivation of specialties is concerned. The practical outcome of these considerations is, that you should first acquire a good groundwork of knowledge of all the subjects of study enjoined by the examining boards; and if any of you should discover in yourselves a liking for a special subject, then there is no reason why that should not be cultivated specially in addition to your general practice. Within the walls of our magnificent Hospital you will find, perhaps, as great a variety of cases as in any other Infirmary in the kingdom. . . . It is the intention of the physicians and surgeons that each student shall, during some period of his attendance at the hospital, not only have the opportunity of holding, but shall be required to hold, the offices of clinical clerk and dresser. You should look upon the holding of these offices as a privilege to be used in its fullest extent; in many hospitals it would be quite impossible, from the greater number of students, that you could have any such opportunity. You will, in the wards, see cases such as when you enter practice you may meet every day, and also rare cases drawn from a wide area, such as you may not be called upon to treat more than two or three times in a lifetime; both classes of cases, for different reasons, require your attention. You will have abundant opportunity of seeing almost every

variety of surgical operation. I would recommend you not to be contented with seeing the operation, and, mayhap, criticising the style of the operator; but watch carefully the after-treatment, and the steps by which the patient advances to a cure, or the contrary. Do not, again, content yourselves with looking after great operations in surgery, but learn by watching others, and on every opportunity doing it for yourselves, how to bandage neatly, to dress wounds nicely, and to apply splints to broken limbs. Should you fail in such matters as these, which are sufficiently obvious to an extra-professional eye, you will have no reason to complain if it be concluded that you will fail to a greater degree in matters of more importance." The lecturer then referred to the study of forensic medicine; the great advances made of late years in the prevention of disease; and the appointment of medical officers of health in most of the great towns in the kingdom. "The good results arising from the greater interest which the general public take in such matters is already apparent in many ways.... In our own town, although much, no doubt, remains to be done, immense strides have been made in such matters as paving and draining during the last few years. The evil of overcrowding has never been so great in Leeds as in some other large towns, such as Liverpool, Glasgow, and some parts of London; hence, possibly, its immunity from epidemics of typhus fever. Medical men have long been pretty well agreed that this disease follows in the wake of overcrowding and insufficient food; and it is for the public authorities to take advantage of this knowledge by preventing the too great huddling of inhabitants in a given place, and thus to avoid the development of a disease which is so specially fatal to the adult population." The connection between the development of typhoid fever and the contamination of our drinking water by decomposing sewage is another point which is pretty well proved, so that it becomes the positive duty of all public bodies which have anything to do with the conservation of the public health to see that the supply of water in our large towns is both pure and abundant, and that all sources of contamination should be sedulously guarded against. The lecturer then directed the attention of students to the best mode of conducting their studies, and gave a few hints as to the best means of taking advantage of the means of education provided at the Leeds school. "From this day until your life's end, if you continue true and faithful votaries of your art, you will ever remain students, still adding to your experience some new fact, or throwing some fresh light upon old ones.... Such men as Hey, Smith, and Teale, have taught us much by their writings, by their oral teaching, and by their example; but to whom could they communicate that wonderful *tactus eruditus*, which they had acquired by long experience and accurate observation? In passing, I may be allowed to pay my tribute of admiration to those men to whom Leeds owes so much of her reputation as a school of surgery. Of Mr. Hey it was impossible that I could know anything personally; but I can well remember, before I knew anything of Leeds, being struck by the way in which my surgical teacher in Glasgow spoke of him 'as that good man and most accomplished surgeon.' I am addressing an audience many of whom can well remember Mr. Smith and Mr. Teale; the former united, with the intense love for, and pride in, his profession, which made him eminent as a surgeon, those genial qualities which made him universally loved as a man; the latter combined, in a rare degree, the unvarying courtesy of manner, clearness of apprehension, soundness of judgment, and determination in acting upon an opinion once formed; both, although rich in the fruits of a long experience, kept their minds wonderfully open to every improvement in practice. They have gone, followed by the regrets of a sorrowing profession, and leaving, I doubt not, a heavy sense of responsibility on those who now fill the places which they so long honourably occupied.

"The medical profession, while providing you with occupation for your lives of the best kind, will also provide you with the means of earning a livelihood. But do not begin your studies with the idea of making a fortune—that is possible in but few instances; but with moderate powers well employed, you may well look forward to earning a fair competence as a reward for their exercise. The profession of medicine does not present as objects of ambition the incontestable heights which the law and the Church offer to their more able or aspiring members.... Medical men who attain to high positions generally do so by virtue of the estimation in which they are held by their professional brethren; they wield no authority but what is admitted by one of the most critical of constituencies; no prime minister can elevate, neither can he degrade them; they are leaders in a democracy which is without turbulence, where the honest worker is generally appreciated, and where quackery and pretence find their fitting reward. They, therefore, who have attained to high places in medicine have reason to be proud of their position; they may be said to be elected by their peers, who are necessarily the best judges of their merits.....

"There is only one profession other than our own to which we can

defer in our opportunities of doing good; and in so far as man's moral and religious, can be treated apart from his material, nature, we must yield to the clergy. But even here we find body and mind so intimately interwoven, the one reacting upon the other to so great a degree, that he would be but an indifferent physician who did not recognise the influence of the mind upon disease, and he but a narrow-minded clergyman who failed to make large allowances for the influence of man's physical constitution upon his higher nature.

"I hope you have gathered from what I have said, that the primary condition of success in practice is that you should have a thorough knowledge of your profession..... But there are certain other qualities which it is necessary to possess. Perhaps the most important of these are promptitude and method in the management of your work. Patients may be a long time in deciding to consult a medical man, or they may do so suddenly; but once having done so they have this thing in common, that they are seized with extreme impatience to see him; therefore all calls upon your services should be promptly met. When a patient is very ill, the doctor's visit is for him the event of the day; he longs for the time of his usual arrival, and, if it be long deferred, worries himself into a condition of feverish impatience. The exigencies of practice are no doubt inconsistent with perfect regularity; but by a methodical arrangement of one's work a tolerable approximation to it may frequently be made. In visiting a patient, do not let your stay be so short as to appear hurried; nor so long that his case ceases to be the point of central interest, and becomes blended and diffused in matters more or less extraneous. Cultivate for those under your care that feeling of kindness and sympathy which will naturally enable you in tone, look, and movement, to attune yourselves to the atmosphere of the sick room, and so avoid shock or jar to the sensitive nerves of its occupant. Think not that attention to such things as these, which may be called the graces of the profession, are in any way unworthy of your notice; on the contrary, a legitimate degree of attention to them will not only improve your chances of success in life, but have a beneficial influence on your practice from their effect on the minds of your patients."

At the conclusion of the address, the medals and certificates of merit were presented to the following students. *Midwifery*—Medal, John B. Bradbury; certificate of honour, Gordon Ritchie. *Materia Medica*—Medal, J. Sergeant; certificate, F. R. Carter. *Botany*—Medal, Arthur John Vause; certificate, Simeon Snell. *Medical Jurisprudence*—Medal, John Fryer; certificate, James Crocker. *Practical Chemistry*—Medal, J. Sergeant; certificate, W. A. Mawson. *Thorpe Scholarship*—First prize, £10, John Fryer; second prize, £5, J. Crocker.

NOTES ON BOOKS.

Compulsory Vaccination: an Inquiry into the present unsatisfactory Condition of Vaccine Lymph, and a Remedy proposed. By HENRY BLANC, M.D., F.R.G.S., Staff Assistant-Surgeon, Bombay Army; Superintendent of Vaccination, Western Circle, Bombay.—The author of this pamphlet brings together as much evidence as he can to prove—1. That transmission of other diseases than vaccinia is not only possible, but "must be received as an acknowledged fact", when humanised lymph is used for vaccination; 2. That the protective power of vaccine lymph is lessened by transmission through the human organism. With regard to the first question, we believe that there has been, to say the least, great exaggeration as to the transmission of syphilis by vaccination; and we suppose that "impetigo and ecthyma" will not be likely to decrease in frequency by the use of lymph direct from the heifer. It seems to us that Dr. Blanc allows himself to be led into a misinterpretation of fact in his arguments on the deterioration of lymph. At page 18, the author gives, as part of his "third inference", that small-pox after vaccination reached, in 1864, "the very high average of 84 per cent."! and, again, at page 30, "We need then hear no more of 83 per cent. of vaccinated persons applying for treatment in establishments that should have been closed long ago." This inference is drawn from a statement by Mr. Marson (page 17), which means that, of the patients admitted into the Small-pox Hospital in 1863 and 1864, 84 per cent. had previously been vaccinated. How are we to trust our author's conclusions, after this specimen?

The Selecta à Prescriptis, or Selections from Physicians' Prescriptions, of the late Dr. JONATHAN PEREIRA, has reached its fifteenth edition. The present editor has made such alterations and additions (including changes in accordance with the *British Pharmacopœia*) as were necessary for the fulfilment of the original objects of the book.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN
THE HOSPITALS OF GREAT BRITAIN.THE HOSPITAL FOR SKIN-DISEASES, BLACKFRIARS.
SERIES OF CASES OF SEVERE ERUPTIONS FROM INSECT-BITES
(MOSQUITOES?).

(Under the care of Mr. HUTCHINSON.)

A MIDDLE-AGED Irish woman came to the Hospital for Skin-Diseases on Tuesday (Sept. 28th) with a curious eruption, confined almost entirely to the face and forearms (there was one spot on the lip). The eruption consisted of large raised erythematous blotches, varying from the size of a threepenny-piece to that of a halfpenny. In some the centre became whitish when the skin was stretched, and in many a small, central dark point was observed exactly like a bite. In addition to these characters, there were signs of scratching, some of the spots being capped by bloody points. The eruption had begun about a fortnight before her attendance, and had varied somewhat in degree during that time, some spots dying away and fresh ones coming out. There was much itching. The spots looked exactly like large bug-bites. The woman was sure she had never been bitten by anything except fleas; she lived over a rag-shop, but she said though there were plenty of fleas, there were no bugs. She did not know what a gnat was like.

Shortly afterwards another woman, who was under care for alopecia, presented herself with a very similar rash on her face, hands, and forearms; it had come out since her last attendance a fortnight before. The spots in this case were somewhat smaller than in the preceding patient.

It appeared, on inquiry, that both patients lived near together, though in different streets and different stations of life; and they both stated that several other persons suffered from the same kind of eruption. The second patient was a servant, and she stated that her master and his daughter had the eruption.

The eruption in these two cases was so peculiar that Mr. Hutchinson thought it worth while to have the facts further investigated. Mr. Nettleship undertook to visit the locality and see what could be ascertained. On visiting the house of the first patient, he found that three of her children (out of five) were more or less affected with the same rash as their mother, but none of them so severely. Next door he heard of five individuals (four of whom we saw) similarly affected; while two doors further down the street the wife of a publican had been laid up with a swelled face and hand. This woman, when he saw her, showed considerable swelling of the left side of her face and of her left hand, and she said that these parts had been a good deal larger than when he saw them. A more detailed examination was not allowed.

The character of the eruption varied a good deal, from the extensive swelling in the publican's wife to spots little larger than papules of lichen. Many of even the smallest spots were really wheal-like, but others, probably of longer duration, were more like spots of prurigo.

In situation a remarkable constancy was observed. The face, forearms, and backs of hands, were, one and all, affected in every case. In two there were said to be spots on the body: one of these was a man who worked with his coat off. Two had some spots on the feet; and one, a boy, had two or three between his fingers.

The duration of the rash had varied from twenty-four hours to a fortnight. There were most spots on those who had suffered longest, and in these also the spots were to be seen in various stages, beginning as a small wheal-like spot, going on often to a large blotch, and ending generally with a prurigo papule.

All the patients seen were persons who lived chiefly at home, and all but one were females. There did not seem to be any relation between age and severity of eruption: the youngest was four years old.

None of the patients, excepting the publican's wife, suspected that they had been bitten; and, with the same exception, none knew what a gnat or a mosquito was like. The woman mentioned stated that her husband blamed mosquitoes for the swelling of her face and hand, and that a customer of her's had seen these insects in the neighbourhood. The street in which ten of these cases occurred is close to the river, and scarcely above the water's level. The remaining three cases (making thirteen in all) were all in one house in a street not more than two hundred yards from the other.

There seems no doubt that these were all cases of bites or stings by some insect. The curious point was, that only one out of ten seen had the faintest idea of the real cause, or that they had been bitten at all.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

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SATURDAY, OCTOBER 9TH, 1869.

THE ANTI-VACCINATION AGITATORS.

WE fear it is not possible for any argument or any form of suasion to stay the tide of folly and ignorance which is now raging against one of the most beneficent discoveries ever permitted to man; it must exhaust itself. The chief actors in the anti-vaccination movement are men upon whom all statements of fact and argument would be wasted. For one reason or other, they have taken their side. A position opposed to the wishes and belief of the rest of the community gratifies their vanity, and supplies them with pleasant excitement. There is no earthly reason why they should submit to be reclaimed. It is like trying to convince Father William that he ought not to stand on his head.

"In my youth," Father William replied to his son,

"I feared it might injure the brain;

But now that I'm perfectly sure I have none,

Why, I do it again and again."

The platform spouters on this question are beyond our hope, and almost beyond our pity. They must be left to hug their darling folly; but for their deluded followers we do feel real commiseration. The arguments which the agitators so boldly state are very specious; they refer to matters concerning which their hearers have no real experience; and they seem to be supported by a certain class of facts. Anything which can be said to prevent the delusion spreading amongst these, it is most desirable to say. Numerous excellent pamphlets and tracts have been published, with the hope of enlightening the public mind; and the argument, as obtained from the statistics of success in preventing small-pox, can scarcely be expressed more clearly than it has been repeatedly done already. The summary of it is briefly this: that, in countries where vaccination has been for many years compulsory, and where the law has been well carried out, small-pox is now almost unknown. It should be explained respecting vaccination, that it does not confer immunity by any means invariably, nor always for the whole life of the individual. The glorious result of stamping out small-pox is obtained in part by the immunity of individuals, and in part by exempting them from exposure to the risk of contagion. If into a thoroughly well vaccinated community a few small-pox cases were to be introduced, and no precautions observed, a certain number would undoubtedly, in a modified form, take the disease. It is probable that this would be the case, without regard to the special method of vaccination; and it makes it clearly evident that the double precaution must be taken. We must destroy, as far as possible, the fecundity of the soil; but, as we cannot do that absolutely, we must also prevent the access of seeds. Hence the need for compulsory measures. It is most unfair to those who have readily adopted the chance of immunity which vaccination gives, that they should be exposed to risk on account of their less careful or crotchety neighbours. If the immunity were absolute and life-long, we might perhaps afford to let the foolish part of the community do as it likes; but, unfortunately, such is not the case. It is most important that medical men should make this aspect of the question widely known. The fact that vaccination as a safeguard is not invariably successful, so far from being an argument against making it compulsory, is the

strongest one which can be urged in favour of legislation. This fact has hitherto been a stumbling-block to many sensible persons. The exceptions to the success of the method have been exaggerated until they have seemed to assume real importance. It is our duty as a profession to explain what the lesson of these exceptions, which we admit, really is; and to show that it is very different from what it might at first sight be supposed. At the same time that we admit some, let us also make it clear that most of the statements on this point are gross exaggerations. A ridiculous blunder in this matter is referred to in another page, in which a would-be authority on the matter actually states that 84 per cent. of those vaccinated suffer from small-pox; the statement which he has so unfortunately distorted being really that of those who in London suffer from small-pox, 84 per cent. have been previously vaccinated.

It is very desirable that medical men should make known, as widely as possible, that what the public call "communicating the seeds of loathsome disease", and surgeons speak of as "vaccinal syphilis", is really almost mythical. A series of Italian cases, a few French ones, about many of which there is much doubt, and we have but few other facts in this direction to mention. Almost without exception, English and German authorities agree in considering this alleged danger as practically non-existent. The same argument may be most truthfully held as regards the transmission of scrofula. Perhaps the most convincing statement which could be made to an uneducated person, in respect to both these supposed risks, is that medical men have no sort of scruple in submitting their own children to them, and thus furnish the strongest proof of utter disbelief in their reality.

It ought to be urged, also, that our profession has, excepting the public good, no sort of object in advising vaccination. It would be greatly to our pecuniary advantage, and would increase the amount of illness immensely, if small-pox were again allowed to prevail.

As regards the production of skin-diseases, it is desirable to speak with perfect candour. Now and then, but only very rarely, vaccination, conducted with every possible care, becomes, as any other local irritant on the delicate skin might do, the cause of an eczema or a porrigo. The commonest form of eruption (and still a very rare one) is that known at the Blackfriars Hospital as "contagious porrigo", and recently named, by Dr. Tilbury Fox, "impetigo contagiosa." It spreads, in all probability, in virtue of the contagion of pus. It produces a very free eruption; but it is very easily curable by local measures only, and leaves no ill result whatever. Eczema will probably only occur in those predisposed to it; and, as every mother knows, "tettery rashes" are so common in children during dentition, that it is absurd to attribute them to vaccination because they chance to occur in apparent connection with it.

As regards the enforcement of compulsory measures, there must be no flinching. It is the duty of the Government to remove, first, every hindrance and cause of reluctance, and to guarantee every possible security. Probably some minor improvements are still needed in the arrangements for public and gratuitous vaccination. But, these having been attended to, it is then the bounden duty of the executive to enforce the law. We have shown that in the universality of the practice lies the only safety of the public. It is one of those matters in which private judgment, or, rather, private want of judgment, cannot be allowed to interfere with the grand result which is before us. It is one of those in which, to use the words of Mr. Mill—the most ardent exponent of the principle of individual liberty—"there is an evident justification for converting the moral obligation into a legal one; just as, in many other cases of the progress of opinion, the law ends by enforcing against recalcitrant minorities obligations, which to be useful must be general, and which, from a sense of their utility, a large majority have voluntarily consented to take upon themselves."

SPECIALISTS BY COMPULSION.

THE subject of specialisms has been discussed over and over again in our pages and in those of our contemporaries. The verdict of the profession has, we think, been given with tolerable clearness. It is, as we read it, that special hospitals are prejudicial in many ways to the interests of the profession and of medical education; but that they have been forced into existence, and are still sustained, by the narrow policy adopted by the larger institutions. In conformity with this belief, there has been a general though tardy movement at our larger hospitals in favour of special departments, which may at once afford the means of training to their students, and take away the pretext of necessity which those who originate special hospitals so commonly employ. To this movement we need not say that we wish every success. It is one which had long been necessary, and which, if carried out well even thus late, will very probably be successful in gradually supplanting the detached institutions which all admit to be open to many objections.

To accomplish this most desirable end, however, the managers of our large general hospitals must act with thorough liberality, and must be willing also to devote a little thought to the best mode of procedure. As far as we can see, the measures adopted by some are far from liberal, and will, if persisted in, tend to perpetuate and augment some of the worst evils of specialism. One of those evils is the formation of specialists, or, in other words, of men who restrict their practice and their thoughts to single subjects, and thus become to some extent disqualified for the wide study of them.

There are now in London about a dozen general hospitals, each having its school attached, and needing, for the purposes of medical education, special departments for diseases of eye, diseases of skin, diseases of ear, etc. There can be little doubt that each year will witness still greater progress in the classification of patients. Such classification is convenient both to prescribers and to students, and it conduces in every way to the increase of knowledge. The question which we wish now to put is, as to how this want shall be provided for. Is it desirable that twelve specialists in each of these several departments of medical practice should be constituted? Is it even possible? Will the metropolis support twelve practitioners exclusively devoted to diseases of the skin? Would not the attempt lead to rivalries and competition of a kind anything but advantageous? If it is not advisable in diseases of the skin, how as to those of the ear, of the eye, of the throat, and other much less extensive departments of practice? Charing Cross Hospital is at present advertising for a specialist in skin-diseases, and cannot get one. It requires him to restrict himself to this one department of practice, and to forego all appointments at other hospitals. We are glad that the search has as yet proved abortive; it is not a reasonable one. Charing Cross is, however, not acting less wisely than several other much larger hospitals, which, in virtue of their size and reputation, succeed in their wishes whilst exacting precisely similar conditions. We protest, not against the special instance, but against the general principle. It has been adopted, we think, without sufficient reflection; and it has for its natural result, not the mitigation of the evils of specialism, but their increase. Its effect, if successful, will be to force men to become specialists; and will encourage the absurd belief, already too widely entertained both in the profession and out of it, that a man cannot understand more than one department.

Is there any better plan? We think there is; and we think so, not as a mere matter of speculation, but from knowledge of its working. Let a hospital arrange special departments; in other words, classify its patients, and appoint members of its own staff (in yearly rotation, or otherwise, as convenient) to attend to them. If the number of those on the staff be not sufficient for the special work, then increase it. If, with a staff fully adequate to the work of the hospital, none can be found who will take charge of special departments, and of the medical teaching required in them, our inference as to the efficiency of the establishment as a school is obvious. The plan has the great advantage that, whilst it encourages the knowledge of what are considered special departments of

practice by many, it makes specialists in the narrow sense of none. It affords to the students the opportunity of seeing the practice of several instead of one, and of those who understand general medicine or surgery, instead of those who have restricted their ideas to one subject only. A few legitimate specialists will undoubtedly from time to time crop up; but they will come of natural selection, and not by any artificial forcing system. They will be those who, after a fair trial, find that their aptitude lies chiefly in one particular direction, and who—probably not earlier than middle life—discover that the verdict of their patients and of their professional friends is, that their abilities are best shown in one department. Against this kind of specialism there is nothing to be said; and, if there were, to say it would be futile.

We are the more anxious to urge this matter on the attention of our readers at the present time, because we feel sure that steps must soon be taken in respect to it, not only in our metropolitan, but also in our provincial schools. Classification of patients is one of the chief means by which the more extensive clinical acquisitions required in the present day are made possible of attainment by students. Wherever medical schools exist, it must sooner or later be adopted.

Nor does the matter concern only our own country. Whilst the English profession is decrying specialism, foreign practitioners, attracted by the achievements of our specialists, come here to study our plans and to copy them. It is important for them, it is important on all hands—it is so to a degree which we can scarcely exaggerate—that our arrangements should be the best that can be devised.

PROFESSOR BOEHM of Berlin is said to be dangerously ill from the effects of a dissection-wound.

A CONVALESCENT home for the Jewish poor, erected as a memorial to the late Judith, Lady Montefiore, was opened on Tuesday last. It is situated near Norwood.

THE Commissioners of Public Charities and Correction in New York are considering a plan for the systematic visitation of the out-door poor at their homes. They propose the appointment of district physicians to visit by their order.

“LAUDARI A NON LAUDATIS.”

THE St. Pancras guardians have presented Dr. Edmunds with an address on vellum, expressive of their appreciation of his skill and energy in helping them through the mud. What will he do with it?

“LAUDARI A LAUDATO.”

MR. SIMON has deferred the republication, in the new edition of Holmes's *System*, of the second half of his splendid essay on Inflammation, because he has not had time to master and test the researches of Cohnheim. We regret it; but never was a higher compliment paid to the writings of any author.

REMUNERATION OF HOSPITAL MEDICAL OFFICERS.

AT a meeting of the Medical Committee of the Metropolitan Free Hospital this week, the subject of the remuneration of the medical staff was discussed. It was unanimously resolved that, in public institutions which do not possess a medical school or other indirect source for remunerating the medical officers, there should be a payment made by the Committee out of the general funds.

“PUNCH” ON CUI BONO.

MR. PUNCH, to whom science generally, and medical science in particular, is often under obligation for excellent remarks, lends last week a helping hand to the reformers at St. Bartholomew's. He has, however, at another page, some comments in ridicule of a medical investigation, from which we are obliged to dissent most strongly. Dr. Beddoe of Bristol has been long and laboriously engaged in obtaining data as to the relative height, weight, etc., of the British population in different localities. His results, epitomised into the bald statement that he

had found “the tallest men in Upper Galloway, the heaviest in Berwickshire, and the smallest in Spitalfields,” have excited our contemporary's sense of the ridiculous, and led him to pen remarks which are certainly very ill deserved. “Most valuable and interesting statistics. Next to knowing how many pennies piled up would be as high as the Monument, and what is the united age of nine old idiots who dined together on the 1st of April, we rejoice in acquiring the above information.” Now, so far from Dr. Beddoe's observations being superfluous, we must attach a high value to them. Nor is the knowledge of height and bulk all of the same kind that we should like. If we had good reliable statistics as to colour of eyes and hair, development of teeth, character of features, etc., investigators in medicine and physiology, as well as in what is included under the wide term of anthropology, would find them very useful. In matters of science, “the infinitely small” is often very near to the “immeasurably great;” and we cannot afford to condemn honest investigation into any detail, however minute. We never know how soon its use may be found. In the present instance, we repeat, it would be easy enough to show present uses, and how invaluable to the student of civilisation would such data be as regards the past, if they were obtainable. The true student will never trouble himself much about the *cui bono*, but will rather adopt the spirit which prompted the exclamation,

“Let me know all! Prate not of most or least,
Painful or easy!
Even to the crumbs I'd fain eat up the feast,
Aye, nor feel queasy.”

CHEMISTRY AT ETON.

Two large buildings, recently erected for a chemical laboratory, have been opened at Eton for the use of the pupils. The laboratory will be under the superintendence of Professor Madan.

PROSECUTION UNDER THE SANITARY ACT.

WE are very glad to observe that a landlord has been fined £3 for causing furniture to be removed and exposed for sale which belonged to a family attacked with scarlet fever. The broker who allowed the goods to be exposed in his shop has also been fined.

IMPOLITIC CONDUCT OF A BOARD OF GUARDIANS.

THE medical profession is sometimes accused of being hard upon Boards of Guardians. The following, although not of medical interest, may be quoted in illustration of the truthfulness of some of our complaints, and of a policy at once shortsighted and inhuman. An old man, nearly 70 years of age, a labourer in the parish of Weeley in Essex, earning sixteen shillings a week, has been sent to Chelmsford Gaol because he was not able to contribute to the support of two grandchildren in the workhouse. He had two sons; one died young, leaving two children, who were in the workhouse. The other son was drowned, leaving one child, whom the grandfather supported as his own. Twelve months ago, the Guardians of the parish summoned the grandfather to contribute to the support of the children in the union. The poor old man, already supporting a wife, himself, and a grandchild, on his earnings, could not do so; and, though the authorities have been well petitioned, he has been sent to gaol, and in consequence the wife and grandchild have gone into the workhouse.

DEATH OF THE SUPPOSED FENIAN KELLY.

WE briefly mentioned last week an accident which happened to a man who was taken into King's College Hospital with a compound fracture of the skull. The man died last Sunday evening. The fracture extended nearly horizontally across the frontal bone, and also over the roofs of both orbits. The brain in one spot slightly protruded, and the bone was depressed in front. Mr. Henry Smith elevated it, with at first slight relief to the patient. The man was about 5 feet 9½ inches in height, well made, and muscular. He had a beard and moustache, of a reddish colour; but the hair of his head was darker. In the upper jaw, on the right side, the first bicuspid was broken, and the second

bicuspid absent; in the lower jaw, the second incisor on the left side had grown backwards, so as to give the appearance, when the mouth was closed, of being absent. There was a faint superficial white scar on the lower part of the abdomen, but it did not look like a bayonet-wound. It seems that Kelly was about 5 feet 7 inches high; had brownish hair; a tooth in the lower jaw wanting; and a scar on the abdomen. At the inquest held last Tuesday, all doubt as to the identity ended, and the deceased proved to be a man named Edward Martin.

THE FIRE AT PADDINGTON.

THE man Titheridge has so far recovered from the slight shock he received, as to be able to leave St. Mary's Hospital. He was not otherwise injured.

KING'S COLLEGE MEDICAL SOCIETY.

THE annual general meeting of this Society will be held at King's College, on Thursday evening next, October 14th. The Chair will be taken at eight o'clock, by the President, Dr. Kelly; and the inaugural address will be read by Dr. R. S. Smith, one of the Vice-Presidents of the Society.

THE INTERNATIONAL MEDICAL CONGRESS AT FLORENCE.

THE session of the International Medical Congress at Florence was opened on September 23rd by M. Bargoni, the Minister of Public Instruction; who had on his right hand M. Bouillaud of Paris, the honorary President, and M. de Renzi of Naples, President for the year. M. Bargoni welcomed the visitors to the congress, and expressed his confidence that its discussions would be for the good of humanity. M. Palasciano of Naples gave an account of the work of organisation of the meeting. It had been at first hoped that the congress would meet in Rome; but, notwithstanding the persuasion used by M. Palasciano, and his assurance that no questions of religion, politics, or philosophy would be discussed, the pontifical government refused his request. It was then determined to meet in Florence, "the provisional capital of the kingdom of Italy". The two presidents also spoke: M. Bouillaud addressing himself especially to the Italians, and M. de Renzi to the strangers. The reading of papers was then commenced, the first subject being "Marsh Miasma": on which several essays were read, in French, Italian, and Latin. The evening of the first day was occupied with papers by Dr. Crispino on hydrophobia; Dr. Tomaselli on heart-diseases; and Dr. Benedick of Vienna on his instruments for arresting hæmorrhage; etc.

THE SOCIAL SCIENCE CONGRESS.

AT the meeting of the Social Science Congress in Bristol during the past week, several important questions were discussed in the Public Medicine Section, under the presidency of Dr. Symonds. On October 1st, the President read a paper on Proposed Legislative Prevention of Drunkenness. His arguments were based on the assumption that a drunken man was in an unsound state of mind, and should be protected from himself and other people as much as a lunatic. Two resolutions were proposed: 1. "That the penal laws repressive of voluntary drunkenness should be more rigidly enforced;" and 2. "That dipsomaniacs should be liable to deprivation of liberty, with a view to their protection and reformation." The resolutions were seconded and carried—the first unanimously, and the second with one dissentient. On Hospital Management, Miss Duck contributed a paper in which she urged various improvements in the conduct of large public institutions. Dr. Lankester admitted that the proportion of deaths in large hospitals was enormous, in proportion with the number of deaths from the same diseases out of the hospitals. He was in favour of cottage hospitals. A discussion on Vaccination lasted for the remainder of the afternoon.—On Saturday, papers were read by Dr. Alfred Carpenter, on the Sewage Evil, its Causes and Effects, with Suggestions for its Remedy; by Mr. Sneade Browne, on the Ventilation of the Sewers of Clifton; by Mr. W. Hope, on Town Sewage; and by Mr. R. B. Carter, on the Sewage-works of Stroud.—On Monday, there was a discussion on the

proposal to extend the Contagious Diseases Prevention Act to the Civil Population. A resolution against the proposal was carried.—On Tuesday, Dr. W. Budd made some observations on Defects in the Present System of Death-Registration. He had mapped the distribution of diseases in Bristol, and several defects had forced themselves on his attention. He mentioned these, and suggested remedies. One of these was the placing of the records relating to deaths and their causes in a central office. Dr. Davies, Medical Officer of Health for Bristol, spoke of the difficulties which he had met with in carrying out his duties. The whole system of registration was, he said, delusive. A large number of illegitimate births were never registered; many births, which would make their appearance on the birth-register too soon after marriage, were never entered; but, if any of those infants died, their death were placed on the death-register. Mr. J. Perry, Chairman of the Bristol Board of Health, promised that the subject should be brought before the attention of that body. Mr. W. W. Stoddart read a paper on the Drinkable Water of Bristol.—A vote of thanks to the President brought the business of the Section to a close.

DR. LYON PLAYFAIR AND THE MASTERSHIP OF THE MINT.

WE are enabled to state that there is no foundation for the report that Dr. Lyon Playfair, M.P., is a candidate for the appointment of Master of the Mint, and that no offer of the kind has been made to him by the Government.

THE AMERICAN REBELLION.

AN Association, called the Southern Historical Society, has been formed for the purpose of collecting material for a history of the late rebellion. One of its objects is the preservation of the medical records of the late Confederate Army. Professor Joseph Jones, of New Orleans, is the Secretary.

NEW MEDICAL COLLEGES IN AMERICA.

A NEW Medical College—the College of Physicians and Surgeons—has been started in New York. It has seventeen professors. A new Medical College, with nine professors, has also been recently organised in Indianapolis.

A POLISH MEDICO-SCIENTIFIC CONGRESS.

A CONGRESS of Polish Physicians and Naturalists was held, for the first time, on September 20th, at Cracow, under the presidency of Professor Meyer. Dr. Galezowski of Paris was chosen Vice-President. Five sections were formed; viz.: 1. Physiography; 2. Anatomy and Physiology; 3. Clinical Knowledge, under the presidency of Professor Brodowicz, Dr. Dieth (Burgomaster of Cracow), and Dr. Galezowski; 4. Hygiene and Sanitary Policy; 5. Chemistry and Pharmacy.

SPECTRUM-ANALYSIS.

MR. H. C. SORBY has published, in the *Quarterly Journal of Microscopical Science* for the present month, a paper on some technical applications of spectrum-analysis. He has investigated, by this method, the changes undergone by the colouring matter of wines; and says that he has been enabled to devise a plan by which he can ascertain the approximate age of port wine kept in the cask. The materials alleged to have been used as colouring matters in wine—logwood, Brazil wood, Virginian poke, and rhatany—he has not yet found in wines of commerce: but he describes methods by which very small quantities of the former two, and less minute quantities of the latter two, may be detected. The substances may, however, be changed by being kept long in solutions, so as not to be detected. The same remark is applicable to colouring matters added to beer; while, in regard to this beverage, Mr. Sorby thinks that the spectrum-analysis may throw much light on some of the changes that take place in brewing, and that it would also aid the detection of some adulterations. He is also able, he says, to detect the presence of turmeric in ordinary mustard and in rhubarb; of colouring matter in cheese and butter; and of cochineal and of magenta in sundry preparations.

WHAT IS BLOOD-FIBRIN?

A FEW years ago, physiologists thought that they had a tolerably clear notion as to what the fibrin of blood is. Schmidt, however, threw doubt on the matter by his theory that the fibrin of blood-clot does not exist as such in the circulating blood, but is the result of the union, out of the body, of "fibrinoplastic" and "fibrinogenous" matter. This year, Messrs. Béchamp and Estor have, in communications to the Academy of Sciences in Paris, announced that the substance called blood-fibrin is only a false membrane, formed of the organic molecules (*microzymes*) of the blood, aggregated by a substance which they secrete from the albumen of the blood. In a communication made to the Academy on September 20th, they describe further researches in confirmation of their theory. They allege that the so-called fibrin, under favourable circumstances, is capable of being resolved into microzymes and bacteria—the latter being formed by the aggregation of microzymes.

THE ROYAL ALBERT ASYLUM FOR IDIOTS AT LANCASTER.

AN annual meeting of the subscribers to the fund for establishing an Asylum for Idiots in the northern counties, was held at Durham on September 29th: the Venerable Archdeacon Bland in the chair. The proposal to found such an institution was first brought forward in Dec. 1864: and, up to the present time, the total subscriptions received have amounted to about £60,000. The amount includes two bequests of £5,000 each, from the late Mr. Bairstow of Preston, and the Very Rev. Dr. Waddington, Dean of Durham; and a donation of £5,000 from Sir Titus Salt, Bart., of Saltaire. It has not been possible to open a part of the building this year, as was intended: but it is confidently expected that the asylum will be ready to be opened by the end of next summer. At the meeting, resolutions were passed expressive of pleasure at the liberal support which the asylum had received from all classes, and appointing members of the central committee, and of the local committee in Durham. The next annual meeting is to be held in September 1870, at Bradford. We trust the subscribers will then have the satisfaction of hearing that the asylum is open and in full operation.

AN USEFUL INSTITUTION.

THE Superintendent's Report of the New York State Inebriate Asylum, for the year 1868, says:—"Of the 228 patients discharged from the asylum since May 1st, 1867, 113 appear to have permanently reformed, after a single probationary trial. Satisfactory reports of the condition of these have reached the Superintendent through the medium of correspondence addressed to him, either by the men themselves, or by their friends. Eleven have fallen after a first trial, and four after a second; but, returning and clinging to the asylum, have likewise triumphed in the end. Of sixty-eight we have no certain tidings, nor any means of ascertaining their present condition; but as many as these were in a highly favourable state of physical and moral health when they left, I think we may confidently claim at least one-third of the number (say twenty-three) as reformed. Twenty-five may be set down as failures. Only four have died, and three have been insane."

KING'S COLLEGE.

DR. RUTHERFORD, the new Professor of Physiology, delivered his introductory lecture on Monday last. The audience was large, and gave Dr. Rutherford a very cordial reception.

CANADIAN MEDICAL ASSOCIATION.

WE notice by the Canadian papers that this body met at Toronto in the beginning of September, under the presidency of the Hon. C. Tupper, C.B., and that the following distinguished members of the medical profession not residing in the dominion were unanimously elected honorary members: Dr. Davis of Chicago, the first delegate from the United States of America; Sir George Duncan Gibb, Bart., M.D., of London, England; Joseph K. Barnes, M.D., Surgeon-General, United States Army; Samuel D. Gross, M.D., of Philadelphia; Charles A. Lee, M.D., of Buffalo University, New York.

CHOLERA IN PERSIA.

ACCORDING to the latest accounts received, cholera still holds its own in Persia. It is true that it is not present to any great extent, but still cases are occurring; sometimes a great many in a day, and, at other times, only a few. It appears, however, to be taking a sporadic form, as it has made its appearance in various isolated parts of the country.

DR. RICHARDSON ON CHLORAL.

DR. RICHARDSON opened his course of lectures on Experimental and Practical Medicine on Tuesday last. The subject was Chloral: and many new experimental facts were illustrated; among others, the great decrease of animal temperature caused by the substance, and the production of prolonged anæsthesia by inhalation from an ethereal solution. The following is a summary of the lecturer's views:—1. Deep and prolonged narcotism can be safely produced by the hydrate of chloral. 2. During a portion of the period of narcotism, there may be complete anæsthesia with absence of reflex actions; a condition, in short, in which every kind of operation fails to call forth consciousness. 3. During the narcotism, there are intervals of apparent exalted sensibility. 4. In the transition from drowsiness to stupor, there is no stage of muscular excitement; but in birds there is vomiting, as is common in the same animal in the second stage of narcotism from chloroform. 5. During the narcotism produced by the substance, there is invariably reduction of temperature. 6. The hydrate produces muscular relaxation; which relaxation extends to the muscles of volition, and also to the iris and muscular arterial system. From the condition of the muscles after death, it may be inferred that this paralysis is in part due to change within the muscular structure itself. 7. The action of the substance on the nervous system is primarily on the sympathetic ganglia, afterwards on the cerebrum; and, finally, on the heart. 8. Recovery is followed by no bad results. 9. In fatal cases, the functions are destroyed in the following order: *a.* the cerebral; *b.* the voluntary muscular; *c.* the respiratory; *d.* the heart. 10. The substance, in small proportions, prevents, in some degree, the coagulability of the blood; and, in large quantities, stops the process of coagulation altogether. In large quantities, it also destroys the blood-corpuscles, and produces general destruction of blood. But to produce deep insensibility, the dose administered need not be so large as to lead to serious derangement of blood. 11. The phenomena observed correspond with those observed under chloroform; and the balance of evidence is, that they are the result of the action of chloroform. 12. Therapeutically, the agent is to be accepted as the rival of opium. It promises to be useful in cases where there are increment of animal heat, muscular spasm, and pain. It will be worthy of extensive trial, in tetanus especially. The dose of hydrate of chloral for a child is seven grains; for an adult, the dose may be extended to one hundred or even one hundred and twenty grains. The lecture was illustrated throughout by experiment; and the lecturer received a hearty reception from those who were present.

THE GOVERNMENT OF INDIA AND DR. MURRAY'S REPORT ON CHOLERA.

THE *Indian Medical Gazette* of August 2nd, says that the Governor-General in Council has caused the thanks of the Government of India to be conveyed to the author of this treatise on cholera in the following terms:—"I am to request that you will convey to Dr. Murray the thanks of the Government of India for his able paper, and for the zeal with which he has undertaken the collection and analysis of the opinion of the medical profession in India; and devoted his time, attention, ability, and protracted experience to the laborious consideration of a question of such momentous importance to the well-being of all the inhabitants of India, native as well as British.....The Governor-General in Council does not venture to pronounce on the degree of weight and authority which should be attached to it; but, as a careful analysis by a professional man of Dr. Murray's special experience and long study of the disease, the Governor-General in Council is satisfied that its promulgation cannot fail to stimulate all those whose duties

call them to combat cholera to an earnest study of its nature and treatment."

PATHOLOGICAL SOCIETY.

A SPECIAL general meeting of this Society will be held at 53, Berners Street, on Friday, the 15th instant, to consider the resolutions adopted provisionally by the Royal Medical and Chirurgical Society to secure the union of the various London Medical Societies. The first ordinary meeting will be held on the following Tuesday.

MEDICAL INSPECTORSHIP TO THE PRIVY COUNCIL.

ABOUT a year and a half ago, in notifying the appointment of Dr. Wiltshire to the above post, we remarked that "Dr. Wiltshire was a distinguished student of University College; and his colleagues and friends will not see without regret his translation into the limited sphere of official work. He might successfully have aspired in practice to a very high position." We now learn that Dr. Wiltshire, much preferring purely professional work to the comparatively uninteresting and heavy duties of official life, has resigned the above appointment; and that he purposes shortly resuming practice in London. We heartily wish him success; and doubt not that, with his qualifications and aptitude for clinical work, our prediction of last year will be fully verified.

A CONVALESCENT HOSPITAL FOR MANCHESTER.

THE trustees of the Manchester Royal Infirmary have for some time past had in contemplation the purchase of Cheadle Hall, with the surrounding grounds, and of adapting it to the purposes of a hospital for convalescent patients. The carrying out of this admirable design would have involved a serious charge upon the funds of the institution, which are not more than adequate to its ordinary needs. In these circumstances, Mr. Robert Barnes, formerly mayor, and many years alderman of Manchester, has placed at the disposal of the trustees, as a free gift, the sum of £10,000. It is more than will be necessary to purchase the Cheadle Hall estate, and the surplus will cover the outlay requisite to render the new hospital thoroughly suitable for the reception of patients.

SCOTLAND.

THE annual meeting of the subscribers to the Forfar Hospital was held last week. The reports were satisfactory. A remit was made to a Committee to consider the propriety of extending the hospital.

AT a meeting of the Edinburgh University Court held on Tuesday, the appointments of Mr. John Young Buchanan and Mr. James Dewar as Assistants to the Professor of Chemistry were approved of.

TESTIMONIAL TO DR. DICKIE OF ALLOA.

A GRATIFYING gift, consisting of a silver jug with purse of sovereigns, was made the other day to Dr. Dickie of Alloa, on the occasion of his leaving that place. Upwards of one hundred and fifty of his patients and friends had subscribed to it. Dr. Dickie is changing his sphere to Hull.

THE EXAMINERSHIPS IN THE UNIVERSITY OF ABERDEEN.

WE hear that Dr. Bruce of Crimond, and Dr. Tidy, Lecturer on Chemistry at the London Hospital Medical College, are candidates for appointments as Examiners in Medicine in the University of Aberdeen. Both gentlemen are distinguished graduates of the University, and well qualified to fulfil the duties of the office.

UNIVERSITY OF EDINBURGH: THE CHAIR OF PATHOLOGY.

DR. W. R. SANDERS was appointed to the Chair of Pathology in the University of Edinburgh, at a meeting of Curators held on Friday, the 1st instant. As the claims of Dr. Sanders and Dr. Stewart were both most excellent, a close contest was necessarily expected; but it was generally believed that those of Dr. Sanders would obtain for him the appointment. This opinion was confirmed, Dr. Sanders receiving the support of four out of seven of the Curators.

APPOINTMENT OF QUEEN'S PHYSICIAN.

THE Queen has appointed Dr. Laycock, Professor of the Practice of Medicine in the University of Edinburgh, one of Her Majesty's Physicians for Scotland, in the place of Dr. Begbie, deceased. This recognition of Dr. Laycock's distinguished position and abilities will be received with pleasure by the whole profession.

REPRESENTATION OF THE UNIVERSITIES OF ABERDEEN AND GLASGOW.

MEETINGS have been held during the week at Aberdeen and Glasgow, by the Liberal members of Council of the Universities; and, although it is most probable that Mr. Archibald Smith of Jordan Hill will be ultimately brought forward as the Liberal candidate, it was resolved in the meantime to appoint a joint Committee to confer as to the most suitable person to bring forward. The "Scottish Universities Union" has resolved to request Mr. John Stuart Mill to allow himself to be brought forward; but, as no one appears to know anything of this Union, the resolution has received little attention.

THE FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.

AT a meeting of this Corporation, held on the 4th instant, the following office-bearers were elected for the ensuing year, viz.:—Andrew Anderson, M.D., *President*; Harry Rainy, M.D., *Visitor*; John Coats, M.D., *Treasurer*; J. D. Maclaren, M.D., *Honorary Librarian*; James Dunlop, M.D., *Vaccinator*. *Councillors*: The President, *ex officio*; the Visitor, *ex officio*; John Coats, M.D.; Eben Watson, M.D.; W. Weir, M.D.; R. S. Orr, M.D. *Board of Examiners*: Jas. Morton, M.D., Surgery and Surgical Anatomy; R. Perry, M.D., Chemistry; R. D. Tannahill, M.D., Midwifery and Medical Jurisprudence; J. B. Cowan, M.D., Medicine and Materia Medica; A. Fergus, M.D., Chemistry; George Buchanan, M.D., Anatomy and Physiology; Robert Scott Orr, M.D., Medicine and Materia Medica; William Leishman, M.D., Midwifery and Medical Jurisprudence; William Lyon, M.D., Surgery and Surgical Anatomy; Eben Watson, M.D., Anatomy and Physiology. *Clinical Examiners in Medicine*: The Physicians of the Royal Infirmary. *Clinical Examiners in Surgery*: The Surgeons of the Royal Infirmary. *Examiners in Arts*: John Coats, M.D.; James Steven, M.D. Laurence Hill, LL.D., and William Henry Hill, *Clerks*; Alexander Duncan, B.A., *Librarian and Secretary*; John M'Farlane, *Officer*.

IRELAND.

SPECIAL DEPARTMENTS IN HOSPITALS.

CERTIFICATES in Ophthalmic Surgery being now necessary for the surgical degrees of the Universities, it is likely that special opportunities will be provided in such of the hospitals as do not now possess them.

ASSISTANT-PHYSICIANS AND SURGEONS.

ONE of the Dublin hospitals is about to elect two assistant-physicians and two assistant-surgeons for the care of out-patients and also of the wards when the physicians and surgeons may be absent. It is to be hoped this desirable change will be made in all the hospitals.

ST. VINCENT'S HOSPITAL.

THE staff of this hospital, all the members of which have been heretofore termed medical advisers, have been divided into two physicians and two surgeons. These officers are, for the future, to receive the pupils' fees.

UNIFORMITY OF TITLE.

THE views expounded in the JOURNAL of the 25th ultimo, with respect to the adoption of the uniform title of "Doctor", have been generally approved of here. Such is almost the only appellation used by the public for a member of our profession. Three or four only in Dublin select the title of "Mr. —", by placing their names thus on their door-plates; and many in large surgical practice call themselves "Dr." The Colleges of Physicians and Surgeons in Dublin, it is said, are likely to agree as to a combined examination.

REPORT

ON

THE PREVENTABLE DISEASES OF THE INDUSTRIAL CLASSES.

X.—HEAT AND VIBRATION.

The Hastening of Development and Decay.—Hatters.—Engineers.—Sugar-bakers.—Bakers.—Prevention of Diseases.—The Sewing-machine, and the Health of Sewing-machine Workers.

THE daily exposure of young persons to an unnaturally high temperature leads to the same result as the "forcing" system employed by gardeners to plants; *i.e.*, it hastens development. This is noticeable in factory districts, and seen amongst the young factory workers. English children, who are accustomed to toil in warm rooms, often arrive at puberty at as early an age as would Spanish or Italian.

Looking at the "female hands" as they leave a cotton-factory, one is surprised to see so many stunted girls, whose faces are those of children, and whose busts are those of fully developed women. And they are women, insomuch as that they have arrived at the child-bearing period. These children soon become the mothers of weaklings, many of whom die without having completed one year of life. Such deaths, we know, make up the greater portion of the terrible total of the mortality-tables of all our large towns in factory districts.

As long exposure to unnatural heat, combined with insufficient bodily exercise, will thus hasten development in children, so will the same causes accelerate decay in adults. We exclude that large class of men working at the mouths of furnaces; for these workmen, although exposed to much higher temperature than the class to which we shall allude, have sufficient muscular exercise to counteract the influence of prolonged exposure to heat upon their bodies; they work too in the open air or in large workshops, through which fresh air passes freely and rapidly.

We would point to those men whose employments are carried on in rooms of a temperature considerably higher than that of the air outside the workshops. These workers may be arranged in three groups:

1. Men who work in overheated rooms.
2. Men who work in overheated rooms in which there is a large quantity of watery vapour.
3. Men who work in rooms in which there is a large quantity of carbonic acid or other gas prejudicial to health.

The first group will include among them engineers, ashore, in factories, or afloat in steamships; hatters, and men working in "drying rooms", or in rooms placed over boilers; the second, a large proportion of sugar-bakers, and others working in rooms where vapour is produced in large quantities; and the third, bakers and men employed in chemical, bleaching, and other works.

1. If the workroom be simply overheated, slow wasting or degeneration of the tissues of many of the workmen will take place. In some there will be great loss of flesh, premature loss of teeth and hair, and other signs of wasting and decay; in others, fatty degeneration of tissues will occur. The following cases will illustrate these conditions.

A man, aged 37, came to us in May last, stating he had worked during twelve months in a room situated directly over the boiler of a steam-engine, the temperature of the floor being "about 120 deg." Before he had this place, he weighed 9st. 9lb.; he soon weighed but 8st. 7lb. He had lost health and strength, and was "as feeble as a child." No organ of his body was diseased, but there were general wasting and great mental prostration.

A starch-maker, aged 56, stated that he worked in a stove-room during part of each day, when the "temperature is 170 deg.", and sometimes in a cooler room of 60 deg. to 80 deg. He had obstinate vomiting, and evidences of fatty degeneration of the heart, liver, and stomach.

A hatter, aged 38, suffered from enlargement and fatty degeneration of the liver, from which he died. Several other workmen in this trade have been under our care for the same disease.

The effect of heat in producing apoplexy is known among the workmen—the apoplexy being but a local result of the general fatty degeneration of tissue. Now these men, and more particularly the hatters, are as unfortunately placed as are the Strasburg geese, whose fatty livers are considered such dainty luxuries. The men being skilled workmen, earn good wages, and live freely and well, but their occu-

pations compel them to remain indoors. The geese, we are told, are caged in small warm rooms, and crammed with fat-forming food. The livers both of the men and of the geese become unnaturally large and diseased.

2. Among the workers in hot, vapour-laden air, a different class of diseases is observed. Rheumatic disorders are common, and congestive maladies are not unfrequently met with. The air, already surcharged with vapour, cannot receive more vapour from the men's lungs. While the external surface of the body is often pale and bloodless-looking, the mucous membranes, both of the respiratory and of the alimentary canals, are congested. These workmen suffer much from bronchial affections, and some from diarrhoea, dysentery, and hæmorrhoidal complaints.

3. Bakers afford the most striking examples of the effects of heat, moisture, and a deleterious gas (carbonic acid), in producing disease. Governmental measures have already been taken not only for the improvement of the sanitary condition of bakehouses, but for the prevention of over-fatigue and unnecessary wear-and-tear of the lives of the men. To make the reform complete, a clause should be inserted "that no bakehouse shall be below the level of the street." The carbonic acid would then have a fair chance of escaping from the room. It hangs about all underground bakehouses for a long time; and, being heavier than atmospheric air, it is always in excess even in well-conducted work-rooms.

That the over-heating of rooms may, in many instances, be prevented, there can be no doubt. Mr. Lord, in his report on hatters, has noticed that there is no reason why the kilns, stoves, or fire-places, in which the hatters heat the irons they use at their work, should be in the rooms in which the men are employed. And as in this, so in other trades, might excessive heat of workshops be avoided. Where space is valuable, and the necessities of trade compel a master to have a work-room or stove-room over a boiler, a double floor is essential, so that a current of air may pass beneath, yet not touch the workmen's feet. When architectural obstacles impede the flow of the air, a fan should always be placed on one side of the building, to keep the air in motion.

The sewing-machine has not only produced a revolution in the method of working with needle and thread, but it has also created a special class of nervous diseases among the workers. Dr. Down has already told how the mechanical action of turning the sewing-machine with the feet causes functional derangements. Nervous affections are also very common among the workers who are thus employed. The "jarring" causes in the young and weakly extreme nervous irritation and depression, headache, and restlessness. Cases have come under our notice in which health has been permanently injured by long continued work of this description. In factories, the labour of turning the sewing-machine—labour which, when badly constructed machines have to be used, is very considerable, and with all machines very irksome—should not be thrown on the workers, many of whom are mere children, since a very small amount of steam-power would turn a large number of the machines. The girls, by being able to concentrate their attention on the work, would direct it with more care, and the masters would lose little by doing that which would protect the health of their workwomen.

We doubt much if needlewomen are, as a class, much better off than when their sufferings were so tenderly told by Hood. It would seem that the machine has kept work as scarce, though the workers are more plentiful. Women now do much work formerly done by men; and nearly all the cheap clothes are the work of women's hands. Many of the workwomen suffer from the effects of overcrowding in badly ventilated work-rooms. The girls become sick and faint, and scores of them come to the hospital in the hope that medicine will remedy the maladies—some slight, some grave, which the sanitary defects of the work-rooms, and the fatigue of turning and the vibration of the machines, have caused. Girls employed in cotton-mills are far healthier than the seamstresses and tailoresses of London: they simply direct and unwind the cotton threads, but the sewing-machine girls, by having to work the machines with their feet, suffer severely from the continuous vibration.

Fashion necessitates new employments; and the fashion for bead-trimming has given employment to a considerable number of girls and young women. Our notice has been called to this new class of workers because some, suffering from the effects of working in badly ventilated rooms, have applied for medical aid.

CAFFEINE IN OPIUM POISONING.—H. A. Lennecker, of Jefferson City (*St. Louis Medical and Surgical Journal*), in a dangerous case of poisoning with sulphate of morphia, injected, hypodermically, pure caffeine in grain-doses, three grains in ten minutes, and the patient quickly recovered.

ST. BARTHOLOMEW'S HOSPITAL: MEETING OF STUDENTS.

A MEETING of the senior students of St. Bartholomew's Hospital was held on October 1st, at 2 P.M., at the Albion, in Aldersgate Street. More than eighty were present. The resolutions proposed were all passed, not only with unanimity, but with the strongest signs of approval.

A former Resident Medical Officer was voted into the chair, and opened the meeting with the following remarks. "We are met together to assert the principle of self-government. We are a constituent body, our fees are our taxes (and they are not small ones), and the institution we support is the Medical School of St. Bartholomew's Hospital. Now, though it is obvious that the age of the majority of us, and the position of such of us as are pupils, must prevent our having any considerable share in the regulation of the school, we are, still, all of us of such an age that our opinions, when they are strong and relate to our welfare as students, deserve a certain consideration. Let it be well understood that we do not claim to control the medical school; quite the reverse. We recognise our position as a governed, but nevertheless in some sense a constituent, body, and as such we expect our voice should be heard. The experience of the last few years has taught us, however, that, unless our opinions are brought together into an unanimous expression, they can be made to have no influence. Hence this meeting."

Dr. Mayo was then requested to read portions of letters received from several eminent men, expressing their concurrence in his views on hospital reform.

A Fifth Year's Man, in proposing the first resolution, said that it was needless to remind the meeting that the session had opened in an unprecedented manner, inasmuch as the usual introductory address had been omitted. To discover the cause of this omission, it was not necessary to go very far back. Most of those present would remember that, two years ago, the entrance into the theatre of an unpopular member of the governing body of the hospital had been the signal for an unexpected and violent demonstration, the significance of which it was impossible to mistake. At the next introductory address, this gentleman had been conspicuous by his absence; and it had become well understood that, in compliance with the unceremoniously expressed wish of the students, he never meant to be present again. Here arose the difficulty: it looked bad for the lecture to take place in the absence of this official; to remove the causes of the disaffection vented on his head would involve too much trouble; and, therefore, this time-honoured custom was suppressed. He then proposed: "That this meeting desires to express its regret that the hospital staff have decided to omit the customary inaugural address and welcome to the new students; and that by this omission an unnecessary stigma has been cast upon the reputation of the Medical School of St. Bartholomew's Hospital."

A Student of the Third Year seconded this resolution.

The next resolution was proposed by a former Dresser, who said he felt sure that every one present must sympathise heartily with Dr. Mayo, and feel convinced that he had suffered a great wrong in being dismissed from his office for the only crime of being too conscientious in the discharge of his duties. He had been at St. Bartholomew's quite long enough to learn how much cause there was to regret the influence which had hitherto been exercised over the school, the staff, and the governors. He felt that it was much to be regretted that the staff had given no expression of opinion on the subject of Dr. Mayo's dismissal. He moved the following resolution. "That this meeting desires to express, also, its unqualified dissent from, and disapprobation of, the course of action taken by Mr. White and the House Committee, in dismissing Dr. Mayo from office for complaining of the insufficiency of the junior staff, and condemns the endeavour to silence by such means a straightforward and manly protest in a public cause. It wishes also to testify its hearty sympathy with, and to tender its best thanks to, Dr. Mayo, unsupported as he has been by any expression of opinion on the part of the Medical Council."

Another Student of the same standing seconded the resolution. He said that he wished to speak with all possible respect of the senior members of the staff individually; but it could not be denied that, as a body, they had been wanting in spirit as regards an expression of opinion on the present question.

Dr. MAYO, on rising to acknowledge the resolution, was received with cheering, which lasted some minutes. He said that he approved strongly of the old maxim, "*Fiat experimentum in corpore vili*", and was very glad to have supplied the "*corpus vile*" for this great experi-

ment, in which his own case was a mere episode. The real question was, whether they could not succeed in improving the administration of the endowments of St. Bartholomew's Hospital; and he thanked them most heartily for their approval of his humble efforts to draw public attention to it. He assured them that he should never forget that day, nor the kindness which he had received from his fellow-students.

The proposer of the third resolution, in the course of his remarks, said: "As regards the administration of the revenues, they could only form their opinions by means of a few prominent results, as the accounts of the institution appeared to be a secret strictly confined to a favoured few, nothing like a balance-sheet ever being published; however, most of them knew that a late Treasurer, for want of something better to do with the revenue, had spent thirty or forty thousand pounds in refacing the Hospital with stone; and in their own time they had just witnessed the expenditure of a sum, probably to be reckoned by thousands, in the gilding and decorating of the Hall, and emblazoning on the staircase-walls the coats of arms of the *employés* in office. On the other hand, there has been a long standing effort on the part of the Executive to limit the prescribing powers of the students, because of the expense of the drugs. The nurses, too, are expected to be on duty for 50 hours out of every 72, and they are frequently on duty 36 hours consecutively. The statistics of the mortality and sickness among these women show a death-rate treble the average, and a rate of sickness of 22 to 9. As compared with the general average of last year, from their own published tables, it had appeared that over 60 per cent. of the nurses had been warded. By the way of another illustration of the Hospital mismanagement, when a pint of essence of beef has been ordered, only half a pint is sent up; and when six oysters, not more than five appear." He proposed "That this meeting believes that the defects in the present administration of the endowments of St. Bartholomew's Hospital call for Parliamentary inquiry and permanent Government supervision in the interests of the public."

The seconder of this resolution said that, so far as he could discover, the present mode of government of the Hospital was the birth of chance, and of the neglect of the Corporation. The business, in fact, was committed to the Treasurer and House-Committee, who were practically irresponsible. Let them look at a few of the results. Some of them were going to dine that day in a room in the Hospital overlaid with costly decorations, gilding, and varnish, reserved for the festivities of the managers of the Hospital. If they went across the square they would see the other side of the picture, in over-worked officers, a grossly mismanaged out-patient department, and accommodation for the nurses which was a disgrace to humanity. In the decorations of the Hall, they would see chiefly the glorification of aldermen, governors, and donors of small sums of money. But on whom did the fame of St. Bartholomew's Hospital rest? On the forgotten names of those who had once a share in its management? No; but on such men as Harvey, Pott, Pitcairn, Abernethy, Lawrence, and a host of others. These were the names which went down to posterity, and these were the memories in which they took pride.

The proposer of the fourth resolution referred to an article in the BRITISH MEDICAL JOURNAL of September 18th, respecting the mode of appointment of medical officers. It was said there with perfect truth that, under the present system, if a young and incompetent man once gets his foot on the ladder, up he must go. He regretted that the younger members of the school were not allowed a voice in elections, by the French system of "*concours*." This would be a most useful check upon bad appointments. It was also much to be regretted that the junior officers were unpaid, the consequence of which was that no man, however able, could remain at the Hospital after his ordinary term of studentship, unless he could afford to spend some years without earning anything; moreover, he had then little chance of obtaining an appointment unless he or his friends possessed a good deal of third-rate City influence. In proof of this he appealed to the list of governors. He moved "That the present system of electing officers to the staff is not calculated to secure such clinical teachers as the preeminent opportunities of the Hospital demand."

A recently qualified Pupil, in seconding, said that he knew full well the extent of clinical teaching at St. Bartholomew's Hospital. When he went round the wards, he found only two ways of ascertaining the nature and treatment of a case; either to remain satisfied with the scanty information recorded on the board, or to put incessant questions to a gentleman who rarely volunteered a remark. He certainly agreed that regular clinical teaching required to be introduced into the School, and that the system of pathological examinations needed radical reformation.

A late Dresser said, that one of the greatest advantages of a free press is the powerful aid which it affords to efforts for the removal of evils,

which would otherwise fail to secure attention. In the instance of their recent difficulties, the students had received invaluable support from the press, especially the medical portion of it. He proposed the following resolution:—"That the best thanks of this meeting are due to the public press for the manner in which they are seconding the efforts now being made to further the cause of hospital reform."

This resolution having been carried, the meeting then closed with a vote of thanks to the chairman.

At present, we will remark only, that we have every reason to believe that the real cause of the omission of the introductory address was not that stated at the meeting. In the JOURNAL for October 3rd, 1868, we advocated the abolition of introductory addresses, being sure—although we knew that the proposal was unpopular—that we should have many sympathisers among the staffs of the larger schools, where the opening of the session has been too often a scene of confusion, no doubt, to a large extent, from the number of outsiders who gain admission to the theatres.

THE MEDICAL SCHOOL DINNERS, ETC.

MIDDLESEX HOSPITAL.

THE annual dinner of the past and present students of the Middlesex Hospital took place as usual in St. James's Hall, after the Introductory Address. The Chair was most ably and acceptably filled by Dr. A. P. Stewart, consulting physician to the Hospital, who was supported by a large muster of old and present students, members of the staff, and friends of the Hospital and Medical College. After the usual loyal toasts, that of "the Army, Navy, and Volunteers," was proposed by the Chairman, and responded to by Dr. Dempster. "The Middlesex Hospital and its Medical College," coupled with the name of Mr. De Morgan, was received with great enthusiasm; and not less so the toast proposed by Dr. Greenhow, of "the Chairman," who had been so warmly respected during his long connexion with the hospital. Numerous other toasts followed: "The Chairman of the Weekly Board" (Mr. Ross); "Dr. Liveing," the orator of the day; "The Dean;" "Mr. Moore;" "Mr. Nunn;" "The Old Students," coupled with the name of Dr. Cribb; and "The Strangers," responded to by Dr. Falconer of Bath. Some excellent songs conduced to render this annual reunion of old friends even more successful than usual.

ST. BARTHOLOMEW'S HOSPITAL.

THE annual dinner of the old St. Bartholomew men was held on October 1st, in the great hall. The attendance was unusually large. Mr. Paget, in proposing the health of the governors of the hospital, referred at some length to the disagreements which have recently existed in connexion with the out-patient department; and he said that he wished it to be distinctly understood that there was the most perfect concord between the medical staff and the governing body. He added that a plan, which would remedy the evils complained of, had been laid before the governors, and now only awaited their approval.

ST. GEORGE'S HOSPITAL.

THE dinner took place at Willis's Rooms, on the 1st instant, under the presidency of Sir Charles Locock. About a hundred gentlemen sat down. Sir C. Locock proposed "Success to St. George's Hospital Medical School". He alluded to the days when he was a student at St. George's, and obliged to wander from one end of the town to the other to attend the classes of different lecturers; and contrasted this with the advantages the students now possessed in having attached to the hospital a complete school. He strongly advised those St. George's men that were younger than himself to attend these annual reunions as often as they could. Afterwards, the health of the "Orator of the Day, Dr. Wadham," was drunk, and warmly responded to. Mr. Prescott Hewett proposed the health of Sir Charles Locock, which was drunk with due honours. Sir Charles having briefly replied, the meeting separated.

ST. MARY'S HOSPITAL.

AFTER the address on Friday evening, October 1st, the members of the hospital staff and the lecturers entertained their visitors and students at a *conversazione*, which was held in the board-room of the hospital, by the kind permission of the governors. The meeting was largely attended, and passed off successfully.

CHARING CROSS HOSPITAL.

THE lecturers and members of the Medical staff gave a *conversazione* in the board-room of the hospital, after the introductory address by Dr. Silver. There was a large display of surgical instruments, photographs, and other objects of interest. The muster of old students and friends was very large.

GERMAN SCIENTIFIC AND MEDICAL ASSOCIATION.

THE forty-third annual meeting of this Association (*Gesellschaft deutscher Naturforscher und Aerzte*) was opened at Innsbruck, on Saturday, September 18th, 1869. The first general meeting was held in the theatre, at half-past ten o'clock. Professor Dr. O. Rembold, one of the local secretaries, opened the proceedings. The Governor of the Tyrol, his Excellency Baron Von Lasser, then made a speech, welcoming the Association in the name of the Emperor of Austria. The Government had received with lively pleasure the determination arrived at last year to hold this meeting in Austria. He was followed by the Mayor of Innsbruck, who gave a similar welcome in the name of the town. The statutes of the Association, embodying the object of its formation, were read, and these stated that "the main object of the Association is to afford means of making the scientific men of Germany mutually acquainted with one another."

Professor Helmholtz, of Heidelberg, then delivered his address on "The History of the Development of Science in Later Times." He traced out the progress of scientific discovery in relation to astronomy, chemistry, etc., till the most recent date. The address was received with much applause. Professor Helmholtz was followed by Dr. Robert von Mayer, of Heilbronn, who delivered a discourse on the necessary consequences and inconsequences of the mechanical theory of heat. The members of the Association then distributed themselves to their various sections, of which there were eighteen, viz.:—1. Mathematics and astronomy; 2. Physics and mechanics; 3. Chemistry and pharmacy; 4. Mineralogy, geology, and palæontology; 5. Botany and vegetable physiology; 6. Zoology; 7. Anatomy and physiology; 8. Internal medicine; 9. Medical reform; 10. Surgery and ophthalmology; 11. Diseases of women and obstetrics; 12. Mental diseases; 13. Teaching of natural science; 14. Public hygiene and forensic medicine; 15. Diseases of children; 16. Anthropology and ethnology; 17. Military hygiene; 18. Medical statistics. All the sections were accommodated in the various class-rooms of the University.

Each section proceeded to elect its president, and the order of the papers for Monday, the 20th instant, was arranged. At one o'clock there was a general dinner, and in the afternoon a promenade to the Isel, a hill south of the town, which commands a lovely view of the surrounding neighbourhood. In the evening a concert was given in the theatre, by the members of the Innsbruck Musical Association.

On the 19th (Sunday), a large number of members had an excursion over the Brenner. On Monday, there were sectional meetings; on Tuesday, sectional meetings and a second general meeting. The afternoon was devoted to a promenade to the Lanser Köpfe, two hills on the east of the town. On Wednesday, the geologists made an excursion to the salt works of Hall, and there was a concert in the evening in the Assembly Rooms. On Thursday and Friday, the sections continued their sittings, and the final general meeting was held on the latter of these days. This concluded the work of the Association for 1869. On Saturday, the 18th, 900 members and 250 associates had enrolled their names. The Association has accepted an invitation to meet next year at Rostock.

MIDDLESEX HOSPITAL.

THE following prizes were distributed after the Introductory Address on October 1st by Mr. Ross, the Chairman of the Weekly Board. *Winter Session, 1868-69.—Clinical Prizes. Governors' Prize:* Mr. R. H. Lucas, Mr. C. S. Tomes (equal). *Second Clinical Prize:* Mr. Phineas P. Langford. *Medicine:* Mr. C. S. Tomes, Mr. R. H. Lucas (equal). *Surgery:* Mr. C. S. Tomes. *Anatomy:* Mr. Blaise B. Floyer. *Physiology:* Mr. John Scully. *Prize in Chemistry:* Mr. Elijah K. Davies. *Pathology:* Mr. Blaise B. Floyer, Mr. J. James (equal). *Medical Society's Prize:* Mr. B. R. Conolly. *Summer Session, 1869.—Materia Medica:* Mr. John A. Lycett. *Midwifery:* Mr. B. B. Floyer. *Medical Jurisprudence:* Mr. B. B. Floyer. *Practical Chemistry:* Mr. E. K. Davies. *Botany:* Mr. E. K. Davies. *Histology:* Mr. C. C. Rogers. The following gentlemen having distinguished themselves in the Periodical Examinations were considered worthy of especial commendation:—Mr. R. H. Lucas in Surgery; Mr. G. Baylis in Anatomy; Mr. J. J. James in Anatomy, Physiology, and Midwifery; Mr. J. F. Wright in Chemistry; Mr. B. B. Floyer in Histology.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

1. *Lunacy Laws and New Lunacy System in the Department of the Seine.*—2. "*Bureau Central d'Examen.*"

Paris, Monday, September 27th.

1. *The Peculiarities of the Lunacy Laws in France and the New Lunacy System of the Department of the Seine* at present engage a large share of public attention. Having had the advantage, last week, of visiting the new institutions with Sir James Cox, one of the Medical Commissioners in Lunacy of Scotland, many points of great interest came under my notice in a very impressive manner. I now propose briefly to indicate some of them to the readers of the BRITISH MEDICAL JOURNAL. Great changes are being inaugurated, which cannot fail greatly to influence the medical, moral, and legal treatment of the insane in all countries. Although, in a short letter, I cannot enter into the subject with that completeness which its importance demands, I may be able usefully to direct attention to some salient points in such a way as to enable inquirers more easily to investigate for themselves the branches of the subject in which they may be individually most interested.

British physicians, philanthropists, and jurists would do well to watch attentively the movement now going on in the Department of the Seine—that is to say, in Paris and its vicinity—in relation to mental alienation, in its therapeutical, hygienical, financial, and judicial aspects. A magnificent system of asylums, and a new system of clinical instruction in lunacy, are at present being inaugurated, and are already, indeed, to a certain extent, on their trial at the bar of public and professional opinion.

In connexion with the new organisation referred to, grave questions are now under discussion touching reforms in the lunacy laws of France, particularly in relation to the right of *habeas corpus* and the personal liberty of alleged lunatics. These questions have of late been warmly discussed by that section of the opposition to which the name of "*irreconcilable*" attaches, and which now uses a freedom of utterance long undared, and not always tempered with wisdom and truth. The political and social discussions to which I refer, although they touch the confines of the practice of medicine, do not come within its domain. I notice them, therefore, only to introduce a statement explanatory of the exact position in which medical men stand to one of the most denounced features of the existing lunacy law—the law of 1838.

In the Department of the Seine, the Prefect of Police can, without one word of warning, and on his own individual warrant, order the arrest and detention of any person whom he alleges to be insane. Farther detention does not (as in non-police cases) require a medical certificate; and the alleged lunatic may remain in custody for a month without the authorities having a medical opinion on his mental state. Under the new lunacy system of the Seine, however, this defect of the law is remedied. A medical certificate is given within twenty-four hours, by Dr. Magnan or by Dr. Bouchereau, physicians to the Bureau Central d'Examen, in the Rue Ferrus, within the grounds of, but quite distinct from, the Asile Sainte-Anne. Through this office—which is a hospital of observation capable of receiving fifty cases—all lunatics of the department have now to pass.

The chief, but not the only objections to the present mode of arrest and detention, is the summary power with which the Prefect of Police is invested, there being no obligatory medical certificate required in police cases. The system cannot be defended; but I do not believe that it has been much, if at all, abused in the way which writers in the *Réveil*, *Rappel*, and such-like papers, are now asserting. Dr. Bouchard, writing in the *Gazette Hebdomadaire de Médecine et de Chirurgie*, expressed himself, nearly a year ago, exactly in accordance with the now prevailing opinion of medical men and others of dispassionate minds. The paper to which I refer appeared on October 23rd, 1868, and is entitled, "*La Question des Aliénés et la Loi de 1838.*" The particular sentence alluded to is to the following effect:—"Je puis dire que les hommes qui connaissent le fond des choses n'ont pas pu entendre sans un sourire des écrivains sérieux se demander si nous avions encore des lettres de cachet pour lesquelles les médecins seraient les distributeurs de blanc-seigns."

It is important to bear in mind that the arbitrary law which I have described applies only to the Department of the Seine, and is specially intended to ensure public tranquillity in Paris, where personal attacks on those in high authority have been often the deeds of maniacs and persons suffering from delusions.

2. *The Bureau Central d'Examen.*—This institution is the greatest novelty, and in reality the only strictly new idea, in the new lunacy organisation of the Seine. Through this office all the insane of the department must pass—those confined by the authorities or by relatives on medical certificates, as well as those sent direct on police warrants, without medical certificates. The movement of patients through this office is, therefore, enormous, seeing that the insane population of the Department of the Seine is about eight thousand. It sometimes happens that, through an error in diagnosis, patients delirious from pneumonia, or typhoid fever, or transient alcoholic excitement, are sent to the Bureau Central. These cases are allowed to remain under treatment at the Bureau, but are not entered as insane persons. Unless sent in by the police, they can be dismissed by the physicians of the Bureau; but, if police committals, the state of the case can only be represented to the Prefect. Last Saturday, when I was at the Bureau, a case sent by the police was found to be typhoid fever. On a previous visit, a person, after twenty-four hours' alcoholic excitement, was set free. Clinical lectures have been given in the summer sessions of 1868 and 1869 at the Bureau Central, and a third course will begin there in March next. In 1868, the lectures were attended by from five to twelve students; and in 1869 the attendance varied from a minimum of twelve to a maximum of thirty. Some of Dr. Magnan's lectures were reported in the *Gazette des Hôpitaux* for July, August, and September of the current year. They contain some original and exceedingly valuable researches into the nature of the different forms of cerebral disorder and disease arising from the use of different alcoholic stimulants and absinth. Dr. Magnan has elucidated his subject by experiments on the lower animals, as well as by clinical cases.

The plan of asylums for the Seine embraces a project of building eight or nine in addition to the three magnificent asylums already opened—viz., Sainte-Anne, Ville-Evrard, and Vacluse. I very much question whether this plan will be completed on the present costly scale. The three asylums already constructed (affording accommodations for 1,800) have cost the department, for ground, buildings, and furniture, the enormous sum of twenty-three million *francs*; and the expenditure is not yet completed at Vacluse. Till the nine asylums are built, however, the proposed classification of the insane cannot be fully carried out on the plan proposed. Thousands of the Seine lunatics, moreover, are at present sent to provincial asylums, there being a great deficiency of accommodation for the lunatics of the department within the department.

The general plan of classification is to send the feeble, chronic, and "wet" (*gâteux* and *gâteuses*) to the Bicêtre and Salpêtrière; the acute and curable, to Sainte-Anne; and the subacute, to Ville-Evrard and Vacluse. Drs. Magnan and Bouchereau make the diagnoses, and send the patients where they please. Some accidental peculiarity may determine them to send a case to one or other of the asylums, irrespective of the general rule now stated. Moreover, with a view to fill the new asylums as quickly as possible, the classification is necessarily, in the meantime, largely violated. Thus, for example, we see at the three new asylums chronic cases of general paralysis and dementia, as well as cases of acute alcoholic insanity.

In a subsequent letter, I propose to give a short account of what is most noteworthy at Sainte-Anne, Ville-Evrard, and Vacluse.

ASSOCIATION INTELLIGENCE.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE first meeting of the above Branch, during the present Session, will be held at the Midland Institute, Birmingham, on Thursday, October 14th, at 3 P.M.

T. H. BARTLEET, *Honorary Secretary.*

Birmingham, September 26th, 1869.

SHROPSHIRE SCIENTIFIC BRANCH.

THE autumnal meeting of the above Branch will be held in the Museum of the Natural History and Antiquarian Society, Shrewsbury, on Wednesday, October 20th, at 2 P.M. President for 1868-9, Samuel Wood, F.S.A.; President-elect for 1869-70, Dr. Oakley.

Gentlemen intending to read papers or report cases, are requested to communicate with the Honorary Secretary.

The dinner will take place at the Lion Hotel, at 4.30 for 5 exact time. Dr. Oakley in the Chair.

SAMUEL WOOD, F.R.C.S., *Honorary Secretary.*

Shrewsbury, October 6th, 1869.

CUMBERLAND AND WESTMORLAND BRANCH.

THE autumnal meeting of the above Branch will be held at the Globe Hotel, Cockermouth, on Wednesday, October 13th, at 12.30 P.M.; M. W. TAYLOR, M.D., President, in the Chair.

Gentlemen intending to read papers or cases are requested to give notice to the Honorary Secretary.

HENRY BARNES, M.D., *Honorary Secretary*.
Carlisle, September 22nd, 1869.

WEST SOMERSET BRANCH.

THE autumnal meeting of the above Branch will be held at the Clarence Hotel, Bridgwater, on Thursday, October 21st, at 5 P.M.; H. J. ALFORD, M.B., President, in the Chair.

Gentlemen intending to be present at the dinner, or to read papers after, are requested to give notice to the Honorary Secretary.

W. M. KELLY, M.D., *Honorary Secretary*.
Taunton, September 22nd, 1869.

BATH AND BRISTOL BRANCH.

THE first meeting of the Session of the above Branch will be held at York House, Bath, on Thursday evening, October 28th, at 7 P.M.; C. H. COLLINS, Esq., President.

R. S. FOWLER, }
CHARLES STEELE, } *Honorary Secretaries*.

CORRESPONDENCE.

EXAMINERSHIPS AT THE UNIVERSITY OF ABERDEEN.

SIR,—Your editorial remarks on the Examiners in Medicine at the University of Aberdeen are well timed.

An ordinance of the Universities Commissioners decreed that three persons should be appointed annually to that office, not triennially, as you observe in your article. Hence it may be inferred that these Commissioners, who devoted no slight expenditure of time to the consideration of University questions, had a meaning in confining the Medical Examinership to one year only, while in the Arts they extended it to three. That meaning, I think, you give expression to, when you say that the same Examiners should not be appointed again and again, thus monopolising appointments which should be as much as possible distributed among distinguished graduates of some years' standing.

The re-election of men, year after year, is to make a dead letter of the ordinance; that re-appointments should be made, the ordinance does indeed allow, but its spirit is opposed to a life appointment, which the present system virtually is.

The office of Medical Examiner, apart from Assistant Professorships, is the only link to academic life which the medical *alumni* of Aberdeen University can have to their *alma mater*. It ought to be looked upon in the light of a fellowship, to be enjoyed for a few years, and then resigned in favour of others who are equally fitted for the post. The graduates in the North of Scotland would then have a valuable stimulus to keep up their scientific knowledge, in the hope that once more they could acquire an official connection with the old academic halls. Thus could the governing power of the University strengthen the slight bonds which at present unite them with their graduates, and have the satisfaction of feeling that their judicious administration of this patronage tended to elevate the medical profession in the North. As it is, although the medical classes are loudly advertised, the Examinerships in Medicine are quietly adjusted without much reference to the external world.

I am, etc.,

A NORTH-COUNTRY PRACTITIONER.

Aberdeenshire, October 9th, 1869.

ST. BARTHOLOMEW'S GRIEVANCES.

SIR,—The suggestion contained in the BRITISH MEDICAL JOURNAL of September 25th, that the junior officers of the London hospitals and medical schools should receive a fair remuneration for their valuable services, would, if carried out, effect a great improvement in the education afforded at the hospital to which I belong. It would involve the appointment of competent and responsible teachers in subjects at present much neglected; it would do away with the system of charging extra fees; and it would give to the unpaid demonstrators who devote so much talent and energy to the improvement of the school, the pecuniary reward they richly deserve. The new branches of instruc-

tion necessitated by the advance of medicine within the last twenty or thirty years have, at St. Bartholomew's, been one by one intrusted to demonstrators, who, in some instances, have been authorised to charge extra fees, and in others are expected to give their services gratuitously: in the one case the hardship falls on the student, in the other on the teacher. But what makes me now especially anxious to draw attention to this subject is, that certain of the gentlemen charged with important demonstrations at our school propose to forego their fees, hoping by their generosity to improve the advantages of the school, and to do their share towards allaying the loudly expressed discontent of the students. As one of these latter, I thank them for their disinterestedness, and should be glad to see all the extra fees abolished; but I must protest against these gentlemen being losers by our gain. The instruction they afford is the result of several years of intelligent and laborious study, and ought, in common justice, to be well paid, not by extra levies on the students, but out of the common fund, which is quite rich enough to pay handsomely every one of our teachers.

I am, etc.,

A PRESENT PUPIL.

THE POOR-LAW MEDICAL SERVICE

OF

GREAT BRITAIN AND IRELAND.

THE IRISH DISPENSARY SYSTEM.

As our Dispensary system is viewed with much interest in England, it may be useful to note a few of its peculiarities. The Medical Charities Act, 14 and 15 Vic., cap. 68, placed all the dispensaries under the Poor Law Commissioners, a Medical Commissioner, and four Medical Inspectors being added to the Staff; but, by an Act passed last year, the distinction between medical and ordinary Poor-law inspectors was removed. The Commissioners, framed regulations for the medical officers, and in each case sanction their election by the Committee if they possess the medical and surgical qualification, and have attained the age of 23. The number of medical officers is 795 for 718 districts, as in the cities there are several officers in the one district, and there are there also apothecaries resident in the dispensaries. In rural districts, the dispensary usually consists of two rooms, in one of which the patients wait, and in the other they are attended to, and their medicines compounded by the medical officer. The guardians of each union contract with druggists for the medicines and instruments of the dispensaries; but much more reliable articles would be procured if the Commissioners would insist on their being all examined by an analytical chemist. 584,604 of the cases attended by all the medical officers in Ireland last year were seen at the dispensaries, and 183,155 at the patients' homes. The ticket requiring a visit may be sent to the medical officer at any hour; but he is only bound to attend at the dispensary for two hours, on two or three days weekly. The members of the Committee (usually numbering 21) and the relieving officers can issue tickets; and, if one be presented by a person evidently able to pay for attendance, the medical officer must obey it. At the next meeting of Committee he may have such a ticket cancelled; but as the meeting may not occur for a month, his attendance may have been completed. Only 661 tickets were cancelled last year. The forms for recording the patients' cases, heretofore much complicated, were last years simplified. The extent of duty required from a medical officer will be best estimated from the following averages: Area of district, 28,384 acres; population, 8,099; number of dispensary cases, 737; visiting cases, 231. The average salary is £93 12s., and the additional payment for vaccination and for registration (for in almost every case the medical officer is the district registrar of deaths, etc.,) amounts to about £20. An Act just passed allows superannuation after 20 years' service, or when the age of 60 is attained. The advice of the Medical Commission had much to do with the granting of this just measure. In 125 districts, midwives assist the medical officers. The Poor-law Commission also controls the sanitary administration of the rural districts; while the town population of Ireland have no central authority whatever in sanitary matters, which are hence very badly organised. On the whole, it may be said that our Dispensary system works admirably, and is worthy of imitation in England. As questions of party and religion influence committees more than the merits of candidates, election by competitive examination is very desirable.

DONATION.—Mr. G. F. Muntz, of Umberslade Hall, has just given £500 towards the Working Men's Fund, now being raised for the enlargement of the Queen's Hospital, Birmingham.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, September 30th, 1869.

Allen, Matthew Septimus, Dudley
Davies, Henry Naunton, Cymer, Pontypridd
McEvoy, Francis, Eastcote, Pinner
Yates, Walter Peel, Nottingham

The following gentlemen also on the same day passed their first professional examination.

Ray, William Joseph Richard, Westminster Hospital
Walford, Edward, St. George's Hospital

MEDICAL VACANCIES.

THE following vacancies are declared:—

ABERDEEN, CITY PARISH OF—A District Medical Officer and Public Vaccinator.
ARDEE UNION, co. Louth—Medical Officer and Public Vaccinator for the Collon Dispensary District: election, 11th Oct.
CAHERCIVEEN UNION, co. Kerry—Medical Officer for the Derrynane Dispensary District: applications, 18th; election, 20th.
GLOUCESTER INFIRMARY—Assistant-Physician: election, 14th.
HULL GENERAL INFIRMARY—Resident House-Surgeon: applications, 18th October.
KIDDERMINSTER INFIRMARY—House-Surgeon and Secretary: applications, 12th Oct.
MIDDLESEX HOSPITAL MEDICAL COLLEGE—Lecturer on Materia Medica and Therapeutics; Demonstrator of Anatomy.
MONAGHAN UNION—Medical Officer for the Scotstown Dispensary District: applications, 13th; election, 16th.
MONAGHAN UNION—Medical Officer for the Glasslough Dispensary District: applications, 18th; election, 21st.
ROSCREA UNION, co. Tipperary—Medical Officer for the Workhouse: election, 14th Oct.; Medical Officer for the Ballybritt Division of the Roscrea Dispensary District: date of election not yet fixed.
ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City Road—Physician: applications, 11th Oct.; election, 18th Nov.
SUSSEX COUNTY HOSPITAL, Brighton—House-Surgeon: applications, 3rd November; election, 24th November.
SWANSEA INFIRMARY—House-Surgeon: applications, 24th Nov.; election, 1st Dec.
UNIVERSITY COLLEGE, London—Professor of Medical Jurisprudence.
WESTMORELAND LOCK HOSPITAL, Dublin—Resident Apothecary: applications, 22nd; election, 23rd.
WIGAN UNION, Lancashire—Medical Officer and Public Vaccinator for the Wigan District and the Workhouse: applications, 21st Oct.

BIRTHS.

BRUMWELL.—On September 18th, at Mossley, near Manchester, the wife of *G. M. Brumwell, M.D., of a daughter.
MASSER.—On September 30th, at Foleshill, the wife of *Herbert C. P. Masser, Esq., Surgeon, of a daughter.
MILLER.—On October 3rd, at Glasgow, the wife of *Hugh Miller, M.D., of a son.
STEPHEN.—On September 28th, at 44, Victoria Road, South Kensington, the wife of *Andrew Stephen, M.D., of a son.
WEBER.—On September 24th, at Grosvenor Street, the wife of *Hermann Weber, M.D., of a daughter.

DEATHS.

***COLBORNE**, William H., M.D., at Chippenham, aged 47, on September 27th.
***GEERE**, R., Esq., Surgeon, at Edenbridge, Kent, on September 23rd.
***FLINT**, Richard, Esq., Surgeon, at Stockport, aged 74, on October 6th.
HEWITT, Frederick H., M.D., of Chapel Street, Bedford Square, at Clapham, aged 47, on September 28th.

UNIVERSITY OF CAMBRIDGE.—The Professor of Anatomy gives notice that the Lectures on Practical Anatomy will commence on Monday, October 11th, in the Old Anatomical Schools, at 1 P.M., and be continued daily. The course of Lectures on Anatomy and Physiology will commence on Tuesday, October 19th, at 1 P.M., in the New Museums, and be continued on Tuesdays, Thursdays, and Saturdays. This course is intended for Students of Natural Science as well as for Medical Students. Members of the University not requiring certificates, are at liberty to attend without fee.

TESTIMONIAL TO DR. MOORE OF LANCASTER.—On Friday evening, 1st October, the opening lecture of the Lancaster science classes for the session 1869-70, was delivered by Dr. Moore, F.L.S., on the Scientific Principles involved in the Illusions Practised by Modern Magicians. At the close of the lecture, a handsome and valuable timepiece, with suitable inscription, was presented by the students to Dr. Moore, in appreciation of the services which he had rendered to the science classes as Secretary to the Committee, and the assistance which he had afforded to the students.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.
WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

WEDNESDAY.—Royal Microscopical Society, 8 P.M. Lieutenant-Colonel Woodward, U.S. Army, "On Immersion Objectives and Robert's Test-Plate"; Mr. William Carruthers, F.L.S., "The Plants of the Coal Measures."—Hunterian Society, 7.30 P.M., Council Meeting. 8 P.M., Mr. Hutchinson, "On some of the Principal Diatheses and their Mutual Relations."
FRIDAY.—Western Medical and Surgical Society of London, 8 P.M.
SATURDAY.—Association of Medical Officers of Health.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

JOURNALS WANTED.—The numbers of the BRITISH MEDICAL JOURNAL for August 1st, August 15th, and December 12th, 1868, are required to complete a set. Full price will be given to any gentleman forwarding them to the office of the JOURNAL, 37, Great Queen Street, London, W.C.

It was noticed some time since that the initials of Fellows of the Royal Colonial Society and of the Royal College of Surgeons were identical; and that abuses would certainly and frequently result, unless some alteration was made in the title of the former. On the representation of the Council of the College of Surgeons, Government has been pleased to signify that the Royal Colonial Society shall henceforth be entitled the Royal Colonial and Indian Society.

THE GALIGNANI HOSPITAL IN PARIS.

THE following additional particulars as to the Galignani Hospital at Paris, from the pen of Dr. Shrimpton, may be of interest.

This establishment—twenty beds for the English poor in Paris—built by the Messrs. Galignani, on a piece of ground purchased by these gentlemen in the name of the British Ambassador, was opened in October 1865, and has, up to this date, received 351 patients.

It was first intended that it should be a retreat for the aged and infirm, as well as a hospital for the sick; but the whole building is now reserved for the latter purpose; and, as a rule, none but serious cases are admitted, on account of the small number of beds.

The building, erected on a dry sandy soil, is divided into two parts—one for men, the other for women—with a separate entrance and a private garden for each. The exposures are S.S.E. and N.N.W. The Hospital has a garden in front.

The kitchen, offices, *calorifère*, bath-rooms and washing department, are on the underground-floor. The ground-floor is thus raised, and is divided into two wards, with an entrance-passage and stair-case, which serves as an air-shaft on each side. The Lady Superior's room is between them. Each ward, 5796 cubic feet, contains six beds, has four large windows, two opposite each other. The door, with its lower pannels pierced by a number of holes, is opposite an open fire-place. For the ventilation, there are eight oval openings (1 foot by 8½ inches), two over each window, closed by plates of largely perforated zinc. Two rooms for infectious cases on the floor above contain two beds each, and have an opening near the ceiling (4 feet 10 inches by 12½ inches), closed by plates of perforated zinc, an open fire-place, and a large window, S.S.E. aspect. The remainder of the building is divided into different compartments for private rooms—the chapel, dispensary, linen-rooms, etc.

The Physician and Lady Superior give their services gratuitously.

The last two years taken conjointly will present a fair average view of the expenditure and mortality.

1867.—Number of patients, 99; number of days in hospital, 2575; household expenses for each patient *per diem*, 1.46 francs (1s. 3d.); mortality, 1 in 24.4.

1868.—Number of patients, 94; number of days in hospital, 4216; household expenses for each patient *per diem*, 2.26 francs (1s. 11d.); mortality, 1 in 11.75 (three patients died on entering).

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

THE SCOTTISH UNIVERSITIES REPRESENTATION.

SIR,—I have seen in one of the newspapers of this week, a paragraph to the effect that, at a meeting of the "Scottish Universities Union", held at the house of Dr. Prosser James, a long discussion ensued, which resulted in the resolutions to invite Mr. John Stuart Mill to become a candidate for the representation of the Aberdeen and Glasgow Universities, and Dr. Prosser James for the sister Universities, should a vacancy occur. As I have always taken, and continue to take, a great interest in the Scotch Universities, I shall feel obliged if you will kindly inform me what are the objects of the "Union" at a meeting of which the above resolutions were passed, and by whom it was formed. I have never heard of it before.

London, October 1869.

I am, etc.,

M.D.

** We have no knowledge whatever of the Scottish Universities Union. Dr. James will, no doubt, be able to furnish full particulars.

ARGUS.—We agree with you, that the practice of medical men reporting in the public papers as to the health of their notable patients, is one not to be encouraged.

STUDENTS' BOOKS.—We can assure our correspondent that we think highly of the ability displayed in his work; but we do not regard it as one which can be recommended to students. Our critique was written solely for the guidance of the latter. We do not think the matter one in which personal friendship ought to be allowed the slightest influence.

AN EXTRAORDINARY Soporific.—Dr. Grussebach, of Stockholm, claims to have discovered a liquid which will send to sleep indefinitely. The body becomes quite brittle, and may be broken to pieces by touching, etc. After a time, he sprinkles some "essence" over, and the sleep departs. The doctor wants the next malefactor condemned to be hung, for him to experiment on.

MAKING GAS FROM SEWAGE.—Sir John Thwaites, at a meeting of the Metropolitan Board of Works, alluded to a paragraph which had appeared in a newspaper to the effect that gas was being manufactured in India from sewage, and leading to the inference that the same results might be obtained from metropolitan sewage. The writer appeared to have ignored the fact that Indian sewage consisted principally of solid matter, whilst London sewage contained 94 or 95 per cent. of fluid matter, which would practically render the cost of extraction too heavy to be of any practical utility. At the same time, on the part of the board, he wished to state that they would give every facility to persons who wished to experiment with a view of arriving at any results not hitherto attained.

We are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Sept. 29th; The New York Medical Gazette, Sept. 18th; The Parochial Critic, Sept. 29th; The New York Medical Record, Sept. 18th; The Boston Medical and Surgical Journal, Sept. 16th; The Aberdeen Free Press, Sept. 28th; The Madras Mail, July 28th; The Indian Medical Gazette, August 23rd; The Birmingham Daily Gazette, Sept. 29th; The Barnsley Times, Oct. 2nd; The British and Foreign Mechanic, Oct. 2nd; The Stratford Express, Oct. 2nd; The Alloa Journal, Oct. 2nd; The Bristol Daily Post, Oct. 5th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. Heckford, London; Dr. Inglis, London; Mr. O. Smith, London; Dr. C. P. Ames, New Orleans; Dr. Henry Kennedy, Dublin; Mr. Tomlinson, London; Messrs. R. Ellis and Son, Ruthin; Dr. A. J. Branson, Doncaster; Dr. Medwin, Blackheath; Mr. A. Sargeant, London; Mr. J. Warnock, Birmingham; Dr. C. Gibson, Newcastle-upon-Tyne; Mr. W. M. Harmer, Hawkhurst; Mr. F. Waterhouse, Pontypridd; Mr. R. Wilson, London; Mr. H. Denny, Birmingham; Dr. O. B. Shore, Derby; Dr. Blanc, London; Dr. J. J. Phillips, London; The Assistant Secretary of the Royal Microscopical Society of London; A Careful Reader; The Secretary of the Faculty of Physicians and Surgeons, Glasgow; Dr. Paul, London; Dr. Rutherford, London; Mr. Milnes Moore, London; Dr. Matthews Duncan, Edinburgh; Mr. Masser, Foleshill; and Mr. T. Massey, Stockport.

LETTERS, ETC. (with enclosures) from:—

Mr. Bradley, Manchester; Mr. S. Watson, London; The Honorary Secretaries of the Bath and Bristol Branch; Dr. Percy Leslie, Birmingham; Eleanor, Birmingham; Dr. Cheadle, London; Dr. Brumwell, Mossley; Dr. Philpots, Edinburgh; Mr. J. Blackburn, Barnsley; Dr. Davidson, Liverpool; Mr. W. F. Morgan, Bristol; Dr. W. Murray, Newcastle-upon-Tyne; Dr. Thos. B. Bott, Bury; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Lomas, London; Dr. Treutler, Kew; Dr. Elliot, Carlisle; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. B. W. Richardson, London; Mr. H. Hemsted, Whitechurch; Dr. G. Reid, Manchester; Dr. Moore, Lancaster; Mr. H. Lowndes, Liverpool; Dr. F. J. Brown, Rochester; Dr. Lyon Playfair, M.P., London; Dr. Kelly, London; Dr. Silver, London; Mr. Seaton, Leeds; Mr. A. Duncan, Glasgow; Dr. Mapother, Dublin; Dr. W. H. Suffield, Dublin; Mr. W. P. Swain, Devonport; Mr. Samuel Wood, Shrewsbury.

Results of Meteorological Observations, for the week ending Saturday, October 2nd, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.							Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	WIND.										RAIN.		
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.			Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell.	Amount in inches.
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm, etc.				
BATH..... Dr. Barter, F.M.S.	29.720	0.553	58.4	55.8	53.4	84	69.5	44.0	25.5	65.8	52.6	124.5	..	7.3	5	..	..	..	2	1.7	1	1.3	..	1	4.3	6	2.11
BOURNEMOUTH..... Dr. Compton, F.M.S.	29.779	0.570	58.1	55.7	53.5	85	65.2	47.4	17.8	62.7	54.1	119.0	..	5.0	4.3	..	..	0.3	1.3	1.7	1.7	1	..	1	2.4	6	1.77
DOVER..... Dr. Parsons.	29.774	0.490	59.8	56.3	53.2	79	71.5	39.9	31.6	66.8	46.4	..	..	4.2	..	..	..	..	2	0.7	2.7	1.7	..	0.3	3.2	3	0.69
DUBLIN..... Dr. J. W. Moore.	29.624	0.651	56.2	54.0	51.9	86	62.0	49.2	12.8	60.1	52.7	..	43.1	5.9	..	..	0.6	1.3	1.4	0.7	1.2	1.5	..	0.3	2	6	1.93
Kew..... Dr. Treutler, F.L.S., etc.	29.778	0.426	58.8	56.2	53.9	83	73.6	46.2	27.4	65.5	52.7	122.6	*	5.3	5	..	..	..	1.3	1.3	2.7	0.3	..	0.3	2.6	3	0.52
LLANDUDNO..... Drs. Nicol and Dalton.	29.726	0.410	57.6	55.2	53.0	85	69.3	50.0	19.3	64.6	54.1	..	..	6.3	..	..	..	1.3	0.3	1.3	1.7	2.3	..	1.5	4	1.35	
MALVERN..... Messrs. W. and J. Burrow.	29.724	0.512	56.8	54.3	52.0	84	69.0	45.8	23.2	65.4	51.4	127.0	38.5	7	4.6	..	..	..	1.7	1	3	1.3	..	..	3.2†	5	2.94
SCARBOROUGH..... Dr. Fox, M.R.C.P.	29.751	0.338	55.0	53.0	51.1	87	66.8	46.3	20.5	62.2	51.1	122.7	39.5	5.6	6.1	..	..	..	0.3	2	1.3	1.7	0.3	1.3	3.5	3	0.20
SIDMOUTH..... Dr. Mackenzie, F.M.S.	29.744	0.612	57.7	56.0	54.5	89	65.5	44.5	21.0	62.8	52.5	..	..	4.7	7	..	..	..	1	3	1	2	..	..	1.4	6	1.52
WORTHING..... W. J. Harris, Esq., M.R.C.S.E.	29.777	0.594	59.5	57.4	55.5	87	67.2	48.1	19.1	64.3	54.3	120.0	38.7	5.7	6.3	..	..	..	1.3	1	2.3	1.3	0.3	0.7	2.1	5	1.13

* Instrument out of order.

† Mean hourly velocity in miles.

REMARKS.—There has been a general decrease in atmospheric pressure during the week, and the range has also been rather less. Temperature has been very slightly higher than last week, while the degree of humidity has been somewhat higher. The range has been rather lower. The maximum of the week occurred at Kew and the minimum at Dover. Winds have ranged principally between the S.E. and W., and have been generally moderate in force. The amount of clouds has been on the whole greater. The rainfall has been considerably in excess of that of last week, the heaviest fall occurring at Malvern, where it amounted to nearly 3 inches. The earlier part of the week was marked by generally fine weather; but towards its end atmospheric disturbances, chiefly electric, occurred over a large extent of country, accompanied by heavy falls of rain. This was especially the case on the 29th ultimo, when thunderstorms occurred at the following times and places:—At Bath, at 5 a.m., vivid and incessant lightning to N.E. from 7 to 8 p.m., and to S. from 8.30 to 10.30 p.m.; at Dublin, distant thunder at 11 a.m.; at Malvern, heavy thunderstorm constant and vivid lightning was seen to W. from 6.30 to 8.30 p.m.; at Bournemouth, a heavy thunderstorm from S.E. occurred at 4.30 p.m., and another at 7 p.m.,—the amount of rain for the day being 0.61 inch. On the 30th, rain fell at Bath to the amount of 0.836 inch; at Bournemouth, 0.59 inch in 75 minutes; at Worthing, 0.53 inch in 2½ hours; at Dublin, 0.616 inch in 4 hours, 0.40 of which fell in 15 minutes, and a heavy thunderstorm with very vivid lightning occurred from 9.15 to 10.15 p.m.; at Malvern, thunder and lightning occurred in the afternoon, and "1.52 inch of rain was registered the next morning—more than has ever been registered in 24 hours in Malvern before." In Dublin, on the 1st of October, 0.630 was registered as the rainfall of 12 hours, and lightning was seen throughout the morning. At Dover, a thunderstorm occurred on the 2nd of October. A brilliant Aurora Borealis was seen at Malvern on the evening of the 29th ultimo; and also at Llandudno, where, however, it was not so brilliant. An Aurora Borealis was also seen at Dublin on the 29th, at 7 p.m. In Dublin 16 deaths have occurred from scarlatina and 6 from measles during the week. The general health continues fairly good.

Owing to faulty punctuation, the latter part of last week's "Remarks" was misprinted; it should read thus: "At Dover influenza is prevalent and several cases of typhoid fever have occurred.—In Dublin measles are epidemic and scarlatina", etc.

Kew, W., October 6th, 1869.

W. J. TREUTLER.

LECTURES

ON THE

PRINCIPLES OF SURGICAL DIAGNOSIS:

ESPECIALLY IN RELATION TO SHOCK AND
VISCERAL LESIONS.*Delivered at the Royal College of Surgeons of England.*

BY F. LE GROS CLARK, F.R.C.S.,

Hunterian Professor of Surgery and Pathology in the College; Surgeon to
St. Thomas's Hospital; and Examiner in Surgery at the
University of London.LECTURE VI (*concluded*).—LESIONS OF THE PELVIC VISCERA.*Fractures of the Pelvis and their Complications.—Rupture of Bladder; Is it always Fatal? Effects: considerations suggested thereby.—Rupture or Laceration of Urethra: Causes and Symptoms.—Traumatic Lesions of Rectum.—Shock in Pelvic Injuries, and in Certain Morbid Conditions of the Uterus.—Recapitulation.—Indications Premonitory of Dissolution or Convalescence.—Conclusion.*

THE character of protection afforded by the pelvis to its contained viscera is more allied to that of the skull in relation to the brain, than to that of the abdomen or chest to the organs occupying, respectively, these regions. The arrangement of the rigid and irregular arch of bone which encloses and forms the walls of the pelvic cavity, is adapted to resist external violence by its sheer strength; whilst its large outlets permit the expansion and evacuation of its membranous contents. When these membranous and muscular organs rise, by their own distension, above the brim of the pelvis, they become obnoxious to injury, from which they are comparatively secure whilst within its protecting walls. Thus, in lesions of the urinary bladder, with rare exceptions, two conditions seem to be necessary, namely, distension and extrusion from the pelvis, which conjointly favour this result. The usual history of these cases is, that the patient has been indulging in free libations, neglecting the calls of nature, and then by some accident,—often a quarrel with a boon companion,—the abdomen is forcibly compressed, and rupture of the bladder is the result. It is somewhat remarkable that these injuries are not more frequent than they are; and this circumstance is a proof of the natural power of resistance of this membranous viscus. Accidents in which the pelvic bones are crushed, gun-shot wounds, and other still less frequent forms of injury, may involve the bladder. But ordinary fractures of the pelvis are very rarely complicated by this lesion; more frequently, though, in my experience, still rarely, its excretory duct, the urethra, is lacerated.

Fractures of the pelvis are met with in every variety, from the simplest to the most complex. They are always occasioned by great violence either of momentum or of weight, as in heavy falls, or in ponderous wheels passing across its walls. I have the records of numerous cases, some without displacement, others including dislocation of fragments of bone, or even of the pelvic symphysis, or of the sacro-iliac synchondrosis of one or both sides. In the detection of these fractures, the outline of the pelvis should be carefully scanned, including the often broken ischio-pubic ramus. Pressure, alternately with either hand, on the anterior spine of each ilium, will usually elicit any mobility which may result from loosening of this bone from its attachments. I would remark, however, that these fractures sometimes escape very careful examination; and I have long since learned the importance of assuming the possibility of pelvic fracture, where it is suggested by the nature of the injury and other circumstances, although it cannot be detected in the usual way. I could relate some remarkable instances of this class, if the time permitted; but no doubt the experience of other hospital surgeons is very much the same as my own. These obscure injuries of the pelvic bones not infrequently lead to unexpected consequences; especially where the body of the pubic bone is fractured, or the pubic symphysis is separated: such as sloughing of the areolar tissue between the bladder and bone, or burrowing abscess in the same position. It is remarkable to what an extent the pubic bones are sometimes divided in these cases, as is exemplified in the preparation I have on the table, which was taken from an old man, the subject of a contusion on the pubes, who survived the injury some weeks. I have a record of several instances, in which the separation varied from one to between two and three inches, the sacro-iliac junction being also torn apart on one or both sides. In some of these, the patients—often young—have died collapsed, without visceral lesion, and in some cases without serious hæmorrhage, or even laceration of any part of the peritoneum. The simpler forms of fracture of the pelvis usually admit easy repair. A

remarkable illustration of this was recently presented in one of my patients, a female, 84 years of age, in whom a loose fracture of the ilium was firmly united in six weeks.

I have never met with, or perhaps I should say more correctly I have never verified, an instance of recovery after rupture of the bladder. The structure and function of the organ are such as to make any reparative effort very difficult; and the qualities of the urine are of a character to render this fluid very obnoxious to the parts amongst which it is extravasated. Yet I must admit that I have, on several occasions, been surprised that the symptoms attending this lesion have not been more positive. Hæmorrhage, sickness, painful or impossible micturition, abdominal pain and tenderness not necessarily acute, are the chief symptoms in these cases, but are not, even in the aggregate, pathognomonic of the lesion. It is true that the suspicion that the bladder is ruptured may be fortified by the history of the accident and the condition of the patient at the time of its occurrence: but many instances are recorded, and some I have seen, where no certainty could be entertained as to the actual presence of this lesion, or where it has not even been suspected;—circumstances which induce me to doubt whether the generally received impression respecting the irritating quality of the urine in relation to the peritoneum may not be overestimated. The symptoms to which I have referred, accompanied with scanty urine and constipated bowels, have suggested uræmic poisoning, or even intestinal obstruction or strangulation: but the condition of the urine in the one instance, and the absence of faecal vomiting and painful peristalsis in the other, are diagnostic distinctions which are aided by the history of the case. I will place, side by side, the leading features in two cases exemplifying the above remarks.

A man was admitted under my care, over whom an omnibus wheel had passed, taking a direction from the right groin upwards and outwards. The abdomen was severely contused, and he was in a state of collapse. Bloody urine was drawn off. On the following day he had severe pain in the belly and back: fresh blood was mingled with the urine; and there was a noticeable variation in the temperature of the stream: constant sickness was present. On the third day, urine flowed through the catheter slowly, but free from blood, and was not accelerated by pressure on the abdomen. On the fifth day there was constant abdominal pain: pressure excited vomiting; and the abdomen was distended: he was delirious at night. On the seventh day it was evident that the distension was partly due to effusion: he said his belly felt like a furnace. During the succeeding week he varied, but on the whole his symptoms somewhat abated: the urine was more abundant and clear. On the twentieth day the fluctuation in the distended abdomen was more distinct, and he suffered from frequent sharp pain: the urine was albuminous; the tension of the abdomen diminishing. On the thirty-first day there was a sensation communicated to the hand, as of some solid body in the lower part of the abdomen gliding away under pressure: the tenderness had ceased. In six weeks he was well.

The other case is that of a young veterinary surgeon who, when intoxicated and riding, suddenly curbed his horse sharply, which reared and fell backwards on him. When admitted, he was semiconscious and restless, but not much collapsed, and not sick. I drew off six or eight ounces of bloody urine, without clot. He complained of constant desire to micturate, without ability to do so. On the following day there was general tenderness over the abdomen, especially on the left side: a pint of bloody urine was drawn off twice with relief. The desire to micturate continued, and he was sick for the first time after taking some tea. The temperature was 96 deg. On the third day the urine was only slightly discoloured, and he appeared better: but on the fourth the pain and tenderness in the belly became very severe, though there was no abdominal distension: he suffered from bilious vomiting, and perspired profusely: his pulse was rapid, and the temperature of the surface varied from 96 deg. to 99 deg. On the sixth day he again rallied, and passed urine freely himself, slightly tinged with blood. On the seventh day he continued to pass his urine: but the pain extended, though the sickness had ceased. He sank gradually, and died at midnight, his intellect remaining unimpaired to the last. The *post mortem* examination revealed a lacerated wound in the back of the bladder, about an inch in length. The bladder itself was contracted and almost empty. Its outer surface and the edges of the torn opening were cemented to the adjacent rectum and peritoneal folds by a considerable exudation of plastic lymph; and the intestines were attached to each other, to the omentum, and to the parietal peritoneum, by recent adhesions. The pelvis contained a pint of turbid brownish fluid; and a catheter, passed along the urethra, found its way, through the rent in the bladder, into this space.

The foregoing representative cases are suggestive of many interesting considerations. The nature of the lesion in the former instance is necessarily conjectural; but for some days the symptoms were such as to induce me to suspect injury to the bladder; and the nature of the acci-

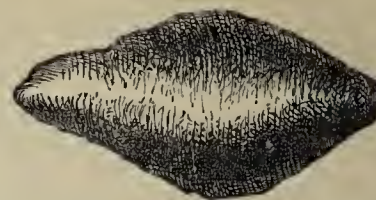
dent rendered it not improbable that such was the fact. Indeed, the favourable issue of the case alone points to an opposite conclusion. But, is that conclusion of necessity justified by the result? I do not feel sure that it is. Assuming, as I have stated I am disposed to believe, that we overestimate the irritating effects of urine on the peritoneum, by knowing how destructive it is when diffused through other tissues, I see no insuperable obstacle to the obliteration of a small rent in the bladder, if favourably placed for such result, by plastic effusion and adhesion to neighbouring textures,—a condition which was exemplified in the second and fatal case, where the connective lymph was broken down in a large rent, by the passage of the catheter after death. And this conjecture is confirmed by the retentive and expulsive power of the bladder in the fatal case, towards its close. But what becomes of the extravasated urine, that which finds its way into the peritoneal cavity? Probably it becomes absorbed. Indeed, I know not how else to account for the absence of urine, which is a not infrequent occurrence in fatal cases; and I am not aware of any insuperable obstacle to this event. There is sufficient analogy between the secretion of a serous membrane (especially when surcharged with saline ingredients in inflammation,) and the urine, to permit the absorption of the latter by the peritoneum, even including, I apprehend, the special ingredients of urea and uric acid. But, whether this speculative opinion be correct or erroneous, still the fact remains, that in some, I may say many instances, the quantity of urine discharged is very scanty: and that, although catheterism may relieve the pelvic cavity of urine which accumulates in it, a cautious use of the instrument may give the patient a better chance, by not disturbing the process of repair, if any such effort be made.

In many cases, no doubt, the history of the accident, the general condition of the patient, and the introduction of the catheter with little or no result, point to the nature of the lesion. The constant desire to micturate and evacuate the bowels, accompanied by the disability to perform these acts, are very suspicious symptoms; and such, likewise, is the continued presence, though in diminishing quantity, of blood in the urine; for, I believe, the bladder rarely bleeds except it be rent or rendered hyperæmic from irritation. Restlessness, an anxious countenance, lumbar pain, a rapid pulse and low temperature, are usually present in this injury. Yet, on the contrary, I have known some instances in which the urine has been voided spontaneously, and some where it has become quite clear and free from blood before death. Tympanites or abdominal effusion is frequent, but not constant, in ruptured bladder, and the *post mortem* signs of peritonitis vary exceedingly. The patient from whom this bladder was removed had very little urine in his bladder after the accident, but much blood, and the secretion continued very scanty during the five days that he survived, though it became quite clear, and he was able to pass it spontaneously on the third day: yet there was a large, rugged laceration, through which a hen's egg might be thrust, in the posterior part of its fundus. The man had been thrown violently in wrestling whilst his bladder was distended; and although he survived the injury for five days, the abdomen shewed no signs of peritonitis, except the presence of four pints of straw-coloured fluid, and a small patch of lymph on the bladder. Mr. Drake, of Stratford, who kindly sent me this preparation, asks, "What became of the urine that was in the bladder at the time of the accident, and how was it possible for a bladder with such a rent in it to empty itself? which it did most assuredly, and the urine was quite natural for two days before his death. Moreover, there were scarcely any signs, *post mortem*, of peritonitis." The answer to some of these inquiries may be found in the remarks which I just now made.

When rupture of the bladder is consequent on fracture of the pelvis, the injury is usually very quickly fatal. The shock is greater, and the urine finds its way beyond the peritoneal cavity. Indeed, it would appear that patients die rather from the effects of shock perpetuated and renewed in ruptured bladder, from whatever cause, than from peritonitis.

The position of the urethra, as it emerges from the pelvis, renders it especially obnoxious to laceration either from fracture or from external contusion; but separation of the pubic symphysis is not necessarily, nor indeed usually, accompanied by any lesion of this canal. Persistent hæmorrhage from the urethra after injury characterises laceration of its walls; when the blood does not find a ready exit by this channel, it will accumulate, in the form of ecchymosis, in the perinæum, but not otherwise. Occasionally the urethra is completely severed from the bladder—a fatal injury in my experience. Even simple laceration of this duct often produces collapse; but it is of a transient nature. The lodgment of a calculus in the urethra is a well-known source of obstruction and of retention of urine. It rarely occurs that it is allowed to remain so long intact as to attain such a magnitude as this phosphatic stone, which I cut from a man's urethra, immediately in front of the scrotum, where it had been lodged for three or four years, until, by increment, it occa-

sioned complete retention, and inflammatory swelling of the scrotum and penis: it is an inch and a quarter long, and three-quarters of an inch in diameter.



The source of hæmaturia in cases of abdominal injury is often very obscure, and especially so when the blood is mixed with the urine, and we are thus deprived of the advantage of examining the form of the clot. In such cases the blood may find its way rapidly from the kidney, without coagulation, presenting even a fresh and florid appearance, as I have seen where the symptoms unequivocally pointed to the kidney as its source. In other instances, the reddish-brown opaque fluid which is drawn from the bladder, with gradually diminishing depth of colour, suggests the presence of a large clot there, which is undergoing gradual solution—a condition which may be occasionally verified at an early period, by the impediment which it offers to the abstraction of the urine through the catheter. In some cases of injury, I believe, the blood is derived from the distended veins of the prostate in elderly persons; and I cannot see the objection which I know to be entertained by many surgeons to this interpretation of the class of cases to which I allude; viz., that the blood cannot retrograde, and thus find its way into the bladder: the fact I believe to be, that enlarged prostatic veins may bleed directly into the bladder. Hæmorrhage from the urethra, where the prostate is enlarged, may be accompanied by blood in the urine; and this I have known to occur persistently for some time after an injury. If the blood—and the same remark applies to pus—precede clear urine, there can be no doubt that its source is urethral or prostatic, as exemplified in rupture of the urethra, or where a prostatic abscess is burst in attempting to pass a catheter.

Superficial injuries of the rectum, in the neighbourhood of the anus, are of not infrequent occurrence, and are readily recognised and usually manageable; but deeper lesions from external violence are, in my experience, rare, and are difficult of diagnosis, and beyond the reach of active treatment.

A severe injury of this class, of which I have a record, was produced in a singular way. A young man was brought to the Hospital, who had been crushed between the buffers of two railway carriages which he was uncoupling. He was suffering from shock; and the only external injury was a laceration of the skin, extending backwards from the anus two-and-a-half inches, and forwards into the perinæum. On further examination, the rectum was found almost severed from its attachments, and retracted, being held at one point only by a small strip of the mucous membrane. There was an extensive space behind containing clots, and here the sacrum and coccyx were denuded. No fracture of the pelvis could be detected: the urethra was uninjured, and the urine was clear. He did not rally, though some reactionary hæmorrhage took place after the lapse of a few hours. On the third day, air was extravasated, emphysema extending round the pelvis, and as high as the scapula on the left side: ecchymosis was co-extensive on the right side. The collapse continued: he did not suffer much, but became restless and wandering, and died on the fourth day. In addition to the injuries described, the skin was found separated over the sacral, lumbar, and gluteal regions. The pelvic bones and the other viscera escaped; and even the rectum was only detached as described, and was not lacerated.

A more extensive and complicated injury occurred, but in a different way, to one of my patients, which was speedily fatal. In this case the rectum was ruptured, and fæces were extravasated into the pelvis. The bladder was likewise ruptured, presenting a long rent, extending from its upper part to the prostate gland in front. A similar laceration, but shorter, was found in the front of the bladder; and the urethra was completely torn from the prostate gland. There were also several fractures of the pelvis, involving the acetabulum, as well as separation of the sacro-iliac synchondrosis, on each side, and of the pubic symphysis to the extent of four inches.

Lacerations of the vagina and female perinæum from external violence are occasionally met with, but offer no particular point for comment in relation to their diagnosis, which is usually simple.

In connection with the subject of shock accompanying abdominal injuries, I may be permitted to refer to some interesting facts to which my friend and colleague, Dr. Barnes, has directed my attention. In a clinical lecture on the subject, published some time since, he points out that the prolapse of a large polypus from the interior of the womb

may entail severe shock, which he attributes to the sudden violence done to the structures connected with the uterus; and observes that this form of uterine hernia is analogous in its effect, in some respect, to the twisting of an ovarian tumour on its axis. The same accurate observer records some interesting cases, in which the decomposing and purulent contents of the uterus, having found their way along the Fallopian tubes into the peritoneal space, produced sudden and fatal collapse, precisely identical, in its phenomena and fatal results, to perforation or rupture of intestine, by the intruding poisonous matter coming into contact with the peritoneum. This condition may follow abortion, where the decomposing remains of the ovum are not cleared out speedily; but it may occur in the unimpregnated uterus, when the products of inflammation are retained within its cavity, and find an exit either by the open orifice of the Fallopian tube, or by an ulcerated aperture in its wall.

Is not this a probable explanation, in some instances, of the rapidly fatal peritonitis which occurs in the puerperal state? Sudden collapse may also occur from rupture in early tubal gestation, or in rapidly formed pelvic hæmatocele. The bursting of an ovarian abscess or cyst may produce the same result; but not necessarily so, as I once had the opportunity of witnessing in a patient to whom this accident happened in St. Thomas's Hospital, by the sudden descent of a lift in which she was being lowered: in this instance the sudden rupture of the cyst was followed by a permanent cure.

In one instance only has it occurred to me to have the opportunity of performing the Cæsarean section at the full time of gestation: in this instance the shock, consequent on exposure of the abdominal cavity and section of the uterus, did not appear to be great.

I trust, Sir, that the alliance of these remarks with the subject which I have been discussing may be my apology for thus travelling off the surgical groove of my discourse.

In reviewing the preceding observations in relation to visceral lesions involving the large serous membrane of the abdomen, I feel myself committed to the following opinions.

1. The fatality of the injuries in question is chiefly due to the prolonged collapse, dependent upon the impression made on the cyclo-ganglionic nerve-centres, and terminating in death.

2. This fatal impression is due usually to the extravasation of the intestinal contents, and only exceptionally so to the actual lesion, *per se*, of the bowel; and rupture high up in the intestinal canal is, other things being equal, more rapidly fatal than lower down.

3. Lesions of the solid viscera in the abdomen are rarely succeeded by general peritonitis; and these lesions, unless extensive or complicated, and attended by the operation of other depressing causes, are repairable, and are not usually fatal.

4. When fatal, hæmorrhage is the most usual cause of death, in injuries of the solid viscera; but rupture of an excretory duct, as the hepatic duct or ureter, is a most serious, if not necessarily mortal, complication.

5. Rupture of the bladder, with extravasation of urine into the peritoneum, is not usually accompanied by collapse so profound as that which marks rupture of the intestine and the escape of its contents: in some instances the presence of urine seems to be tolerated almost passively by the serous membranes; and, as a rule, it is not resented so actively as is the presence of feculent matter from the bowel.

6. The period of survival, after rupture of the bladder, usually exceeds that of rupture of the stomach or small intestine; and the pelvic peritoneum, being far removed from the great ganglia and nerveplexus of the abdomen, is thereby less susceptible to the consequences of inflammation.

7. It seems not improbable that urine may be absorbed by the peritoneum.

Lastly, I would remark, in relation to traumatic peritonitis, that this form of hypervascular action is most variable in its presence, intensity, general features, and consequences, as well as in the signs by which it may be recognised. The fickleness of its occurrence seems to defy any general classification, but is to be explained by peculiarities, both intrinsic and operating from without, in each particular case. Those extraneous causes which will excite intense vascular activity in one instance, arouse scarcely any in another. A few patches of lymph, or the presence of some turbid fluid, may, in one case, indicate, *post mortem*, that such action existed; whereas, in another, the abundant production of plastic matter, agglutinating together all parts in contact, and floating, in its redundancy, in a sero-purulent menstuum, testify to the active peritonitis which, perhaps, a trifling cause may have sufficed to light up.

But one remarkable feature is, that not only may general chronic peritonitis run its course unsuspected, when excited, for example, by a growing ovarian cyst, but, even in the acute form, the signs and symptoms during life are by no means uniformly commensurate with the re-

sults which are witnessed after death. It is true that this circumstance may be, and no doubt in many cases is, accounted for by the depression of shock from injury under which the patient is labouring; and this is often no bar to increased local vascular action: yet, in many instances, I have no hesitation in affirming that traumatic peritonitis may be present in an active degree, with scarcely any of the characteristic signs by which it is usually described as recognisable. I say traumatic, because it is with this form of serous inflammation that I have been dealing in the preceding remarks;—a condition which, under these circumstances at least, I cannot regard as a disease, but purely as an effort, perhaps misguided and uncontrolled, in the direction of repair. Whether the so-called idiopathic form of peritonitis has, in practice, that constant type, and is uniformly characterised by those active signs which are usually ascribed to it, I must leave to more competent judges than myself to decide.

The symptoms and signs which indicate convalescence, or are premonitory of dissolution, are naturally watched for with deep interest in visceral lesions, as in other cases of doubtful issue. Many circumstances to which, separately, not much importance would be attached, assume, in concert, a significance which scarcely admits of doubtful interpretation. Such are, a rapid and feeble action of the heart; depressed or abnormally elevated temperature; a parched tongue; hurried respiration; tympanites; muscular spasm; aggravated or arrested pain; the colour and expression of the face; even the earthy odour of the skin; the raving of delirium, or the wandering of inanition,—these and many other well known signs possess, in more or less complete or varied combination, a significance which cannot be ignored.

The information derived from varying temperature is not unimportant, and will, no doubt, assume more value as our study of the facts connected with this subject becomes more accurate and extended. In acute sthenic diseases, the temperature continues to rise usually till the time of death; and it is higher, as I had occasion to remark in a former lecture, in inflammatory action following brain-injury, than in other cases, according to the record in our surgical wards. The highest death-temperature registered is 106°, in a case of traumatic abscess of the brain which I narrated last year; the lowest is 89°, in a case of fracture of the base.

In cases which belong to the category which I have recently been considering, sudden transitions in the general phase of the symptoms, the result of accidental or unforeseen causes, often baffle the calculations and anticipations of the medical attendant. But the onward march—the progressive development—of such signs as an increasingly rapid pulse and falling temperature, with a dry and glazed tongue and a tympanitic belly, is alarming; and, when the stomach rejects, not only what it receives, but its own secretions and those of the upper bowel, there is not much hope for the patient, though the cerebro-spinal functions may manifest but little sympathy with these evidences of fast-failing power and of ebbing life. The appeal is to and through the cyclo-ganglionic centres of organic life; and, till the pitcher and the wheel are broken, the silver cord and golden bowl may retain their integrity.

Among the signs of recovery, I have more confidence in a moist tongue and a tractable and willing stomach, than in any other indication or combination of signs; and herein especially is the agency of the judicious practitioner witnessed, in that he does his utmost to humour this susceptible and fickle organ, whilst he avails himself to the utmost of its capabilities for good.

In my present course of lectures, I have experienced, even more sensibly than in my last, the difficulty of compressing within a given area even a digest of the materials which an extended hospital experience has placed at my command. I have, indeed, felt painfully conscious of the obscurity which is necessarily associated with a condensed style in lecturing; and I have been as frequently embarrassed by the abundance of illustrative matter, as by the alternative of selection or entire omission. I therefore feel the more beholden to you, Sir, and to other members of the Council and professional friends, for your indulgent attention to my discourses.

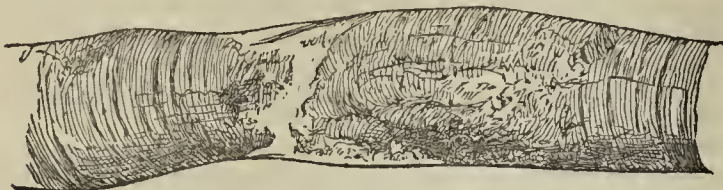
The materials which I had collected, for the purpose of illustrating the extended and important subject of intestinal obstructions from various forms of strangulation and other causes, I have been reluctantly compelled to omit from my course. But it became evident to me, as I advanced, that some such sacrifice must be made, unless I were willing to permit my lectures to degenerate into little more than a series of surgical aphorisms.

Yet it has been neither my intention nor ambition to furnish a systematic treatise on the subject I have undertaken, but rather to throw into a suggestive form what I have observed, and the conclusions which I have drawn from my observation. It is in this reading of Nature from

various stand-points, and in the interpretation of her language by different minds, that our store of knowledge is extended; and he who works in an honest spirit, even though he fail to read her lessons aright, may still have done some service in helping forward the cause of Truth.

ADDENDUM.

THIS woodcut, from a drawing by Dr. Stewart, the Curator of the Museum at St. Thomas's Hospital, exemplifies the condition alluded to in a former Lecture, in which the primitive muscular fibres are found



ecchymosed, disintegrated, and ruptured, in tetanus. The specimen was taken from the patient referred to in the text, who died of acute traumatic tetanus; and is magnified 300 diameters.

ON THE USE OF PROTOXIDE OF NITROGEN GAS; AND ON A NEW MODE OF PRODUCING RAPID ANÆSTHESIA WITH BICHLORIDE OF METHYLENE.*

By RICHARD RENDLE, Esq.

It is my intention to place before you the results of my experience in the use of protoxide of nitrogen gas and the bichloride of methylene, which, I think, from the variety of cases in which these agents were used, and the varied modes in which they were administered, may prove interesting to you. Having had, since the last meeting of the Association, some opportunities of studying the use of anæsthetics in various departments of surgery, I have been often struck with many disadvantages in the use of chloroform; such as the length of time in the production of anæsthesia, the occurrence of vomiting and muscular excitement, and the tardy recovery which in some cases attended its use.

With the idea of lessening, if not of remedying these evils, I began to administer the bichloride of methylene with a modification of Dr. Junker's apparatus, which is here before you. I gave it in this way in forty cases taken indiscriminately—19 males and 21 females, from 14 months to 76 years of age. In 32 of the cases, the time required to produce anæsthesia was—over 20 minutes in 3; over 10 minutes in 4; over 5 minutes in 9; over 3 minutes in 6; over 2 minutes in 2; and over 1 minute in 8. In eight cases, all over 20 years of age, after continuing the administration for 3, 5, 10, 11, 14, 15, 16, and 17 minutes respectively, using from 30 minims to $4\frac{1}{2}$ drachms, chloroform was substituted, and in 5 of the 8 produced anæsthesia in 1 minute; in 1 in 2 minutes where the methylene had been used 14 minutes; in 1 in 3 minutes where the methylene had been used 15 minutes; in 1 in 9 minutes where the methylene had been used 16 minutes; in this last case, complete muscular relaxation was required and produced. Of the 32 cases, in 1 anæsthesia was kept up for 45 minutes (ovariotomy); in 2, for 10 minutes; in 9, for 5 minutes; in 15, for 2 minutes; in 5, for 1 minute. On an average, three or four fluid-drachms were used. It was given for iridectomy in 11 cases; for strabismus in 11; for extraction of cataract, needle-operation for cataract, excision of eyeball, applying nitric acid, setting fractures, reducing dislocations, ovariotomy, and various other operations, in 18. Vomiting occurred in 8 cases—that is, 1 in 5. Thus, in the majority of the cases, it took longer to induce anæsthesia, required more of the anæsthetic, and was consequently much more expensive (bichloride of methylene being at present more than three times as costly as chloroform). Vomiting occurred as often as with chloroform; and the only advantage which I noticed the bichloride of methylene, administered in this manner, to possess over chloroform, though a very important one, was, that there was scarcely any muscular excitement.

I next gave the protoxide of nitrogen gas in 74 cases. The details of manufacture and of administration having been published in the Odonatological Society's *Transactions*, and in papers read by Mr. Fox and Mr. Clover at Oxford last year, I shall proceed at once to mention the modes in which I have given it, and the observations I have made. Its mode of action, I believe, is similar to that of all other anæsthetics; viz., that the blood supplied to the nerve-organs is not duly oxygenated,

or is not able to interchange its oxygen for carbonic acid sufficiently for the due performance of their duties. Anæsthesia is a consequence of the air supplied not producing the necessary changes in the nerve-organs, and not of a deprivation of respirable air, as has been stated.

At first, I obtained the gas compressed in iron bottles from Mr. Barth, and gave it in the manner recommended by Mr. Coleman, which consists in causing the gas, when expired, to pass through a chamber of slaked lime (as shown in this diagram). This economises the gas very much, about three gallons being sufficient for each patient for almost any length of time, but the apparatus required is rather complicated; moreover, there must be some arrangement for getting rid of the air already in the lungs, instead of allowing it to return into the bag. This is effected by a valve near the mouth-piece, which opens on expiration, and after the first three expirations can be closed. Here are two made for this purpose. After this the gas, when expired, returns to the bag over the slaked lime, by which any carbonic acid is removed, and the gas is rebreathed. It was given in this way in 24 cases, 13 males and 11 females, from 3 to 73 years old: for strabismus, in 7 cases; for iridectomy, in 6; for operations on the eyelids, in 8; removal of opaque lens capsule, in 1; extraction of teeth, in 2. The shortest period in which anæsthesia was produced was 60 seconds; the longest, 150 seconds; average, 93 seconds. Anæsthesia was maintained 13 minutes in 1 case; 6 minutes in 5; 4 minutes in 5; 2 minutes in 12; and 1 minute in 1. Intervals of air were allowed in all but one. The gas was given until deep anæsthesia was produced, air being then admitted until the natural colour returned, when the gas was again turned on, and so on alternately as long as desired. The gas was required for a shorter period at each successive time. The period during which air was admitted varied very much, and it would require a much larger experience to state whether it had any relation to the time of each inhalation of gas or to the whole period of anæsthesia. In the earlier cases, before I succeeded in getting well-fitting mouth-pieces, some failures occurred from the admission of air with the gas; yet I noticed that, if the quantity of air admitted were small, anæsthesia was produced, though less rapidly, and the blueness was less marked. One of these patients laughed uproariously on recovery, and had lost all idea of the time. One, a woman, aged 48, on whom iridectomy was performed in both eyes, was under the influence in 60 seconds. The gas was continued five minutes longer without any admission of air; at the end of this time she was most unusually blue; the respiration and pulse very slow and failing. The gas was removed; the patient was turned slowly over on her left side (a proceeding, I believe, peculiar to the ophthalmic department at Guy's, and which has never failed to restore cases manifesting unpleasant symptoms from anæsthetics). She gradually recovered completely, and walked away in five minutes more. I next had a small gasometer made, a modification of one made by Mr. Barth (seen in section in this diagram); it has a core to diminish the quantity of water, and on the top of this is a tray containing slaked lime; a pipe passes in from beneath for the passage of the gas in and out; the upper part is exactly counterbalanced, and, as the gas is breathed out and in, this falls and rises. The expired gas is thus exposed to the slaked lime before being again inspired. Of course the same arrangement has to be made in the mouth-piece for getting rid of the air in the lungs, by the first three expirations being allowed to escape instead of being expired into the gasometer, but all other valves are done away with. This is a very suitable apparatus for an operating-room, but is not portable. This was used in 15 cases—7 males and 8 females, from 4 to 70 years of age; for strabismus, in 3; for needle operation for cataract, in 1; for operations on the nasal duct, extraction of teeth, removal of toe-nails, and various others, in 11. The shortest period in which anæsthesia was produced was 30 seconds; the longest, 85 seconds; average, 64 seconds. Anæsthesia was maintained half a minute in one case; 1 minute in 8; 2 minutes in 3; 4 minutes in 1; 6 minutes in 1; and 8 minutes in 1. One of these cases, a man, aged 30, short-necked, plethoric, who began to inhale it for the extraction of a tooth, pushed away the inhaler and refused to continue. He complained of very unpleasant sensations in his head for some hours after, but this eventually passed off. One woman complained of headache afterwards.

Having now a store of gas at my command, economy was not studied, and it was given in the ordinary way from a large bag, with a mouth-piece having an inspiratory and expiratory valve; in this way a much larger quantity of gas was used, about five gallons for each minute's inhalation. Thirty-four inhaled it in this way—22 males and 12 females, from 3 to 58 years of age; for strabismus, 3; enlarging lacrymal duct, 2; fistula in ano, 6; opening of abscess, 4; extracting teeth, 8; removal of nails, reducing paraphimosis, removal of small cysts, attempt to reduce a dislocation, 5. The shortest period in which anæsthesia came on was 40 seconds; the longest, 100 seconds; the average, 61 seconds. Anæsthesia was maintained 1 minute in 23; 2 minutes in 6; 3 minutes

* Read in the Surgical Section before the Annual Meeting of the British Medical Association in Leeds, July 1869.

in 4; and 5 minutes in 1. One had had chloroform and bichloride of methylene on previous occasions, but she preferred the gas. Three had a second inhalation. In the case of dislocated humerus where it was used, the patient, a strong muscular man, was brought fully under the influence on two occasions; but, though considerable force was used as the muscles remained rigid, we failed to reduce it. Chloroform was given about twenty minutes afterwards, and the dislocation easily reduced.

A medical student, aged 22, had it for the extraction of an impacted molar tooth four times in succession on one occasion, and twice on another. Each time, immediately on the removal of the inhaler, before any instrument was used, he gave a shrill scream; and, on recovery, had no knowledge of it, but described the sensation as pleasant. A child four years old had it on two occasions, and, on the second, vomited about two hours afterwards. This is the only case in which vomiting followed the use of the gas. In a child three years old, where anaesthesia was maintained 90 seconds, two intervals of air having been allowed, the respiration ceased, and the pulse sank so as to be scarcely perceptible at the radial artery for several seconds. The gas was removed, and the child turned slowly over on his left side. He gave a deep sigh; the pulse and respiration gradually returned; and he recovered completely within five minutes.

There was no appreciable difference in the effects under the three modes of administration, excepting a slight one in the time of induction of anaesthesia; being, on an average, 93 seconds with the small bag; 64 seconds with the gasometer, where the same gas was re-breathed after passing over slaked lime; 61 seconds with the large bag, where it was breathed only once. This difference, however, appears greater than it should, from the average being much raised in the first mode by badly fitting mouth-pieces. I generally prefer the large bag for use in private practice, being less complicated and more portable, the extra expense of gas being of minor importance.

It may be said, then, that the advantages of the gas are, the rapid production of, and recovery from, anaesthesia; the absence of sickness, etc.; and the agreeable taste. That it is safe in all short operations, there can be no doubt; and, I think, also in many longer, for even twenty minutes or more, provided there be a due admission of air at proper intervals. But that great care is required in its use, is shown by the alarming symptoms of one or two cases which I have related.

Its disadvantages are, the trouble and time required in its preparation, which I know to my cost, having occasionally had to remain watching it through the night, though this has been much lessened by the beautiful automatic apparatus invented by Mr. Porter; its bulk and non-portability, even when compressed into iron bottles; the complex apparatus necessary for its administration; its unsuitability in certain cases, especially where muscular relaxation is required. The rigidity and congestion preclude its use for operations within the eye where there is any increased tension. The muscular twitchings interfere with all delicate operations. Moreover, it has the objection common to all gaseous anaesthetics, as pointed out by Dr. Richardson; viz., that they remain gases at the temperature of the blood, and do not condense when introduced into it. Hence it is necessary to give it in very large quantities, to produce anaesthesia; and this renders its use expensive. But, notwithstanding all these disadvantages, some of which may yet be overcome, it is very useful in certain cases, especially dental.

I must now pass on and describe the new method of giving bichloride of methylene, by which effects are produced resembling, in rapidity and absence of unpleasant symptoms, those of the protoxide of nitrogen gas, and which are free from some of the objections to the gas. It was suggested by Mr. Bader, who had seen it so used by a dentist in Brighton, that, if I could succeed in making the patient inhale a large quantity of the bichloride in a short space of time, anaesthesia would be rapidly induced. For this object, I constructed a cylinder of cardboard, seven inches long, and about three in diameter, perforated at the sides, and covered inside and out, and at one end, with some absorbent yet porous material. The other end was left open, and shaped to fit closely over the nose and mouth.

I have had several modifications made, in size, shape, and material. The last are those exhibited in the Museum, and these on the table before you. They are made in various sizes, of leather sufficiently thick to retain the shape, yet thin enough to yield a little in fitting on the face. The top is dome-shaped, and perforated to admit just sufficient air to enable one to breathe without effort. The sides are not perforated, and the open end is shaped to fit nose and chin. In the interior is a flannel bag, the mouth of which is turned over the edge of the leather, and secured by an elastic band. Thus the edge is made soft to the face; and the flannel lining is kept in position, and, when soiled, can be readily changed. Into this inhaler, for an adult, one fluid-drachm of the bichloride of methylene is sprinkled, and the inhaler applied closely over the

nose and mouth: the patient is directed to breathe freely, anything tight around the chest or neck having previously been loosened, and the respiration and pulse being closely watched. In some cases, the respiration proceeds naturally; in others, chiefly from fear, there are convulsive efforts at inspiration for a few seconds. This generally ceases, and respiration becomes natural. If not, it is advisable to remove the inhaler, and allow one inspiration only; and then reapply it; and all goes well. But all unnecessary admission of air must be avoided, as the rapid effects are dependent on the rapid inhalation of the bichloride with a minimum of air.

The pulse is invariably strengthened and accelerated at first, but soon returns to its normal state. Insensibility to pain comes on, in a large number of cases, in twenty seconds; and Mr. Bader generally commences ophthalmic operations in about thirty seconds. I usually prefer, however, in general surgery, continuing the inhalation for about sixty seconds; but even then I know no one sign indicative of insensibility to pain, as distinct from complete insensibility; the former, as must be well known to many, being a prior stage to that for which a callous conjunctiva is the guide.

The duration of anaesthesia also varies much. In dental operations, where the inhaler has of necessity to be removed, and the pain is peculiarly acute, anaesthesia is short, though quite long enough for one, and often for three or four extractions, according to the skill of the operator. In other operations, where the inhalation can be continued until the drachm of bichloride is exhausted, the effects last about five minutes, and then the patient recovers, and is able to walk away with slight unsteadiness in gait, which passes off in a minute or two, and recovery is perfect. No sickness or headache follows, unless the inhalation have been continued many minutes, or a second dose is given to keep up the effect. Of course, if the inhalation be prolonged, the after-effects resemble, though in a less degree, those of chloroform, save the one before mentioned—absence of muscular excitement.

The following is an analysis of 123 cases in which I have given it in this way. The ages varied from 6 months to 70 years. It was given for iridectomy in 40; for operations on eyelids and ducts in 9; for strabismus in 8; for extraction of cataract in 6; for needle-operation for cataract in 1; for excision of eyeball in 2; for various other ophthalmic operations in 11; for extraction of teeth in 18; for examining and setting fractures in 9; for applying nitric acid in 7; for opening abscesses in 4; for reducing dislocations in 2; for circumcision, excision of testicle, removal of growth from hand, amputation of finger, dividing fistula, in 6.

Anaesthesia was produced in 30 seconds in 18 cases; in 60 seconds in 70; in 2 minutes in 25; in 3 minutes in 5; in 5 minutes in 3; in 9 minutes in 2.

Anaesthesia was maintained 1 minute longer in 20; 2 minutes in 31; 3 minutes in 19; 4 minutes in 14; 5 minutes in 11; 6 to 10 minutes in 10.

Less than 1 fluidrachm was used in 20 cases; 1 fluidrachm in 54; an additional half-drachm in 20; an additional drachm in 16; additional 2 to 4 drachms in 13.

Fifty recovered within 1 minute; 23 in two minutes; 9 in 3 minutes; 28 in 5 minutes; 11 in 10 minutes; 2 were continued with chloroform.

Vomiting occurred in 15—*i. e.*, 1 in 8; but in all of these it was continued beyond the second minute; and in 9, more than 1 drachm had been used. Some had just been eating.

Three female adults and one child became rather blue, and the pulse slower than normal; but, on removal of the inhaler, and turning them slowly on the left side, they recovered well and rapidly. One, a man aged 70, spat up a little bright frothy blood during the inhalation, and once or twice after, during the next twenty-four hours. He stated that he had never done so before. One woman became very hysterical. Two had had the gas, and liked methylene equally well. One preferred the gas. One screamed while under, but had no knowledge of any pain.

The rapidity of action and recovery appears to be due to the great volatility and solubility enabling a large quantity to reach, and escape from, the nerve-organs at once; its safety, to its rather stimulant action on the heart, and its rapid elimination. The bichloride, being very volatile, requires to be kept in a well stopped bottle; and it is an advantage to keep it in the dark, inverted under the water.

To sum up, then, I claim for the new mode the following advantages. The patients retain their normal colour and appearance. The anaesthesia is good, is rapidly induced, and can be maintained for any length of time. The recovery is rapid and complete; there are no unpleasant after-symptoms, nor muscular rigidity. The apparatus required is simple and portable. As regards safety, I may add that I have not had a fatal case.

I hope, gentlemen, the observations I have placed before you have been sufficiently novel and interesting to repay you for the attention you have given me.

THE NITROGENOUS TEPID WATER OF BUXTON.*

By WILLIAM HENRY ROBERTSON, M.D.,

Consulting Physician, and formerly Senior Physician, to the Devonshire Hospital and Buxton Bath Charity.

BUXTON is chiefly celebrated on account of the great relief afforded by the use of its naturally tepid nitrogenous water to cases of rheumatism and gout, and the various morbid conditions allied to these diseases in origin and character.

The water issues from several fissures at the edge of the mountain limestone formation. It is discharged in vast quantity, estimated to be probably not less than 300 gallons per minute. The water issues at the unvarying temperature of 82 degrees Fahrenheit. It is very clear and brilliant in appearance, has a beautiful faintly blue colour, is slightly alkaline, and is charged with pure nitrogen gas, probably to the utmost possible degree. Dr. Sheridan Muspratt has estimated the amount of nitrogen as 504 cubic inches per gallon, which would shew a discharge in this water of 154,200 cubic inches of nitrogen gas per minute. It is enough that the water is surcharged with this gas, under pressure, at the depths below the surface of the earth at which the water acquires its elevated temperature.

The water is made use of in the form of baths, and it is taken internally. Other things being equal, the bath exerts a greater and more lasting effect on morbid conditions than the internal use. However used, the water is primarily a stimulant, and secondarily an alterative. It may, if used unduly, aggravate the localisations of rheumatism or gout in the first instance; but this is neither a desirable nor a necessary condition or test of eventual benefit. If used with judicious care and caution, the water corrects both the consequences and the causes of rheumatism and gout, so far as these are within the influence of possible treatment. The curative result does not bear proportionate relation to the primarily stimulating effect, or to any evident alterative influence, or to any eventual debilitating influence. As a rule, the younger the patient, the more recent the case, and the nearer to the surface the part that is affected, the more rapid and lasting is the curative result. The stronger the evidence of hereditary predisposition, the more difficult and tedious, and imperfect, the result may be expected to be. Even the external application of the water to the affected parts exercises an appreciable influence; but total or partial immersion of the trunk of the body and the limbs is commonly needful. Some persons cannot drink the water, others cannot bathe in the water, and some can only apply it locally, without excessive and undesirable effects. The use of the bath at the natural temperature is more immediately powerful than that of the same water heated to any higher degree; and the power is commonly found to be lessened in the ratio of the higher temperature. The amount of effect is regulated, also, by the period of immersion in the bath. Ten minutes may be the average time for desirable immersion; but, in some cases, one minute is found to be quite sufficient, and, in some, half an hour is not found to be too long. The course of baths may consist of ten baths, or sixty or more baths may be necessary for the full effect on the morbid condition. The effect of the bath depends closely on the amount of friction of the surface that is used during the immersion, and must be referable to absorption of the medicinal agent through the skin. The use of a mineral water charged with nitrogen appears to be the only way in which the medicinal action of nitrogen is obtainable, whatever the nature of this action may be eventually ascertained to be.

The Devonshire Hospital and Buxton Bath Charity has received since the year 1820, or in forty-eight years, 49,236 patients. Of these, about six-sevenths, or 42,200, have been cases of rheumatism. Of the total cases, 44,744 have been discharged more or less cured or relieved; and of the 42,200 rheumatic cases, 38,430 have been discharged more or less cured or relieved, only 3,774 of this vast number of rheumatic sufferers having derived no benefit from the use of the Buxton water. It must be mentioned, moreover, that these rheumatic cases have been usually of chronic character and comparatively long duration, for the relief of which all the usual means and appliances of medical treatment had been previously tried in vain.

Buxton is situated almost at an equal distance from the eastern and western coasts. It has essentially an inland climate. It is one thousand feet above the level of the sea. It is upon the mountain limestone formation, but close to its edge. The dry formation of mountain limestone extends many miles on one side of the town, and the equally dry formation of millstone grit extends many miles on the other side. It has a remarkably dry upland atmosphere and climatorial character,

notwithstanding a comparatively heavy annual rainfall. The elevation, the undulations of surface, the subsoil, and the nature of the vegetation, render the air remarkably free from fogs or exhalations from the ground, and the climate invigorating, and the district as free as geological conditions can render it from the ordinary results of damp or miasmata.

IMPERFECT DEVELOPMENT OF VERTEBRAL COLUMN: CONGENITAL PARALYSIS.

By THOMAS B. BOTT, M.D., Bury.

THE following case of congenital paralysis presents some singular features, and in its history confirms the generally received opinion on a point in the physiology of development. The little patient was under my notice, more or less, since her birth.

The patient was Ellen Riley, daughter of a brewer. Soon after birth, it was noticed that she scarcely moved the legs, if at all; and that the urine was constantly dribbling away. Subsequently, it was found that the stools were not retained, but came away at short intervals. A physical examination showed a deeply depressed cicatrix, an inch in length, situate on the buttocks, over the centre of the sacrum. There was almost complete paralysis of the parts below the brim of the pelvis. During infancy, the nates were often covered with pimples and pustules, which, being almost constantly irritated by the contact of urine, ulcerated, and were with difficulty healed, unless very great care was paid to cleanliness. When she was old enough to sit in a chair, the pressure on the upper parts of the thighs and the buttocks, consequent on the position, was added to the irritation caused by the excretions. The combination resulted in the formation of large ulcers, which extended by burrowings beneath the skin, and descended so as to lay bare the muscular fibres of the region. The faint attempts made by nature to repair the damage to the surface were frustrated by the almost constant presence of the urine.

I passed interrupted currents of electricity from the sacrum through the ulcers and down the limbs. This was done about twice a week. Although no improvement in voluntary movement resulted, yet this, combined with cleanliness and simple dressing, was found a most effectual means of procuring the healing of the ulcers. Although the little patient could not feel a pinch applied to the skin of the parts below the brim of the pelvis, yet strong currents of electricity gave her pain, so as to cause her to cry.

For several weeks before death she complained of pain in the lower part of the abdomen. Fourteen days prior to death, a tumefaction was noticed, extending from the pubes to the navel. At the navel, the swelling was very prominent. The parents did not notice any diminution in the quantity of urine passed. In seven days, the tumour of the navel burst, discharging pus, followed by urine. The discharge of urine by the urethra ceased immediately and completely, and there was a constant flow of urine from the navel. That the watery fluid coming from the navel was urine, there is no doubt. The cloths applied for the purpose of catching the secretion were wrung out. The liquid resulting, when left in a vessel, underwent the ordinary urinary decomposition.

She died on August 24th, 1868, aged seven years. No *post mortem* examination was permitted.

REMARKS.—It is evident that the paralysis resulted from imperfection or arrest of development in the lower end of the vertebral cavity—of its walls and its contents. The fact that the cord occupies at first the whole length of the vertebral canal would account for the paralysis being higher up in the body than could be accounted for by the situation of the cicatrix. There is no doubt that the cicatrix was originally the seat of the deficiency; and that it represented a breach of surface—caused by the laminae dorsales not having joined at the spot—which had healed prior to birth. The injured part of the cord had in the meantime ascended in the canal relatively.

There is another point of interest in this case. It is to be regretted that the prejudices of the parents prevented the performance of a *post mortem* examination. Had one been made, I have no doubt that it would have been found that there was a continuation of the interior of the bladder along the urachus. This also is the result of an arrest of development. Dr. Carpenter, in his *Manual of Physiology*, says: "The urachus or suspensory ligament of the bladder is the shrivelled remnant of a duct, by which the uro-genital sinus (from a part of which the bladder originates) originally communicated with the allantois." This passage had been imperfectly closed; and, when the bladder became distended, nature made use of it to get rid of the urine.

* Read before the Medical Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

THE HYPODERMIC INJECTION OF MORPHIA AS A REMEDY FOR OBSTINATE VOMITING.

By JOHN KENT SPENDER, M.D. Lond., Bath.

I HAVE recently found the hypodermic injection of morphia useful in removing or relieving obstinate vomiting arising from three distinct causes.

1. Mrs. E., aged 24, in the sixth month of her first pregnancy, consulted me in July. Vomiting had been troublesome during nearly the whole period of pregnancy; latterly, no food whatever had been retained, except, now and then, cold fluids. The bowels were constipated, but, in other respects, the health was fairly good. After a single purgative dose of calomel, a quarter of a grain of morphia was injected under the skin of the arm. Iced milk and soda water were kept down immediately afterwards. I injected the morphia on two subsequent occasions, using one-third of a grain each time. There has been no return of the vomiting, and she has since taken every kind of food without inconvenience.

2. Mrs. P., aged 58, came under my care about the middle of August. She had long suffered from frequent vomiting, even when the stomach was apparently empty; much frothy bilious fluid was brought up. There was no distinct evidence of organic disease, though there was clearly a large dilatation of the stomach; there were plenty of odd nervous symptoms, and the case had been dignified as "hysteria" by good medical authority. No remedies had done any permanent good, but the injection, every evening, of a third of a grain of morphia has greatly tranquillised the system, and there has been scarcely any vomiting since this plan of treatment was begun.

3. Mrs. T., a middle-aged married woman, was suffering from *brandy-sickness*, the result of secret drinking. A grain of opium, given every hour, relieved a *quasi*-delirium, but the vomiting was not checked until I had administered two hypodermic injections of morphia, each dose being a quarter of a grain. She then began to take liquid food, and the appetite soon returned; but the same cycle of events will, no doubt, quickly come round again, as her habits are incorrigible.

I do not speculate on the action of morphia in these cases, as my desire, now, is simply to record facts.

But it is remarkable that when I began to use morphia hypodermically, more than nine years ago, sickness was often a troublesome sequel. And if further experience should confirm the success of morphia, when given in this way, in removing the vomiting of pregnancy, when everything else has failed, the induction of premature labour will happily become an alternative very remote.

CASE IN WHICH BROMIDE OF POTASSIUM WAS PUSHED TO ITS FULL EXTENT.

[THE following narrative, although not by a member of the profession, is, we think, sufficiently graphic and interesting to warrant insertion. The narrator is the patient.]

It was in June 1867 that I began taking the bromide; the daily dose being then, I think, about twenty grains. It very soon caused the cessation of the "lapses" (*petit mal*); and, in order to make sure and stop the greater evil also, I went on increasing the dose (hardly with Dr. M.'s permission, and yet not against his orders) till at length I should think I must have been taking seventy grains a day, perhaps sometimes eighty. The first symptom of overdoing the thing that I noticed was the profound and yet disturbed sleep into which it seemed to throw me. I always awoke with a mental struggle and effort, not knowing at first where I was, or what had become of me; in fact, as I told Dr. M., I seemed to have gone too far down into the gulf of sleep. Side by side with this, but, of course, less noticeable to me, was the enfeebling of mental power. A little page in my accounts, which I should usually prepare and balance in half an hour, took me two or three evenings' weary work. But the worst thing was the tendency to talk "Mrs. Malaprop" English, substituting one word ending in "tion" for another, in a most provoking and yet ludicrous way. I had once to write some letters reminding people that their subscriptions were due, and I had the misfortune of having my letters (I think one or two of them) brought

back to me by a clerk, who pointed out to me that I had written "contraction", or some such word, instead of "subscription". I cannot just now remember any more instances; but this difficulty in getting and keeping the right word (though the right idea was present to my mind) is very vividly, and not without humiliation, present to my recollection. Soon, of course, my wife and partner saw the change in me, and attributed it to the right cause. I went from home, and for a time dropped the medicine. In a week, my host said, "Why, you look ten years younger than when you first came." The stoop in my figure, the slow uncertain speech, and other bad symptoms, especially the heaviness in the eyes, were gone, and I felt quite myself again. I am still taking the medicine, but now never exceed forty grains a day, often taking only twenty; and, if I find the slightest touch of the "Mrs. Malaprop" difficulty, I reduce the dose at once.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

SYMPATHETIC OPHTHALMIA AFTER INJURY BY A CHIP OF IRON:
DIVISION OF THE CILIARY NERVES: TEMPORARY RELIEF:
SUBSEQUENT EXTIRPATION: COMPLETE RELIEF.

(Under the care of Mr. SPENCER WATSON.)

T. B., a boiler-maker, aged 27 years, received an injury of the left eye on January 20th, 1869. He was hammering a rivet; and a piece "flew up into, and cut, his eye, and rebounded." He thinks that no part of the piece of iron remained in the eye.

When seen on April 8th, 1869, the left eye was intensely inflamed and painful. The pupil was distorted and displaced downwards, and a cataract was visible through it. The wound was evidently at the lower and inner part of the corneo-sclerotic junction, and the iris was drawn downwards into the cicatrix. The tension was very much below the normal standard. The eyeball was markedly tender at the upper ciliary region. There was a slight perception of moving objects held below the eye. Ever since the accident, he had suffered from pain and photophobia, and had consequently been unable to work; and there was circumorbital pain around the right eye. The photophobia affected the right eye as well as, or perhaps more than, the left.

April 16th. Some relief had followed the application of an opiate ointment to the left brow and temple, and the administration of a tonic mixture; but there was still sympathetic irritation, and the tenderness in the upper ciliary region remained. The case seemed one to which the operation proposed by Dr. E. Meyer, of division of the ciliary nerves, was well adapted; because the tenderness was distinctly limited to a particular part of the injured globe; and it seemed very possible that the nerves of this tender spot might be the offending filaments, the division of which might cut off the communication between the morbid and healthy eyes. On April 16th, therefore, the sclerotic, choroid, and ciliary nerves were divided immediately behind the insertion of the superior rectus, by the operation of Dr. E. Meyer. The operation, which must have been exceedingly painful, was performed without giving chloroform; the patient, however, scarcely flinching, and making scarcely any signs of suffering.

The relief following this operation lasted till May 7th, or later; all pain and photophobia having ceased within a few days after the division of the nerves. The eyeball, however, remained injected, and soon became much more so; and on June 1st it was so painful and inflamed, and the sympathetic irritation had so completely returned, that the patient submitted to extirpation of the injured eye. On removal, no foreign body was found in the eye; but a fleshy mass growing from the site of the wound, and extending into the vitreous space.

Since this last operation, the recovery was uninterrupted; and on September 10th he presented himself with a well-fitted artificial eye, and declared that he could now do his work as well as ever. He had, however, been obliged to learn to use his hammer as a right-handed man, having been before left-handed. This had caused him some delay in returning to full employment, which he would have commenced at an earlier period, but for this circumstance.

REMARKS.—The case gives a good prospect of successful results in some cases of sympathetic ophthalmitis after division of the ciliary nerves. In this case, the patient scarcely allowed his eye to have rest long enough after the operation; but, being anxious to return to his employment, brought on a fresh attack of inflammation and sympha-

thetic irritation. How far this temporary relief may have been due to allowing a drain from the vitreous humour through the sclerotic wound, it is difficult to say; but the fact of the return of the inflammation is quite consistent with the view that the sclerotic may have closed up at this time, and the beneficial drain from the interior of the eye have been so cut off.

NELSON HOSPITAL, NEW ZEALAND.

ENCEPHALOID DISEASE OF TESTICLE: OPERATION: RECOVERY.

(Under the care of WILLIAM G. KEMP, L.R.C.P. and M.R.C.S.E., Surgeon to the Hospital.)

CHARLES ELLIS, aged 27, married, a gold miner, was admitted into the Hospital on June 1st, 1869, suffering from an enlargement of the left testicle. His appearance was thin, in consequence of the wasting effect of his disease. His general health had always been good, and his habits had been most regular and temperate.

He said that the left testicle was always smaller than the right until two months after he married (twenty months ago), when it commenced to swell slowly, but with no pain. The swelling did not seem to commence at any one part, but was an uniform enlargement. It first began to give him pain about thirteen months ago; and both the pain and swelling gradually increased up to the time of admission. There was no history of a blow, strain, venereal or any inflammatory disease of the organ. He had been in the habit of lifting heavy weights. On admission, the following were the local appearances. The left side of the scrotum was occupied by a firm, oval, somewhat elastic tumour, slightly painful when touched, but preventing him from sleeping at night. The superficial veins of the scrotum were enlarged and distended; but the skin was not adherent. The circumference, in the longest measurement, was about eleven inches.

June 23rd. As there was no sign of improvement under the influence of iodide of potassium and unguentum hydrargyri and several other alterative remedies, and as he was showing severe constitutional symptoms, it was determined to remove the diseased organ, which I did in the usual way, by making one long incision from the external ring to the bottom of the scrotum, and dissecting out the mass. There was little hæmorrhage; and, after tying the vessels separately, the wound was washed with carbolic acid lotion, and left exposed to the air. Five hours after the operation, he was in no pain, and had had no sickness; and from that time progressed favourably, without a bad symptom. He is yet in hospital, but will soon be discharged.

BIRMINGHAM GENERAL HOSPITAL.

A CASE OF LYMPHO-SARCOMA IN THE LUMBAR AND PELVIC REGIONS.

(Under the care of JAMES RUSSELL, M.D., F.R.C.P.)

C. B., aged 65, a painter. His family history presented nothing worthy of note. The few symptoms which he was able to detail were entirely of a mechanical nature. He had suffered for five months from pain in the lower part of the abdomen, and especially in the region of the sacrum. This pain had gradually increased in severity, but had been at no time urgent; it was worse at intervals, and especially when he stood erect. It also appeared that he had not passed his urine in a full stream for six months, and that lately the difficulty had increased. Under our observation, the urine merely dribbled from the penis in small quantity. He had also suffered from costiveness, and did not find it so easy as before to empty his rectum, defæcation being attended with a sense of bearing down. Six weeks before admission, his legs began to swell, and in the space of a single week the anasarca had involved the whole of both lower extremities. His general health and his digestive functions had not suffered at all, with the single exception of one or two attacks of vomiting. His urine was healthy. He was a hale hearty man, in all appearance in robust health. The right lower extremity was extremely anasarcaous, the left considerably so. No venous distension was apparent, except in one branch of the right circumflex ilii vein running over Poupart's ligament.

On physical examination, a large mass, with a rounded margin, firm and immovable, was felt in the right iliac fossa, two fingers' breadth above Poupart's ligament. An undefined resistance to pressure was also felt over the bladder. A full sized catheter could be introduced within the bladder, but its movements were remarkably circumscribed; and, although no blood passed at the time, some hæmorrhage took place from the bladder in the evening. The rectum was felt to be considerably contracted by a hard mass occupying the situation of the fundus of the bladder.

The patient died suddenly, without any fresh symptom having developed itself.

On *post mortem* examination, an enormous tumour was found occupying the lumbar and pelvic regions. In the loins, it constituted a large flattened mass behind the peritoneum, closely connected with the bodies of the lumbar vertebræ, and reaching upwards to the origin of the cæliac axis. The vena cava lay in front of it, the aorta behind it. The left renal vein passed along its upper margin; the right lay in front. The left ureter ran along its side; the right was embedded in its substance; and two calices of the corresponding kidney were dilated. From the loins, the tumour passed down into the pelvis, encircling and nearly occupying that cavity, but leaving in the centre a small open space, in which lay the rectum, quite disengaged from its tissue. On each side it rose up to the pelvic brim, forming on the right the prominent ridge felt during life. In front, it had quite incorporated itself with the posterior wall of the bladder, greatly contracting and deforming the cavity of that viscus, and encircling its neck. Several of the gland-like masses of which the tumour was composed had intruded themselves between the muscular bundles of the bladder, and projected within, but without damaging the mucous membrane; one of them hung loosely, merely connected with the vesical wall by a thin pellicle of mucous membrane. The tumour consisted of a congeries of gland-like bodies, closely connected together, varying from the size of a pea to that of a large walnut. Their tissue was whitish, soft, and pulpy, and exuded in abundance a thick cream-like juice, composed of a multitude of small cells, circular, ovoid, or irregular in shape, averaging in diameter 1-1660th of an inch. By acetic acid, their envelope was destroyed, and small nucleus-like bodies remained. Every other organ was perfectly healthy, except that the lungs were oedematous, and their bases loaded with blood. The heart was not examined by the microscope.

TAUNTON AND SOMERSET HOSPITAL.

RECTO-VAGINAL FISTULA: OPERATION: RECOVERY.

(Under the care of HENRY J. ALFORD, M.B.)

SARAH V., aged 23, was admitted October 3rd, 1868. She is married, and five months before admission was delivered, by forceps, of her first child. She was found, on her admission, to have a fistulous opening, one inch in length, in the posterior wall of the vagina, through which the entire contents of the rectum passed. The perinæum was gone as far as the anus, the sphincter, however, being intact. She stated that immediately after her confinement her medical attendant put a few stitches in the perinæum, which immediately gave way.

On October 12th, adopting the operation of Mr. Baker Brown, I removed all the mucous membrane around and above the fissure, made the usual horse-shoe shaped cut, and brought the raw surfaces together by three deep quilled sutures, and interrupted ones between, and divided the sphincter. Her bowels were kept locked up for twelve days; the catheter was used; and, on the 24th October, a warm water injection was administered. After this, the bowels acted daily *per anum*. On the 31st, she was able to sit up, and she was shortly afterwards discharged cured.

She has recently come into my out-patient room, and her cure is complete.

STONE IN THE BLADDER: LITHOTOMY: RECOVERY.

(Under the care of HENRY J. ALFORD, M.B.)

This case is of interest, on account of the great rarity of stone in our hospital and neighbourhood; this being, I believe, only the second case of lithotomy from our town, which has been performed in the Hospital since its foundation, over fifty years ago.

Frederick T., aged 2 years, was admitted October 27th, 1868. Twelve months previously, I had circumcised him for congenital phimosis. His mother now brought him to me with all the symptoms of stone, and, on sounding him, we at once hit upon apparently a large calculus. On November 3rd, the ordinary lateral operation was performed, and an uric acid calculus, weighing 215 grains, extracted. No bad symptoms followed. On the 5th, urine passed *per urethram*, the wound rapidly healed; and, on December 5th, he was discharged, cured.

BEQUEST.—Among the bequests of the late Philip Maret, of New Haven, is one amounting to one-fifth of his property, being about 146,000 dollars (about £29,200) to the Connecticut State Hospital, the income of which is to be applied in providing free beds for the indigent patients, giving preference to those incurably affected, if such are admissible.

COMPARATIVE PATHOLOGY.

ADDITIONAL NOTES ON THE FOOT-AND-MOUTH EXANTHEM.

ON Sunday, October 9th, we again visited, in company with Mr. Evershed, the inspector, the district around Godalming. As the malady has shown precisely the same features in all parts of the country, we may suitably take this district as a specimen of all. The disease is now prevalent in many parts of England.

Since our last report, a month ago, numerous cases have occurred in the district mentioned, but the severity of the disease, as usual towards the end of an outbreak, is thought to be declining. Cattle, sheep, and pigs, are the only animals which have suffered. The mortality has been very slight in sheep and adult cattle, whilst considerable amongst calves and young pigs. In evidence of the strongly infectious nature of the fever, in most instances every animal in the herd has suffered. In many cases all the pigs and all the sheep in the farm have escaped; but these have always been instances in which early precautions have been taken.

We visited a large farm at Chilworth, where the disease is at present rife. Out of 58 horned cattle, with a few calves in addition, not a single one has escaped. None have died, or are likely to do so; and most, excepting in being still lame, are already nearly well. One cow in milk had commenced only two days before our visit, and the disease was at its height. Her udder and teats were covered with vesicles and blebs; some of the latter held from a drachm to two drachms of fluid. They were situated on the teats, were easily ruptured, and nothing would be more probable than that, with a careless milker, some of their contents might find their way into the milk-pail. We obtained for examination some of the milk, and also a portion of the so-called "slough" (a diphtheritic pellicle), from the sores in the mouth. At this establishment we learnt some interesting facts.

1. As to the asserted *non-occurrence of vesicles on the udders of heifers and of cows not in milk*. A cow which was dry when she sickened, showed plenty of them; she had, however, only recently been dried; and a much more conclusive fact against the popular notion was afforded by a heifer in calf, whose udder showed a few unmistakable spots.

2. As to the *mode of communication of the disease from cattle to pigs*. It has been asserted that pigs, like human beings, will not take the disease by aerial infection from other animals, but only by swallowing some of the fluids—milk, saliva, serum from bullæ, etc. Now the history of this farm-yard strongly confirms this opinion. The cattle are in three different stables at considerable distances, but all have suffered. The pigs, about fifteen in number, are confined in a sty at the end of the stable in which the disease first showed itself three weeks ago, and are separated from the diseased cattle only by a boarded partition, with chinks in it, yet no pig has taken the disease. They have not been allowed to have the milk.

The sheep in this farm were driven to a distant part immediately when the disease showed itself, and none have suffered. Although no animals have died, or are likely to do, the farmer calculates his loss at one or two hundred pounds, owing to failure of milk and loss of flesh.

Mr. Evershed told us that he thought the mortality in his district amongst adult cattle had not been more than one per cent. He had had one *post mortem* examination since our previous visit, and had found patches in the trachea, and pneumonia. He also stated that another instance of communication of the disease to man, through drinking the milk, had fallen under his notice. Three or four members of the same family had been ill together with sore mouths, feverishness, and back-ache. None were bad enough to consult a doctor. The rarity of communication to man is, Mr. Evershed thinks, to be explained by the fact that milk is but little used in farmers' families, and that, of those who do use it ordinarily, most have abstained during the prevalence of the epidemic. It is not improbable that there may also be something in the notion that milk is only capable of conveying the disease when taken new and warm. If this be the fact, it would clearly limit the risk of contagion very much.

The discrepancies in the statements of writers as to the visible qualities of the milk in this disease may, we think, be explained by reference to the fact that, in some cases, the udder becomes inflamed. It is in such that the secretion becomes red or brown by the admixture of blood or pus. Two cows in the Chilworth establishment yielded a thin, reddish fluid, not at all like milk, and such certainly as no decent person could ever have dreamed of putting into a milk-pail; but both were suffering from "inflamed quarters" as a sequel to the disease. The milk from those

in which the gland was not inflamed, although the disease was at its height, looked quite natural.

As regards the treatment of the foot-and-mouth disease, we may say that all whose judgment is valuable are agreed, and that their decision is in keeping with that of our own profession in reference to parallel diseases in the human subject. Its chief principle is not to interfere needlessly, and, above all, to abstain from violent medication, both local and internal. The disease is a very transitory fever. We have no remedies which in the least modify its course. The animal should, during its presence, be properly fed, and, if the weather make it needful, protected from the cold: a mild aperient or saline may do no harm. The local lesions do not at first require any attention, and mostly disappear quickly of themselves. Sore feet are almost the only serious inconvenience which lasts long; and if this condition persists to a troublesome extent after the fever is well, the use of stimulating lotions or ointments may be beneficial. In cows in milk, it is desirable to attend carefully to the udder, and take care that the milk is removed, otherwise, just as in sore nipples in women, inflamed breast may be the result.

As regards the name of the malady, we much prefer the one at the head of this report. It indicates the true nature of the disease. We define an exanthem to be *a specific animal fever, attended by an eruption*. All exanthems spread by contagion only; they all observe stages, are spontaneously curable, and occur but once in a life. Such are the features of the foot-and-mouth disease. The term *eczema epizootica*, although it has the high sanction of Professor Symonds, is less appropriate; for *eczema*, in the human subject, is a very different disease, and has no relation to the specific fevers. The term "*murrain*" is also better avoided, since it carries with it a notion of severity and fatality, which is not appropriate to this malady. A disease which scarcely kills one in a hundred, and which, in a large proportion of instances, is so mild as to be scarcely noticeable, does not require so alarming a designation as "*murrain*" or "*plague*."

It is impossible to exaggerate the importance of the doctrine that the disease spreads by contagion, and by contagion only. We have been astonished to find, not only among farmers, but even amongst medical men, who would readily enough admit the same assertion in reference to measles or chicken-pox, an unwillingness to accept the doctrine fully. The malady showing itself so specially in the mouth and in the feet, it seems easy to them to suggest that it has something to do with the dampness of the pasture, the kind of manure used, etc. It ought, however, to be most definitely understood that such influences have nothing whatever to do with it, and that nothing but exemption from the risk of contagion can prevent an animal from taking the disease. Nor does the health of the animal materially influence the severity of the disease, for often those in best condition appear to suffer most. Our profession may suitably take its share in the formation of public opinion on these points, for that opinion, when once formed, will be found very useful in reference to the exanthems which occur in man.

MICROSCOPICAL APPEARANCES OF A SPECIMEN OF MILK FROM A COW WITH FOOT-AND-MOUTH DISEASE.

ON the 11th instant, Mr. Nettleship examined for us a specimen of milk drawn twenty-four hours previously from a cow severely affected with foot-and-mouth disease. It was the third day of the disease, and the udder was covered with vesicles. Its colour was good, and it furnished a fair proportion of cream on standing, rather above than below the usual amount. Under the microscope there was nothing very striking to be seen at first; but, by careful examination, it was found that there was a good deal of finely granular matter, arranged often in elongated forms suggestive of casts, but too flat and too irregular to warrant this idea. These collections of pale fine granules were generally covered up with oil-globules, and for this reason not readily seen without special care. There were, besides, a few definite spherical granular cells a little larger than pus corpuscles. Possibly the granular collections above noticed might have resulted from the disintegration and coalescence of a number of these cells. A few dark, yellow granular masses, like those in colostrum, were seen here and there. The milk was certainly not healthy, but neither was it, so far as microscopical appearances went, extremely altered. Mr. Nettleship considered that it much resembled some specimens of cattle-plague milk which he had examined during the epidemic of that disease.

FOOT-AND-MOUTH DISEASE IN MARYLEBONE.

FROM Dr. Whitmore's report, as sanitary officer for the parish of St. Marylebone, we extract the following statements.

There were in August and September about 464 cows in St. Marylebone

parish. Of this number, 310 (66.5 per cent.) have been attacked by the foot-and-mouth disease during the present epidemic. Dr. Whitmore concludes, from the absence of evidence of any disease among children, "such as the drinking of milk from animals suffering from an eruption of vesicles on the feet and in the mouth would be likely to produce"; that "the risk or danger in drinking such milk is very small"; adding, that "the cowkeepers are quite of opinion that the milk is not deteriorated by the disease; they give it freely to their own children, some of whom were brought out for my inspection, and certainly no more excellent specimens of healthy nutrition could possibly be seen." For our own part, we should be cautious in taking a cow-keeper's estimate of the quality of his own milk; and, granting that there are usually no morbid naked-eye appearances in the milk, we still have no proof that it is really unaltered by the disease. It is, after all, scarcely probable that cow-keepers would give their own children the worst milk.

REVIEWS AND NOTICES.

ST. BARTHOLOMEW'S HOSPITAL REPORTS. Vol. V. London: 1869.

THE fifth volume of the *St. Bartholomew's Hospital Reports* has appeared punctually, and is a very valuable one. It opens with a short and very discriminative obituary notice of the late Dr. Edwards.

The first "article" is a long clinical one from the pen of Mr. Callender, on the "Anatomy of Brain-Shocks", and is in continuation of one published in vol. iii. Mr. Callender does not restrict his attention to purely surgical cases, and the notes include many of apoplexy and other brain diseases, with a careful investigation of their teaching as regards certain modern doctrines of cerebral pathology. The title of the paper by no means implies all that it contains. The series extends to ninety-nine cases, but many of them are only briefly given. As regards loss of speech, Mr. Callender thinks that his facts support the following propositions.—1. The anterior cerebral lobes or parts about the corpus striatum are usually diseased or injured. 2. The disease or injury is usually on the left side (as stated by Dr. Jackson and M. Broca). 3. It is not evident that the results of disease or injury are, in these cases, limited to the third frontal convolution. Amongst other interesting speculations, the author connects convulsions with left side paralysis, and with disease about the tracks of great vessels, or with profuse hæmorrhage; he finds the pupils in head-cases usually fixed, and neither dilated nor contracted; vision is very rarely affected; and, lastly, he thinks that hæmorrhage into the right hemisphere is much more rapidly fatal than into corresponding parts of the opposite one.

Article No. II is by Mr. Savory, on "Injuries to the Spinal Cord." It contains some well-told and valuable cases; but we cannot but think that some of the inferences and general statements would have been made more definite, and in some instances modified, if their author had read what others have recently written on the same subject. Mr. Savory is a believer in the occurrence of hæmorrhage into the cord as the result of concussion without fracture. One case of very great value is given, in which, without fracture, a clot was present large enough to cause paraplegia, and to induce death in two days. It would be well worth while to emphasise this case, by producing the specimens (the cord and the bones) at the Pathological Society this session. Three cases of "railway spine" are given. We looked eagerly for new information on this most difficult topic, but, unfortunately, the cases are all of the old stamp—long statements of subjective symptoms, in the patients' own words, and nothing made certain. One of the patients, after having presented very serious symptoms for a long time, got wholly rid of them. We are not informed as to the treatment pursued; but in the absence of information to the contrary, the case reads exactly like one cured by the award of damages.

An admirable paper by Mr. Paget, under the title of "Residual Abscesses", deals with those cases not infrequent in practice, in which suppuration occurs after a long interval in the site of some former inflammation. Mr. Paget cites cases of recurrent abscess, after apparent complete absorption of the original one, from cases of spinal disease, hip-joint disease, periostitis, etc. He teaches that sometimes the detritus of the absorbed collection of matter becomes the source of irritation at long periods afterwards; and that in other cases, tissues damaged by inflammation, thickened, etc., become affected for a second time. He defines a "residual abscess" to be "an abscess formed in or about the residues of former inflammation." His paper is illustrated by a good lithograph, showing old abscess cavities in the psoas muscle of each side.

No. v is an excellent article, by Dr. Tuckwell of Oxford, on the "Pathology of Chorea." He advocates the theory first suggested by Dr.

Kirkes, and subsequently supported and extended by Dr. Hughlings Jackson and Dr. Broadbent, that the nervous symptoms are usually due to embolism, and are, therefore, secondary to disease of the valves of the heart. A good coloured plate shows the cardiac valves from two fatal cases, and an embolic obstruction of the posterior cerebral artery from one of them. The author very plausibly answers the objections which Dr. Ogle and Dr. Barnes have brought against the embolic theory. He gives, also, statistics to show that, in childhood, contrary to what is the fact in adults, rheumatism as well as chorea is more common in the female than in the male sex.

A very readable and interesting article on "Rachitis", by Mr. Coote, constitutes the eleventh.

In the twelfth, Dr. Owen Richards contributes the notes of ten cases of lithotomy from private practice, in the Bala Lake district, Wales. One case was in a woman. Of the nine males, the youngest was 46, and the oldest 64. Two operations were in the same patient, with a three years' interval. All the men are reported to have been temperate. Seven recovered and two died; one of the seven died seven months later from a tumour in the bladder. It is interesting to note that stone in children is unknown in the district. Mr. Richards performed the usual lateral operation.

In Article XVII, we have some valuable observations by Dr. Duckworth on the action of ipecacuanha and its alkaloid emetia.

Mr. Coleman, surgeon-dentist to the Hospital, contributes excellent papers on "Inhalation of the Protoxide of Nitrogen as an Anæsthetic", and on "A Convenient Apparatus for the Administration of Chloroform."

Dr. Gee records an example of "Acute Pemphigus," with some not very discriminative comments on the use of the word "acute". His case was one of a first attack of pemphigus in a young child, which was cured by arsenic in about a month, and the patient then discharged and lost sight of. Dr. Gee remarks: "That pemphigus is never acute after the type of measles, we may readily admit, and yet at the same strongly affirm the existence of an acute pemphigus after the type of acute rheumatism. What more proof can be needed than the occurrence of cases such as that which I have narrated?" We reply: A great deal, and of a very different kind; for the case recorded was cured by a specific, and would probably have become chronic if arsenic had not been used. Acute rheumatism gets well after six weeks, whatever may have been the treatment. The so-called acute pemphigus does not get well (so far as facts yet show) unless the proper treatment is employed; but either kills the patient, or lapses into the chronic form. No one can possibly doubt the occurrence of acute pemphigus, if that term is to be given to the onset, always sharp, of the ordinary class of cases. Absence of any spontaneous tendency to cure, and remarkable tendency to relapse even after arsenical cure, are characteristic features of pemphigus. On the latter point Dr. Gee's narrative gives no information. Notwithstanding these defects, the case is, however, of much interest in itself. Dr. Gee also records a case of cirrhotic enlargement of the liver, with some valuable remarks on the occurrence of enlargement in some cases, and contraction in others, from the same cause. A third contribution from his pen gives very briefly the results of some experiments with apomorphia and chlorocodic. We are told that apomorphia "has been freely used in Wales for the purpose of relieving the stomachs of the Apicii of a certain district." What district is it of which the Apicii are so anxious to rid themselves?

Mr. T. Smith's report of a most unusual example of Nævoid Elephantiasis is one of the most valuable papers in the volume, and is illustrated by three excellent lithographs.

We are obliged reluctantly, from want of space, to pass by valuable papers by Mr. Vernon, Dr. Church, and Mr. George Lowe. There is a short record of midwifery statistics by Mr. Clement Godson.

We much regret one great omission. It is that of the year's statistics of the hospital. These statistics have, in previous volumes, been exceedingly well given, and have been very valuable. Every hospital ought certainly to publish such; and we trust they are only omitted from the present volume in order to separate production in a more extended form. The volume as a whole proves most conclusively that Clinical work of the best kind is by no means neglected at St. Bartholomew's.

NOTES ON BOOKS.

On the Presence of Sulphocyanides in the Blood and Urine. By ARTHUR LEARED, M.D., M.R.I.A., etc. (*Proceedings of the Royal Society*, No. 114, 1869.)—Dr. Arthur Leared has been examining the evidence of the presence of sulphocyanides in the blood and urine. In some preliminary experiments, he found a sulphocyanide in the saliva of forty-five out of fifty persons. It was afterwards detected in human

urine and blood, and in the blood of a bird, a reptile, and a fish. Cow's milk and human pus gave negative results. None was detected in the *clot* of blood; but Dr. Leared supposes it possible that the red colour of hæmatin may be due to the presence of a *small quantity* of sulphocyanide of iron; the greater part of the iron being in some other state of combination, and the larger proportion of sulphocyanogen remaining in the serum until required. That the sulphocyanides are not formed in the salivary glands, was sufficiently proved by these results; and still further evidence was obtained in cases of disease: *e. g.*, in some fevers it was found that the sulphocyanides disappeared from the saliva, and were separated in increased quantity by the kidneys. The author believes that a weak solution of sulphocyanide of potassium is *antiseptic*, but that it has no power of preventing or checking "ordinary fermentation".

NEW INVENTIONS, &c., IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

"THE MAMMA" INFANT'S FEEDING BOTTLE.

THIS new feeding bottle has been recently devised and patented by Mr. J. Perrett of King Street, Cheapside. It is somewhat pear-shaped, with the smaller end curved upwards; while the larger end is formed of an India-rubber cap, modelled so as to resemble in form the breast and nipple. This cap is fixed on by an India-rubber band, so that it can be easily removed and the bottom cleaned; and a small bent glass



tube reaches from the lower part of the interior of the bottle to the nipple. The smaller end has a cap, in the interior of which is a valve allowing the access of air, but preventing the escape of the milk. We can state after some experience that the child appears to take very readily to the breast-shaped cap; and that from the great facility with which it may be cleaned, thus diminishing the chances of diarrhoea, the bottle presents advantages which will no doubt be duly appreciated.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 16TH, 1869.

O! REFORM IT ALTOGETHER.

Is it unjust to tax the profession with being culpably apathetic in face of a very important crisis? We do not fear any great danger; on the contrary, whatever of change is coming will be for the better; but still there is a crisis—such, perhaps, as has never occurred before, and one which, if now neglected, may be long before it comes to us again. There is an opportunity ripe for the achievement of great good; for a reform in our ranks of the utmost importance to the future. Both in London and in Dublin, negotiations are now in progress between the chief medical and surgical examining bodies for the formation of joint boards. We will speak for London only. It is felt here that the present competition can go no further—that the anomaly of a College of Physicians which examines in surgery and a College of Surgeons which returns the compliment in kind can no longer be tolerated. We are very thankful that a perception of the ludicrous has been vouchsafed thus far. But might not the proposed reform go further? Is not there here an opportunity for Harvey and Hunter to shake hands, to put an end for ever to the disgraceful rivalry which has been bequeathed us, to establish a fraternal compact of unity? Such is the crisis to which we allude. The British empire is blessed with about twenty competing examining boards—all anxious for the profitable honour of conferring legal qualifications to practise the medical art. The incongruity of this state of things has long been felt and deplored, but hitherto by most has been regarded as hopeless. Now, however, light has dawned in an unexpected quarter, and those in authority are the proposers of reform. Shall it be said that in this juncture the profession at large was too busy with its own private concerns to care for the general weal; that it stood with its hands folded, a mere looker on, and gave to the small minority in power no hint of its wishes?

We speak not in the slightest disparagement or distrust of the executive bodies of our Colleges. We assert, simply, that they constitute but a very small part of the profession for which they legislate, that they are only indirectly responsible to it, and that there are various reasons which make it desirable that a larger tribunal should be appealed to. If the verdict of the physicians, surgeons, and "apothecaries" of England could be taken to-morrow on the question, whether it is not desirable that the three corporate bodies of London should amalgamate and constitute one ROYAL COLLEGE OF MEDICINE AND SURGERY, we cannot doubt for a moment which way it would go. Liberal concessions would be freely made, and the time-honoured traditions of the past would, where they conflict with the interests of the future, be gently but resolutely put aside. We have our fears as to whether any similar decision of purpose will be shewn by those who represent us. Each College will, we apprehend, be impressed too deeply with the duty of defending its own interests, and a compromise, poor in comparison with what might be done, will be the result. It is an affair which

would be better managed by those somewhat outside than those immediately interested; it is a matter for arbitration rather than for bargain. We assert emphatically that it is a subject in the settlement of which every thoughtful member of the profession ought to have a voice.

In what precise manner the profession should be consulted it is not for us to propose. Petitions are inconvenient and untrustworthy; and agitation meetings, besides being a bore, would be sure to bring into officious prominence a certain few whose silence is most desirable. The matter might perhaps be well managed, if each separate body were to collect the sentiments of its constituents on a few general propositions in the same way as has been done in the now pending amalgamation of the Societies. This done, a suitable arbitration authority should be constituted, the nomination of which might perhaps be effected either through the Medical Council or the Government.

We know that there are those who begin to mumble about "King Stork and King Log" whenever the name of Government is mentioned; nor are we ourselves in the least inclined to suggest that the management of professional concerns should be transferred to the State. We believe, however, that advantages of the utmost importance would accrue from an open and free conference with Parliament in the matter, and that the relations of the public and the profession might be placed on a better footing. In the end, such conference would, in all probability, liberalise our institutions and give us self-government in a sense in which at present we certainly do not enjoy it. It is probable, too, that it would result in the State relieving the profession, to some extent, of certain burdens with which we have very inappropriately loaded ourselves; such, for instance, as the maintenance of museums which are national in their character, and the expenses of diploma examinations which are conducted chiefly for the public good. Such boons could not for a moment be asked without preliminary reform; nor could we venture on any account to invite public scrutiny into the absurd relations in which our competing examining boards at present stand to each other.

All will admit that whatever is done in this matter ought to be inspired by a clear, cold, passionless perception of the interests of the future. We must legislate as if our acts would come into force a quarter of a century hence, when our personal interests will be no longer involved. It is scarcely to be expected of human nature that examiners and expectant examiners, office-holders and aspirants to office, should approach a discussion of reform without some trammelling predilections; nor can it be hoped that the memory of old rivalries, not unmingled with mutual contempt, between Pall Mall and Lincoln's Inn, are quite forgotten and forgiven by the immediate successors of those who waged the war. It is not so very long since a president of the College of Surgeons thanked God he was no physician; and, although perhaps more courteously expressed, we suspect his sentiments were pretty nearly reciprocated by the heads of the opposite house. Even up to the present hour an eager competition between the two bodies has been carried on, not without its share of bitterness; and, only the other day, a victory on the one side was productive of corresponding chagrin on the other. It is to this victory that the present willingness to make concessions is chiefly due; but the mood induced is not the most propitious for their arrangement. Hence, as it appears to us, the necessity that the body of general practitioners—the great bulk of the profession—which is equally

interested in the success of both, which has long ago laid all rivalry at rest, which comprises a host of thoughtful men with leisure and every advantage for fruitful, unprejudiced thought, should take its rightful share, and that share the chief one, in the decision as to the essentials.

The medical press, we doubt not, stands ready, and would probably be for once unanimous in helping forward a glorious reform. One at least of our contemporaries long ago advocated similar views, and will doubtless continue to support them. For ourselves, we are the organs of a great constituency; and, to some extent, we wait the sign. If the members of the British Medical Association have in this matter implicit confidence in the Councils of the two Colleges chiefly concerned; if they believe that these bodies will do all that the best interests of the profession require, and will act fairly to those of a third and very meritorious corporation, we are content to let it be so. If, as some facts seem to indicate, the profession at large does not care two-pence how the matter is settled; or to put it more mildly, if it entertains a John Bull sort of confidence that all will come out well in the end, and so, reserving the right to grumble, prefers to rest quiet, we, too, have other concerns to attend to, and shall willingly desist from a profitless task.

EMPLOY BOTH.

THE late Archbishop of Dublin is stated to have once been present at a temperance debate. At its conclusion he said that he heard so much in favour of whisky from the one side, and of water from the other, that he felt inclined to continue his habit of mixing them. Now this is precisely the sort of suggestion which we would make to those who have to decide as to how the new Edinburgh Infirmary shall be built. Mr. Syme has urged well the advantages and conveniences of one large block erection; and Sir James Simpson, on the other side, has just as eloquently denounced the palatial mode of building, and advocated that of a village. Why not mix them? For cases of rheumatism, of pneumonia, of renal disease, heart-disease, or phthisis—for the bulk, in fact, of physicians' cases—there is no risk whatever in connected wards, and there are many and obvious advantages. The same may be asserted for three-fourths of the surgical patients: fractures (not compound), diseases of joints (not requiring operation), diseases of the spine, orthopædic-cases, skin diseases, and syphilis, are none of them likely to suffer detriment from being treated in large wards, or to cause any sort of injury to other patients. For all these maladies—perhaps four-fifths of those which the Infirmary will receive—moderately large wards, placed conveniently near to each other, will probably be found advantageous as regards expense, as regards general comfort of patients in nursing, etc., and very greatly so in respect to attendance of the staff and clinical teaching. The other fifth of the hospital practice may be expected to consist of cases requiring operation, cases involving open wounds, cases of erysipelas brought in as such, compound fractures, contagious maladies of various kinds, admitted accidentally or otherwise. For all such facilities for segregation are essential; and probably nothing could be better than a number of detached cottages placed at considerable distances from each other, and sufficiently numerous to allow of some of them being frequently disused for a time. It would seem essential to the large Hospitals of the future that they should combine these two features. The compromise of building a number of moderately sized and detached erections is an unsatisfactory one. What is wanted is convenience for the almost absolute isolation of a few cases; and then, as regards the remainder, the old plan of large and connected wards will do very well. There is no reason to think that a fracture of the thigh or leg would unite quicker in a cottage than in the biggest ward

ever built, or that its subject would run less or more risk of intercurrent maladies in the one than in the other.

The arguments which have been so ably urged upon the lay members of the Hospital Building Committee must have been not a little confusing to them. We would advise, if we may be permitted to do so, that they should settle the matter off hand, by allowing Mr. Syme to plan the bulk of the building, and Sir James Simpson to finish the rest. Under such a compromise, we doubt not that a Hospital would be produced of which Edinburgh might be proud, and which, as regards the advantage and safety of those to be received within its walls, would be a vast improvement on anything as yet extant. Let there be no compromise which would spoil both plans. To recur to the anecdote with which we set out, the contest is between whisky and water, and it will not do to settle it by recommending a poor wine instead of either. What we want is a little good, sound, strong whisky, and with it plenty of the old-fashioned element.

AMPUTATION STATISTICS IN TOWN AND COUNTRY.

IN the Section on Sanitary Medicine at the meeting in Leeds, some printed statistics were produced from St. Bartholomew's Hospital, which were understood to be in disproof of Sir James Simpson's statement that the mortality of amputations is much higher in metropolitan hospitals than in country ones. Not having had time to examine them, Sir James could only protest that they were opposed to the facts supplied to him, and must be reserved for further consideration. In the volume of St. Bartholomew's *Reports* just issued, Mr. Callender, in a very laborious and elaborate paper, furnishes full data as to the calculations there referred to. His paper and its subject are of so much importance, that we prefer to notice them separately from the review of the volume which appears in another part of this JOURNAL.

Mr. Callender concludes his production of figures by the following summary.

Mortality after all Amputations.

Country hospitals	. . .	1 in 5.7 died, or 17.5 per cent.
Country cases in London	. . .	1 in 5.8 " " 17 " "
Country private practice	. . .	1 in 5.8 " " 17.1 " "

And he remarks thereon, that "no one can fail to notice how closely these experiences agree."

Now, as regards the general question, Mr. Callender's figures are very valuable. He shows, by some very remarkable examples, to what fallacious conclusions statistics, if too much trusted, may lead us; and he certainly invalidates the assertion that there is any close relation between the size of a hospital and its mortality. That he proves that our large metropolitan hospitals afford the same chance to a patient that he would have in a smaller institution or at his own home, we are, however, obliged honestly and very reluctantly to doubt. His argument is, that the difference is not in the hospital, but in the patient. Give us in London country patients, and we will save as many as can be saved any where. This assertion he supports by facts—by taking out of the gross total of St. Bartholomew's amputations, during an eight years' period, all those which were in country subjects. We have already stated the result of this mode. Is it trustworthy? We think not; for it must be clear that the cases likely to be sent up to St. Bartholomew's from distant parts are a class to themselves; few or none of them will probably be primary amputations, and almost all will be for chronic disease, and in patients in health good enough to travel. Some of the most dangerous cases are manifestly excluded; and the mortality of such a group cannot fairly be contrasted with that of country hospitals or country practice, in which all cases, primary, secondary, and for disease, are counted together.

There is one source of error in all attempts to estimate the gross amputation-mortality of a hospital, in comparison with others, which Mr. Callender appears to us to have almost wholly overlooked. Roughly speaking, we may assert that the death-rate of amputations

will rise in proportion as the number of *primary* amputations increases. Now amputations for injury and amputations for disease by no means preserve the same proportionate numbers in different hospitals. As a rule, the larger the hospital, the larger the proportion of primary ones; but this is interfered with in the case of special localities near mines, manufactories, etc. Mr. Callender's tables afford some very interesting facts as to this point. We will restrict our attention to amputations of the thigh; and, before stating the facts, will just remind our non-surgical readers that a primary amputation of the thigh is so dangerous that one in two may be expected to die; whilst an amputation for disease of the knee-joint is attended by comparatively little risk. Now, in Table IV, we find that one hospital reports 9 primary thigh-amputations, and 101 for disease; whilst others report these two classes as 8 and 13, 6 and 8, 15 and 22, 16 and 30, respectively; and in one instance the primary amputations exceeded in number those for disease. It is manifest that the practice of these hospitals cannot be compared, for their cases were not similar ones. In Table V, Mr. Callender gives the death-rate in certain country hospitals. Now, if we exclude a few on account of their numbers being too small to be safely used at all, we shall find that the ratio of primary amputations to those for disease may be safely guessed by attention to the death-rate. For example, No. 3 has a death-rate of 12 per cent., whilst No. 25 has 38; and, on turning back to the other table, we find that No. 3 had one primary amputation of the thigh to eleven for disease, whilst No. 25 had nearly equal numbers of each (12 and 13).

Whilst, therefore, we feel much indebted to Mr. Callender for the labour which he has expended on the matter, and for the demonstration which he has given of the futility of the arguments of others, we can scarcely think that he has proved his own. We still believe that erysipelas and pyæmia are diseases which are contagious, and which do not unfrequently spread by contagion in hospitals. We admit that the exponents of what is called hospitalism have very greatly exaggerated the prevalence of these diseases in hospitals, and have produced facts for comparison which are of no value for that purpose. Every allowance being made for exaggerations of this kind, we are still, however, obliged to believe that, when a fair contrast of the results of operations in private and in large hospitals is made (if it ever will be), the balance will be found to be to some extent against the hospitals. That, under the circumstances of the case, it behoves those who have the management of large hospitals not to ignore or try to disprove the facts, but to adopt every possible precaution against the risks referred to, we feel quite certain.

THE first meeting of the Pathological Society of London will be held on Tuesday next.

A STATUE of Dupuytren is to be inaugurated at Pierre-Buffière tomorrow (October 17th).

WE understand that Professor Miller of King's College is a candidate for the appointment of Master of the Mint.

AN Italian Ophthalmological Society was formed during the recent session of the International Medical Congress.

A DISCUSSION on mortality among infants is going on in the Imperial Academy of Medicine in Paris.

THE *Indian Mail* notices a report that the Sanitary Commissioner of the Punjab, Mr. De Renzy, has instituted, or is about to institute, an action against *Indian Public Opinion* for libel, contained in an article on sanitation.

MR. S. A. BINDLEY (the President) and the Council of the Midland Medical Society have invited Dr. B. W. Richardson to deliver an address in Birmingham on Thursday, the 21st instant. The meeting will take place at the Great Western Hotel, Birmingham. A very large attendance is anticipated. Members of the medical profession generally will be welcome visitors.

THE 58th Regiment is said to have lost upwards one hundred men from cholera during the recent prevalence of that disease in its ranks.

CHOLERA IN INDIA.

THE cholera (says the *Indian Mail*) seems to be working itself out in Umritsur. The daily deaths about the 10th of September had fallen to six or seven; but fever was carrying off ten or eleven a day. Cholera had disappeared from Shiraz and Ispahan since the middle of August, but was still raging in Teheran.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE quarterly meeting of this Association will be held at the Freemasons' Tavern, Great Queen Street, on Wednesday, the 27th instant, at half-past seven precisely. After the report of the Council has been submitted, the President, Dr. Joseph Rogers, will address the meeting, and give his experience of the Irish dispensary system, acquired in a visit recently and specially made to Ireland for the purpose of studying the working of the system on the spot. We earnestly recommend all medical officers, whether members of the Association or not, to attend; and we would advise guardians of the poor desirous of obtaining information on the subject to avail themselves of the opportunity. We trust that there will be a large attendance.

TREATMENT OF SNAKE-BITES.

DR. G. B. HALFORD has published, in the *Australasian* of August 7th and 14th, an article on the treatment of snake-bites by the injection of ammonia into the veins. He says that, in order to avoid the fallacies and difficulties attending the poisoning of dogs by snake-bites, he has injected the snake-poison subcutaneously, and in only one instance out of many has he failed to produce the effect of the poison. As to the manner of administering the ammonia, he says that, when given by the mouth, the stomach is more likely to reject than to retain it; that the circulation is slow, and, consequently, absorption does not take place; that the ammonia, before it enters the circulation, ceases to be that which was given (part, at least, being converted into hydrochlorate); and that experience shews that the method cannot be relied on. Subcutaneous injection is inadmissible, because the ammonia destroys the tissues and is not absorbed. The plan which Dr. Halford follows is to inject liquid ammonia mixed with two parts of water directly into a vein; within twenty or thirty seconds it passes to every part of the body. Dr. Halford relates four experiments on dogs, performed in October and November of last year; and relates ten cases of snake-bite in the human subject, in some of which the injection of ammonia proved successful—the failure in one case arising apparently from the remedy having been delayed too long. In some of the successful cases, the patients had passed into a state of stupor, from which they emerged soon after the injection. In one of the cases, a girl, aged 14, was restored from a comatose state by the injection of ammonia—no other remedy being used—and recovered in a few hours. Next day, she was again bitten, and was again restored by the ammonia. On both occasions, the ammonia produced a state of excitement, for which it was necessary, the second time, to administer sedatives for two or three days. Dr. Halford will have done good service if he thoroughly establishes a safe and certain mode of treating one of the most serious accidents to which the dwellers in Australia are liable.

LEGISLATIVE CONTROL OF INTEMPERANCE.

PROFESSOR GAIRDNER of Glasgow—an authority whose advice all must respect—at the recent meeting of the Social Science Congress, advocated legislation against drunkenness in two directions: against the seller of intoxicating liquors for allowing drunkenness to happen in his public-house; so as “to make the publican legally responsible for the production of the drunkard, and subject him to a heavy fine, or, in aggravated cases, to imprisonment, in the event of his knowingly violating the law:” secondly, against the consumer who becomes intoxicated. Here we are met by the difficulty of defining drunkenness, and the equal difficulty of

rightly apportioning the kind and degree of legal interference, in the cases of *occasional*, *habitual*, and *inveterate* drunkards. The man who is drunk for the first time, or very occasionally, need not be severely dealt with; the sin is often punishment enough itself. In the worst cases of inveterate drunkenness, Dr. Gairdner thinks that “the person of the drunkard might be placed under restraint in properly regulated establishments like the ‘inebriate asylums’ of America, under State inspection and control.” Short of this extreme measure, the man’s earnings ought to be placed for a longer or shorter time in the hands of a trustee or tutor, so that a man “might be made to save money (as it were, in spite of himself),” and might thus be induced to reform permanently. The weak point in legislation on such a question as this seems to be the wide margin necessarily left for the exercise of magisterial “discretion.” The intimate relation between “discretion” and “caprice” makes the occurrence of a good many instances of injustice, or at least of hardship, almost certain under such legal interference as that advocated by Dr. Gairdner; still the *average* result would probably be both just and beneficial to all persons, and as such it is most desirable.

TWINS TWICE WITHIN A YEAR.

A CORRESPONDENT of the *Times* of Wednesday last says that the wife of a clergyman at Blackheath has been delivered of twin female children on *two* occasions, with an interval of only eleven months. The birth of two pairs of twin children within one year is sufficiently curious and rare to be worth notice.

ANOTHER SPECIAL HOSPITAL IN PROSPECT.

IN his paper on Rachitis in St. Bartholomew’s Hospital Reports, Mr. Holmes Coote remarks, with much truth: “It unfortunately happens that rickets prevails most among the poorer classes; many of the recommendations here suggested are, therefore, impracticable. Among the many charitable institutions now proposed, a large infirmary for rickety children, situated in a proper locality, would be deserving of support.”

PREVALENT DISEASES.

IN close connection with the prevalence of “foot-and-mouth” disease amongst cattle, the extraordinary frequency of stomatitis, and of allied diseases, amongst children, not only in London, but in Glasgow and many other large towns, deserves notice. We are informed by Mr. Woodman that, at the North-East Children’s Hospital, more than two hundred cases of stomatitis have been under treatment during the last four months. There have been several well-marked instances of contagion, not in members of the same family only, nor in inhabitants of the same house or street. The eruption differs from the ordinary form of sore mouth, by attacking apparently healthy children; by being attended with an elevation of temperature (100 deg. or 101 deg. being common), which often falls considerably as soon as the eruption on the mucous membrane is fairly pronounced, by the appearance of the crop of vesicles all at once, or almost so, and being apparently unattended by any visible cryptogam, or pellicular exudation, in the earlier stages, or in healthy children. In weak children, and after some days, *oidium albicans*, and the so-called *leptothrix buccalis*, are often found. This form of stomatitis is generally promptly relieved by the free use of chlorate of potash. Besides this, varicella is more than commonly prevalent, which has in many cases proved unusually severe, and in one case at the London Hospital, fatal. Mr. Weller, the surgeon to the Merchant Seamen’s Orphan Asylum at Snaresbrook, informs us that several samples of diseased milk, of a horribly offensive character, were seen by him, and that he thought it right, for a short time, to recommend the use of preserved milk. We should be glad to receive from Mr. Weller, or from any other correspondent, notes of any authentic and recent cases of disease which might be fairly traceable to bad milk. Milk, when good, is such an indispensable article of diet for our children, especially in large towns, that it would be a very ill-advised thing to create a popular panic on the subject. We want facts—illustrated, if possible, by careful chemical and microscopical examinations of the inculpatated fluid.

THE LONDON UNION SOCIETY.

THE annual general meeting of the London Union Society will be held in the large theatre, King's College, on Wednesday, October 20th, at half-past seven o'clock, when the annual report will be read, and office-bearers for the ensuing year elected. All students are invited to attend.

THE ANTHROPOLOGICAL SOCIETY.

DR. BEDDOE of Bristol has been appointed President of the Anthropological Society. Amongst the Vice-Presidents who are members of our profession are Dr. Beigel, Dr. Barnard Davis, and Sir Duncan Gibb; and amongst the Council, Dr. Langdon Down, Dr. Richard King, Dr. W. Travers, and Dr. Wiltshire.

SCARLATINA IN MARYLEBONE.

WE learn from Dr. Whitmore's monthly report for August and September on the health of the parish of St. Marylebone, that scarlatina is increasing in his district. He notices that it is comparatively uninfluenced by the hygienic conditions of the inhabitants, but that the poor adopt "no precautionary measures whatever" against it. *E. g.*, three children were found playing in a room which contained the bed-clothes and dead body of a scarlatina patient!

ST. BARTHOLOMEW'S HOSPITAL.

WE are glad to announce that active efforts are being made to improve the out-patient department at St. Bartholomew's Hospital. A new *régime* has been inaugurated, of which the leading features are, a decrease in the number of out-patients, effected by closing the surgery-doors at ten instead of eleven o'clock as formerly; and the provision of materials for clinical teaching in the out-patient room, by the appointment of two medical officers, Dr. Hollis and Mr. Marsh, whose duty it is to sort the cases, and set apart such as are more suitable for treatment and teaching.

MEMORIAL TO THE LATE MR. ALEXANDER BRUCE.

A FEW friends, desirous of erecting a suitable memorial to the late Mr. Bruce, are collecting subscriptions for the purpose among his more intimate acquaintances. Although the form of the memorial has not been decided upon, it will probably assume the shape of a tablet to be erected in University College. Those willing to subscribe towards the object may do so by communicating with Dr. Wiltshire, Medical Department, Privy Council Office, Richmond Terrace.

ACTION FOR DAMAGES ELEVEN YEARS AFTER THE INJURY.

AN action between two quondam schoolboys has been tried in Concord, New Hampshire, eleven years after the event, to recover damages for injuries received in a tussle. The parties were, at the time of the occurrence, both about twelve years old. One threw the other violently on the stairs, and a hook entered his neck, and caused severe and permanent damage. No malice was imputed. The action was deferred till the parties came of age. The jury awarded the plaintiff upwards of three thousand dollars. This plan of deferring the action has, at any rate, the advantage that it allows the ill consequences to be accurately estimated.

THE INTERNATIONAL CONGRESS.

DR. TINDAL ROBERTSON, of Nottingham, was one of the foreign Vice-Presidents at the International Medical Congress in Florence. The other Vice-Presidents (foreign) were—Virchow of Berlin; Engelsted of Copenhagen; Benedikt of Vienna; Tessier of Lyons; and Lombard of Geneva. The dignity of honorary president was conferred on the venerable Professor Bufalini of Florence, who was unable, on account of his age, to undertake the active duty of president. The next session of the Congress is to be held in Vienna. The committee of organisation includes the names of Benedikt, Duchek, Oppolzer, Rokitsansky, Sigmund, Wittelshöfer (editor of the *Wiener Medizinische Wochenschrift*) and others.

AUSTRALIAN MEAT.

THE supply of preserved meat from Australia appears to be improving in quality and gaining in public favour. A meeting was held last week at the Edmonton Institute, at which this meat, cooked in various forms by the wives of the artisans themselves, was served as dinner to about one hundred and eighty. The evening ended by a vote pledging those present to try the meat for six weeks, whether they liked it or not. M. Tallerman and the Rev. N. Hall were the chief movers in the matter.

A NEW WORK BY MR. DARWIN.

MR. DARWIN, according to the *Academy* (a new monthly journal), is preparing a new work, in which the conclusions arrived at in his work on the Origin of Species will be applied to man. The book, which will be published next year, will treat of—1. The Descent of Man; 2. Sexual Selection; 3. The Expression of the Emotions.

DEATH FROM TETANUS AFTER EXTRACTION OF TEETH.

DR. STEELE of Dayton, Ohio, relates the case of a robust, healthy youth of nineteen who had ten upper teeth removed (under nitrous oxide) for the purpose of having a set of false teeth inserted. He resumed his occupation as a farmer, but in six days he perceived twitchings of his lower eyelids, which increased for seven days more, by which time a risus sardonicus became developed. Morphia and chloroform were tried. He died on the eighteenth day. It is said that for some time before death he was held in a standing posture.

"THE PRACTITIONER" ON VACCINATION.

IN an article (the first of a series) in our able contemporary, *The Practitioner*, for October 1869, the editor of that journal states his conclusions that human lymph has not degenerated; that, when the operation is properly performed, and the lymph properly selected, vaccination is as protective now as it was in Jenner's days; and that lymph direct from the cow is not more protective than humanised lymph. Dr. Blanc's recent pamphlet is severely, and very rightly, censured for the culpable statistical errors therein found. One of the chief of these errors we ourselves pointed out last week, not being then aware that Dr. Anstie had already done so.

ALLEGED ANTICHOLOERAIC EFFECTS OF WORKING IN COPPER.

AN idea, started several years ago by M. Burq, has again been noticed in the Parisian medical journals:—that workers in copper are specially exempt from cholera. M. Burq says that the mortality from cholera has been 1 in 178 among workers in other metals than copper, iron, or steel; 1 in 209 among workers in iron or steel; and 1 in 1,270 among the workers in copper—the mortality being least among those most exposed to copper-dust. M. Burq is evidently convinced of the correctness of his theory: but, before it is accepted, it will require further confirmation. The remark, however, made by Dr. Clapton at the recent meeting of the Clinical Society—that copper workmen have always escaped cholera and choleraic diarrhoea, although these diseases have prevailed extensively in the neighbourhood, is very interesting in connection with M. Burq's theory.

LADY-NURSES FOR YOUNG CHILDREN.

WE have always held a strong opinion as to the bad influence often exercised by servants on young children; and we are glad, therefore, to see in the columns of a contemporary that an attempt is being made by influential mothers to remedy the evils arising by substituting gentlewomen in this way for head-nurses. The credit of proposing this plan in print is due to "Mater", and we are assured that it has already succeeded to some extent. We think that there must be many ladies in the position of governesses who would find their natural tastes and sympathies more exercised in the moral and physical training of young children than in their "instruction", and the benefit to the children would be unquestionable.

MEDICAL SOCIETY OF LONDON.

THE ninety-seventh session of this Society will be opened on Monday next, with papers by Mr. Hancock and Dr. Andrew Clark. The subject for the Fothergillian Medal competition in 1871 is some subject in obstetrics, including the diseases of women—the choice being left to the authors of the essays. The dissertations must be sent in on or before November 1st, 1870. Further particulars will be found in the advertising pages of the JOURNAL.

DEATHS FROM CHLOROFORM IN AMERICA.

TWO deaths from chloroform are quoted in the *Boston Medical and Surgical Journal* of September 23rd. The first was that of a Mrs. Banker of Hart's Falls, who died at the house of Dr. Z. Cotton. Chloroform having been given, three teeth were extracted: after a second inhalation, several other teeth were removed; the patient apparently recovering perfectly from the effects of the anæsthetic. There being two stumps remaining, she insisted on taking it again, and inhaled the third time. Having extracted the remaining teeth, Dr. Cotton noticed that respiration had nearly if not quite ceased. He threw her forward to let the blood run out of her mouth; and, finding no symptoms of returning life, laid her on the floor and attempted artificial respiration, but it was of no avail. A jury rendered a verdict that Mrs. Banker died from the use of chloroform, for the purpose of extracting teeth, and that it was judiciously and properly administered, and that no blame could attach to Dr. Cotton. A death from chloroform is also reported to have occurred in Pittsburg, in the practice of Dr. John Dickson. The patient was about to undergo amputation of the leg, but died about a minute after the anæsthetic was administered.

ROYAL VICTORIA DISPENSARY AT NORTHAMPTON.

THE honorary secretary of this institution (Mr. John Becke) was on the 2nd instant publicly presented with a testimonial (three silver flower and fruit stands) in recognition of his exertions since the foundation of the Dispensary, which he originated in 1844. The Mayor of Northampton, who was chairman, said, in the course of his opening remarks, that the Victoria Dispensary had saved many from pauperism, by obviating the necessity of that which was often the prelude to pauperism—application to the relieving officer for an order for medical attendance. The Rev. Sydney Gedge, in presenting the testimonial, commented on the success of the institution; remarking that, while the payments of the free members at the end of the past year were £150, at the beginning of the twenty-fifth year they amounted to £1,500. This sum represented between 4,000 and 5,000 paying members; and, out of a population of 40,000, the benefits of the institution were extended to 16,000 or 18,000 persons. Mr. Becke, in acknowledging the testimonial, said that the idea of the Dispensary was first suggested to him by reading the papers of the late Mr. Smith of Southam. He did not think that it was necessary to consult, in the first place, the pecuniary interests of the medical man in order to obtain their support. "I have always felt," he said, "and do feel, that, if the interests of any class become antagonistic to those of the community at large, then the narrower and smaller class must yield its views to the general good. I believe that an institution of this kind, if properly carried on, may be conducted as much to the benefit of the medical men connected with it as to the benefit of the community..... In this and other towns I have seen the workings of the systems which were in vogue before the idea of a provident medical institution was started. I have known what it was to see industrious hard-working men going from door to door, to beg Infirmary tickets, when illness was in the house, and when time was of the utmost importance; when prompt attention might have saved much suffering. I have known instances when the bread-winner of the family has been ill, and unable to get letters of admission to the Infirmary, he has been content, instead of paying a doctor, to act on the advice of neighbours not more skilled in medicine than himself, or what is infinitely more dangerous, has gone to any quack or uneducated person, who possessed neither the knowledge, training, nor experience necessary for the

treatment of disease..... The course which seemed to me most likely to prevent these evils was the establishment of institutions through which, by the payment of small sums of money by persons in health, proper medical assistance might be obtained in times of sickness. That was the idea which entered my mind, and it was on that principle the institution was founded."

MEDICAL CLUB.

THE yearly general meeting was held at the Club, 9, Spring Gardens, on Wednesday last. Sir W. Fergusson took the chair. The question of the future management of the Club was discussed at considerable length and with much animation. A proposal to change it from a proprietary to an ordinary mutual club was brought forward; but the negative of the resolution was carried, only one member voting for the alteration in the principle upon which the Club has up to the present time been conducted. The Committee for the next twelve months was elected, consisting of the following gentlemen: Mr. Brady, M.P.; Mr. Clement, M.P.; Mr. Cockayne; Sir W. Fergusson; Dr. Bell Fletcher; Dr. P. Hood; Sir T. Gilbraith Logan; Dr. J. A. Lush, M.P.; Sir Ranald Martin, C.B.; Dr. McEwen; Sir C. R. McGrigor, Bart.; Dr. Russell Reynolds; Dr. B. W. Richardson; Mr. Edwin Saunders; Dr. Swettenham; Dr. Webster; Dr. Wiblin; and Mr. Erasmus Wilson. A vote of thanks to the Chairman terminated the proceedings.

DEATH FROM CHLOROFORM.

A DEATH from chloroform is reported in the *Western Mail*, a Cardiff paper. A boy, aged 12, employed in the Cwm Neol coal-works, was injured on August 22nd by being knocked down and run over by a tram-train. He was attended by Mr. Devenall, who, in his evidence, said that he had been for three years assistant to Mr. D. Davies of Aberdare, but had no legal qualification. After he had attended the boy some weeks, Mr. Devenall for the first time found that he had dislocation of the hip. The boy was examined by Mr. Davies, who resolved on attempting reduction. Chloroform was given on a handkerchief, in doses of twenty or thirty drops at a time. The operators had been pulling at the ropes, when it was noticed that the pulse was failing; and the boy died immediately. He had been under the influence of the chloroform about twenty minutes, and two drachms had been given. As far as regards the chloroform, no blame appears to lie with any one concerned in the administration.

ADULTERATION OF MILK.

A DAIRYMAN at Stoke Newington has prosecuted a cowman and his wife, whom he allowed to sell his milk, for adulterating and adding water to the milk with which he supplied them. He gave them seven quarts in the morning, and in the course of the day found that they had twelve quarts. A large bottle, containing a nasty looking brownish liquid, was produced in Court, and the defendant said that was what was used to make the milk look rich.

THE ENTRIES AT THE METROPOLITAN SCHOOLS.

ALTHOUGH the number of new entries is not yet definitely known, we believe that the aggregate number of students who have as yet entered for their first year's course of study at the metropolitan schools is somewhat smaller than last year.

MISCHIEVOUS ATTEMPT AT POISONING.

ONE of the boys at Rossall School, a son of a solicitor in Dublin, was noticed by another boy to put something into a sugar-basin used by one of the masters of the school. No further notice would have been taken, had not the first boy afterwards asked whether the master had been sick after the meal. This excited suspicion in the mind of the boy who had watched the tampering with the sugar-basin; and, on examination by the resident medical officer of the school, the sugar was found to contain a quantity of arsenic sufficient to kill nine or ten persons. Fortunately, the master had not touched the sugar. The boy, when questioned,

said that he wanted to know what effect the arsenic would have on the master; that he had brought a quantity from Dublin with him, and there was some left in the chimney. On searching, enough was found, it is said, to have killed all the people in the establishment. The father has taken his son home. Such an occurrence as this should lead to more stringent regulations to prevent persons from obtaining arsenic. One is puzzled to know how the lad could have got so large a quantity.

THE CLINICAL SOCIETY.

THE opening meeting of this Society was held in the Medical Society's Rooms on the Friday evening of last week. The President (Mr. Paget) delivered a most valuable and able address, pregnant with suggestions for the guidance of the Society, an abstract of which will be found in another column. Dr. W. H. Day read a paper on the "Hyphosphates of Iron, Quinine, and Strychnia"; and Dr. Clapton one of great interest on the "Effects of Copper on the System", in which several noteworthy phenomena were described, as the presence of marked green stains on the teeth, bluish green perspiration, and hair of greenish hue in old patients.

OVARIOTOMY.

M. BOINET brought before the Academy of Medicine, on September 28th, a woman aged 48, on whom he had twice successfully performed ovariectomy at an interval of ten months. Her general health, before the first operation, was so unfavourable that he had hesitated to operate. After the second operation, she nearly died of diphtheritic angina; no false membrane was developed in the operation-wound. M. Boinet could find no trace of the first operation in the peritoneum; union was complete. He had included the peritoneum in the sutures.

AN UNQUALIFIED ASSISTANT.

ON October 8th, an inquiry was held at Bethnal Green before Mr. Richards respecting the death of Emma Ryall, aged 27, who was alleged to have died in consequence of improper medical treatment. On September 17th, the woman was confined, being attended by Dr. Richards. On the night of September 27th, she became very ill, and her relations called in a Mr. Budgett. He considered her to be suffering from inflammation of the bowels, and applied leeches. She died at five o'clock the next morning. Mr. Budgett gave a certificate to the effect that she died of exhaustion. Dr. Phillips stated that the patient had really died from disease of the heart and lungs. No medical skill could have saved her. It was an error of judgment to apply leeches. The Coroner said that Mr. Budgett assisted his father, who was a properly qualified medical man. Mr. Budgett would have been present, but that he was ill of a malignant fever. It was afterwards said that the father had signed the certificate, though he had never seen the woman. The jury refused to sign the inquisition paper till they had seen Mr. Budgett. No imputation could rest against Dr. Richards. The inquiry was adjourned.

SCOTLAND.

DR. GEORGE MACLEOD has been appointed Professor of Surgery in the University of Glasgow.

THE ROYAL INFIRMARY, EDINBURGH.

AT a meeting of the Managers held on Monday, Mr. Annandale was unanimously promoted to be an acting-surgeon of the Infirmary.

THE REPRESENTATION OF ABERDEEN AND GLASGOW UNIVERSITIES. THE Joint Committee appointed by the members of Council of the two Universities have resolved to bring forward Mr. Archibald Smith, M.A., LL.D., F.R.S., of Jordan Hill, as the Liberal candidate. Mr. Smith was a distinguished student of the University of Glasgow, and afterwards graduated as Senior Wrangler at Cambridge. With Gregory he instituted the *Cambridge Mathematical Journal*, which has been invaluable

for the impulse it has given to mathematical science in Great Britain. Mr. Smith's admirable work on Magnetism is well known. He is also a well known Chancery barrister.

STIMULANTS AND MORTALITY OF TYPHUS.

DR. RUSSELL gives, in the Report of the Glasgow Fever Hospital, a table showing, among other points, the percentage of typhus cases in which stimulants were administered. 39.5 per cent. were stimulated; 13.8 per cent. of all cases died. With reference to age, we find, as usual, that (above 10 years) the mortality increases with the age; and further, that the proportion needing stimulants also increases in about the same ratio; so that the percentage of cases to which alcohol was given, at any age, corresponds very closely with the death-rate of the same age. With reference to the cost for food, alcohol, and medicines, Dr. Russell tells us that fivepence three farthings was the average daily expense per patient in 1868-69, being twopence per day less than it was in 1866-67. The stimulants in 1868-69 cost something less than one penny per patient daily, and the medicines scarcely one halfpenny. The usual notion that stimulants necessarily form the most expensive part of a fever patient's treatment, is thus signally negated in Dr. Russell's experience.

UNIVERSITY OF ABERDEEN: THE EXAMINERS IN MEDICINE.

DR. ANGUS FRASER, Dr. Davidson, jun. (Wartle), Dr. William Keith, Dr. A. F. Smith, and Dr. Will have come forward as candidates for the appointment of Examiner in Medicine. The publicity given to these appointments, and the remarks which have appeared in the JOURNAL regarding the manner of filling them up, appear to have had the desired effect of stimulating a larger number of graduates to come forward than on any previous occasion. It is surely not too much to ask the University Court to act independently in the matter, now they have so good a choice of candidates, and to appoint the best men.

ACCIDENT TO THE EARL OF STAIR.

A VERY serious accident has occurred to the Right Hon. the Earl of Stair. His lordship was shooting with a numerous party on Saturday last, when a shot, discharged about fifty paces behind him, accidentally lodged part of its contents in his left shoulder and cheek, and one of the shots, rebounding from his fowling-piece, penetrated the left eye. Dr. Wolfe found it necessary to excise the eye. After the removal of the eyeball, a pellet was discovered in the posterior part of the socket, showing a very narrow escape from penetration of the brain. This accident is worth noting, inasmuch as the wound of the eye was clearly from the front, and one shot was known to have been fired from behind, and to have been quite accidental. Had the result been a fatal one, no third witness present, and some known source of quarrel in existence between the parties, the one who fired the unlucky shot might have found it hard to prove a statement that he was standing some distance behind.

ST. GEORGE'S HOSPITAL.

AT the quarterly meeting of the Governors held on October 8th, Benjamin Lancaster, Esq., in the chair, the following prizes were awarded to the students who had distinguished themselves in the Medical School attached to the Hospital during the Session 1868-69. *The William Brown Exhibition*: £40 per annum tenable for three years, Mr. Rowland. *Sir Charles Clarke's Prizes*: Mr. Vasey. *The Thompson Medal*: Mr. E. G. Barnes. *Sir Benjamin Brodie's Clinical Prize in Surgery*: Mr. Palmer. *The Acland Clinical Prize in Medicine*: Mr. Noad. *The Johnson Memorial Prize in Anatomy*: Mr. Baber. *Certificate*: Mr. Brabant. *General Proficiency Prizes*: Third Year Students. *Prize*: Mr. E. G. Barnes. *Certificate*: Mr. Bowles. *Certificates of Proficiency*: Messrs. Harrison, Noad, Palmer, Squire, and Vasey. Second Year Students. *Prize*: Mr. Norman. *Certificate*: Mr. Brabant. First Year Students. *Prize*: Mr. Goldsmith. *Extra Prize*: Mr. Stradling. *Certificates*: Messrs. Thrupp, Winterbottom, and Warden (Chemistry). *Certificates of Proficiency*: Messrs. Athill, Colthort, Hale, McHardy, and Robinson.

REPORT ON HOSPITALS: THE EDINBURGH ROYAL MATERNITY HOSPITAL.

A LETTER appeared a few days since in the *Scotsman*, signed by one of the leading managers of the Royal Maternity Hospital, soliciting pecuniary aid to carry out the improvements which it is found absolutely necessary to make for the efficiency of the hospital in general and for the safety of the patients. It was our intention some months since to bring before the notice of the public the shameful state of the Hospital as it then existed, but we forbore in the belief that energetic means were about to be taken by a renewed committee to carry out complete improvements in the Institution. We have reason to think that these will be carried out honestly and effectually if sufficient funds are subscribed; and it is now with the object of stirring up the benevolent of Edinburgh and its neighbourhood to come forward and do what they can to remove so great a blot from the good name of their charities as has been brought upon them by the Maternity Hospital, that we publish the following remarks. We believe there is no institution in Edinburgh which has more claim on the sympathy and support of the public.

During the year last reported on, the Institution admitted 259 patients. Of these, 6 died. It is, therefore, a small hospital with a large mortality. It is supported by voluntary contributions, and is managed by a Committee of subscribers, along with some others, who are *ex officio* members of the Board of Directors. The Professor of Midwifery in the University is a consulting medical officer of the Institution. In connection with the University, there is no other means of properly teaching practical midwifery; and, to give a full view of its capability in this way, it is to be noted that, besides 259 intern patients last year, it had 376 extern patients.

The Hospital is at present undergoing a systematic cleansing and repair, under the management of the former matron of the Edinburgh Royal Hospital for Sick Children. There can be no doubt that this cleansing could no longer have been delayed, without the utter ruin of the establishment, which would have been a fortunate ending, in such a case. The state of filth and mismanagement of the house could not be exaggerated. The state of the beds, the state of the walls and floors, the state of the kitchen and laundry, were abominable beyond belief. We hope that the benevolent parties who have, for a time at least, fortunately forced good advice on the directors, will go on with their good work. If they do, they will surely receive the support of the public. Whereas formerly a visitor, if he could get into the place, left it in disgust, we may now hope that visitors will be invited, and that they will see at least ordinary cleanliness and good management. Deserving support, the Institution will find its empty purse begin to fill. No worthy Institution fails in Edinburgh, if well managed. The breakdown of this one should be a warning to others.

A Maternity should be a place wherein the lying-in woman finds not only medical skill and quiet seclusion, but where she should see exemplified those virtues of order, cleanliness, and cheerfulness, to which most of the inmates of such places are great strangers. We trust that now a decided attempt will be made to secure these advantages.

This Maternity is the only hospital of the kind in the city. It is the only Lying-in institution of any kind in connection with the University. But there is too much cause to deplore the state of the teaching of practical midwifery here. The Senatus of the University is surely deeply interested in the management and prosperity of the Institution. We trust that they will regard the present as a fitting time to show this interest, and to come forward, lending at least the influence of their names, to promote the thoroughly neglected cause of practical midwifery education in this great medical school.

At the present time, when hospitals, especially maternities, are so much spoken against—so unfairly maligned—it is surely incumbent on the directors of this little institution, not only to rescue it from its present disgraceful state, but to make it a pattern for other like establishments. A small hospital in a place like Edinburgh, and having, as this has, on its staff a set of able and distinguished medical officers, needs only good conduct and zeal to secure for it every possible improvement. The house at present occupied by the institution can only be a temporary abode for it. Old, dirty, ill-lighted, ill-ventilated, excessively noisy, it must be deserted as soon as the directors can find a better, or a good place for building. Nothing can improve the present house satisfactorily; it must be regarded as only a temporary place. At present it is overcrowded with beds, and they must be thinned out, from regard to the safety of the inmates. The area for each bed in the chief ward appears to be considerably under 100 square feet.

In carrying out these desirable objects, the directors and medical officers must trust to themselves and their good cause. They must not lean on any one else; least of all, on the already over-burdened shoulders of the managers of the Royal Infirmary. That great institution has enough to do already, and it has no money to spare. It should not go out of its own sphere to establish in connection with it a maternity, which all experience shows should be disconnected with a general infirmary. A maternity department superadded to the Royal Infirmary's present departments would be a dead weight on its funds to the extent of probably £1,000 a year. A maternity in Edinburgh, managed with ordinary zeal and ability, will easily secure for itself ample funds, without putting its hand into the pocket of the Royal Infirmary.

Formerly, there were midwifery wards in the Royal Infirmary. A former Professor of Midwifery, wisely disapproving such a state of matters, established a Lying-in Hospital, separate from the Infirmary. It will be, in more senses than one, a retrograde step to push back the Maternity into the Infirmary. But, though this is undoubtedly the case, it will be, for many reasons, advisable to have the new Lying-in Hospital within a moderate or convenient distance from the new buildings of the Royal Infirmary. Doubts have of late been widely entertained by the profession as to the value of maternity institutions under any circumstances. We have written the above remarks in the belief that the one in question cannot be done without. If the new erection be on the cottage plan, most of the peculiar dangers which attach to such will be obviated.

THE CLINICAL SOCIETY OF LONDON.

ABSTRACT OF THE PRESIDENT'S OPENING ADDRESS.

MR. PAGET urged the members of the Society not only to be active in writing and debating, but to be, in all their work in the Society, strictly clinical. He said that he feared there existed, even among the members of the Society, too little faith in the power of clinical research; too great readiness to doubt all results and all suggestions which are not according to our beliefs in physiology or anatomical pathology; too great readiness to accept and act upon deductions from other sciences, though they are not approved by clinical evidence. He vindicated the claim of clinical science to be considered, in the same degree as any other science, self-sufficient. Self-sufficient, indeed, no science could be; all being bound together by common facts and mutual illustrations, and the same cardinal rules of study. But, in whatever degree self-sufficiency and self-reliance might be allowed to any department of science, in consideration of the speciality of its subject-matter, and of its method of investigation, in that same degree might self-sufficiency be justly claimed for clinical science.

It could not be objected that, in claiming the rights of special clinical study, too narrow a field of inquiry would be enclosed. The field would be found wide and large enough for every member of the Society to take a different subject or method of investigation, and make of it the work of a life. The new Nomenclature of Diseases did not enumerate all the subjects; but, many as they were, each might advantageously be studied in many different ways. As the most promising methods, were pointed out the collections of cases undisturbed by treatment; of rare cases; of large collections for deductions from mere numbers of the simplest facts; of groups of cases having one striking common character, such as the character of explosion of nerve-force, or that of nerve-storms; of clinical coincidences, such as those of diseased renal capsules with colouration of the skin; and clinical sequences, like those of syphilis, in likeness to which it appeared probable that others might leave trains of consequences extending over far longer periods of time than they had yet been traced in.

Referring to therapeutical inquiries, in which disappointment had been expressed that the Clinical Society had achieved no great results, the necessity was pointed out of discriminating between the management of a disease and the cure of it. No one talked of curing pyæmia or of managing ague; we managed pyæmia, helping the patient to live while, by natural processes, the disease continued and then subsided; we cured ague. In respect of cures, there seemed too great a tendency to adopt the popular belief that for every disease there must be a remedy; whereas, there was rather no reason to be given, from the nature of things, why any disease should have a remedy; and, in all biology, there appeared no more singular fact than the real cure of disease, after the manner of ague by cinchona, or syphilis by mercury and iodide of potassium. Such facts as these could not but be rare and very difficult of discovery; but the search for them was one of those lines of inquiry in which the reward of success would bear a just proportion to the toil for achieving it.

If every member of the Society, according to his power, or taste, or

opportunities, would choose his own subject and his own mode of research, and work in it heartily, the Society would embody the highest ideal of a well-ordered association, wherein each man does as much as he can of that which he can do best.

COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

AT the ordinary meeting of the Council held on the 7th instant, a letter was read from Dr. Hawkins, reporting the erasure of the name of John Pattison, and of the qualification of Mr. Lima Abraham La' Mert as a Licentiate of the Royal College of Physicians of Edinburgh.

It was resolved, on the motion of Mr. Spencer Smith, to appoint a committee with power to seek such legal advice as may be necessary to advise the Council as to the desirability and the practicability of instituting one conjoint Board for conducting joint examinations, upon which qualifications to practise medicine, surgery, and midwifery may be obtained. On the motion of Mr. Charles Hawkins, it was resolved to refer to the Court of Examiners, for report to the Council, the practicability of testing the knowledge of candidates for the membership by clinical examination of patients.

SPECIAL CORRESPONDENCE.

THE FLORENCE CONGRESS.

[FROM OUR OWN CORRESPONDENT.]

Florence, September 27th, 1869.

WITH regard to Florence, I have little to say, and much to complain of; and I am sure Dr. — (the only Englishman whose name I saw in the register) will doubtlessly bear me out in full, should he have made a longer stay than twenty-four hours. He who arrives at this International Congress after having been at the German meeting of naturalists and physicians at Innspruck, must be and is sadly surprised to find so much ado about nothing. True, there is a great show of flags, flowers, and carpets; there are splendid apartments in the Ospedale di S. Maria Nuova, beautifully fitted up for a nightly *conversazione* amongst the members of the Congress; there is a dinner to be given to the guests next Thursday; and a holiday excursion to Montecatini, the baths of which place are said to be worth seeing; but, as to science, there is but very little, and that little served in so unpalatable a manner that it is still less agreeable to taste. Fancy a large hall, high as a church, and seeming like it, where it is extremely difficult to hear; and three languages allowed, viz., French, Italian, and Latin; and you will easily imagine how much must be lost to the medical public. The papers are invariably read; the discussions are addressed to the chairman, and thus become still more inaudible than the papers; and, as those who attempt to take part in the discussion seem glad to express their own opinion, regardless of those of others, the necessary consequence is, that the hearer is more in the dark after the discussion than before, supposing he has had a good place, and has managed to hear something of what has been said. Another, and, I think, just ground for complaint, is the manner in which the time of sittings is arranged; viz., from 9 to 12 A.M., and 2 to 4 P.M. The whole Congress meets each time together. Now, even under ordinary circumstances—that is to say, when everything is as you wish it to be, when you have a comfortable seat, a fair hearing, and congenial subject—you ought not to be put to so severe a test as five hours sitting a day, with a single pause for lunch of two hours' duration.

I will, in my next letter, give you an outline of what this Congress has brought forward. Meanwhile, I enclose the statute programme and commentaries about the principal questions; and conclude with the remark that, if the first international Congress of Paris was a failure, this second is a decided *fiasco*. No wonder that all those who do not come here for pleasure leave as fast as they arrive, and that the register of addresses which I have in hand scarcely contains a hundred names, many of which belong to gentlemen who have already left.

I hear that the third International Medical Congress will be held in Germany. I trust they will choose a German university town, and leave to the people there the care of arranging the Congress after their idea, and after the form of the meetings of the German Naturalists and Physicians, whose annual gatherings become more and more family gatherings, where the *utile et dulce* are harmoniously combined, and where the colleagues bring with them their wives and daughters, in order that these too may have an opportunity to see at collective work their fathers, brothers, and husbands. The popular lectures in the three general sittings at Innspruck, delivered by Helmholtz, Charles Vogt, and Virchow, will, for instance, be remembered a long while by all those who were present, ladies included.

ASSOCIATION INTELLIGENCE.

SHROPSHIRE SCIENTIFIC BRANCH.

THE autumnal meeting of the above Branch will be held in the Museum of the Natural History and Antiquarian Society, Shrewsbury, on Wednesday, October 20th, at 2 P.M. President for 1868-9, Samuel Wood, F.S.A.; President-elect for 1869-70, Dr. Oakley.

Gentlemen intending to read papers or report cases, are requested to communicate with the Honorary Secretary.

The dinner will take place at the Lion Hotel, at 4.30 for 5 exact time: Dr. Oakley in the Chair.

SAMUEL WOOD, F.R.C.S., *Honorary Secretary*.
Shrewsbury, October 6th, 1869.

WEST SOMERSET BRANCH.

THE autumnal meeting of the above Branch will be held at the Clarence Hotel, Bridgwater, on Thursday, October 21st, at 5 P.M.; H. J. ALFORD, M.B., President, in the Chair.

Gentlemen intending to be present at the dinner, or to read papers after, are requested to give notice to the Honorary Secretary.

W. M. KELLY, M.D., *Honorary Secretary*.
Taunton, September 22nd, 1869.

BATH AND BRISTOL BRANCH.

THE first ordinary meeting of the Session of the above Branch will be held at the York House, Bath, on Thursday evening, October 28th, at 6.45 P.M.; C. H. COLLINS, Esq., President.

This meeting will be rendered special—1. To consider the following resolution, notice of which was given at the annual meeting. Proposed by Dr. BUDD, and seconded by Dr. BRITTAN: "That power be given to the Local Councils to fill in any vacancy that may occur in this Council, *ad interim*, to the next annual meeting."—2. On a requisition of the Bath Council: To fill up the extraordinary vacancy caused by the lamented decease of W. H. Colborne, M.D., President-elect.

Papers are also expected, from Mr. Prichard, Mr. Bartrum, Dr. E. L. Fox, and Dr. Fleming.

R. S. FOWLER, } *Honorary Secretaries*.
CHARLES STEELE, }

EAST YORK AND NORTH LINCOLN BRANCH.

THE half-yearly meeting was held at the George Hotel, Barton-on-Humber, on Sept. 23rd, 1869; W. H. EDDIE, Esq., in the chair; Sir H. Cooper, the President, being unavoidably absent. Sixteen members were present.

Papers.—The following papers were read. A Fatal Form of Measles. By G. F. Elliott, M.D.—Cases treated by Bromide of Potassium. By W. H. Sissons, Esq.—Fungus of Testes. By Kelburne King, M.D.—Case of Tetanus. By W. J. Lunn, M.D.—Case of Compound Fracture of the Thigh. By R. Grieve, M.D.

Dinner.—The members afterwards dined together.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE first meeting of the thirteenth session (1869-70) was held at Rochester, on September 28th; ADAM MARTIN, M.D., in the Chair.

The Treasurer and Secretary were re-elected; and the next meeting appointed for November 16th, at Maidstone, with Dr. Monckton as Chairman.

New Member.—Edward Henry Hugo, Esq., was elected, subject to the rules. Dr. Aveling (already a member) was admitted to the District.

The William Carr Scholarship of the Royal Medical Benevolent College was advocated by Mr. W. HOAR of Maidstone.

Communications.—1. Mr. NANKIVELL described Lister's mode of using Carbolic Acid in Wounds and Compound Fractures, and demonstrated the mode on a patient. The carbolised cat-gut ligature, plasters, solutions, etc., were exhibited.

2. Mr. W. P. HOARE (Dartford) read a paper on the Surgical Use of Chloride of Zinc. This paper was a continuation of one that was read at Dartford on April 24th, 1868. The author destroys polypi of the ear by introducing a wire coated with the zinc into the centre of such growths. The operation is safe, effectual, and painless. Solutions are used in the following proportions:—Otorrhœa, gr. ij to ʒj;

exudation of fauces, gr. xxxij to 3j (gr. iv to 5j); gonorrhœa, gr. $\frac{1}{2}$ —iv to 3j; nævi, gr. clx to 3j (gr. xx to 5j).

3. Dr. F. J. BROWN read some notes of Clinical Cases; also a paper on the Mode in which Direction is ascertained by Migratory Animals. —The Clinical Cases were: *a.* Ecchymosis of the Chin by a Blow on the Forehead in a boy, occurring in three minutes, as the result of *contre-coup*. —*b.* Partial Dislocation of one of the Middle Cervical Vertebrae in a middle-aged woman, on July 31st, 1869. The dislocation occurred at 7 A.M., and it was reduced in the evening. The accident was caused by stooping to kiss a baby in her lap, and twisting so as to kiss the infant's neck. There was swelling on the left side of the neck, with the chin turned to the right shoulder, and fixed in that position. She had much pain in the neck and left shoulder. The dislocation was reduced by lifting the head by the chin and occiput. An audible snap occurred, followed by restoration of the form and function of the neck. —*c.* Aberration of the Will. A boy, aged 10 years, and a girl of the same age, fasted in a partial degree for three months, and became very thin. The boy recovered spontaneously; his diet consisted of three or four picnic biscuits and three glasses of port wine daily. The girl was cured by assafœtida enemata; her diet consisted of apples and sweets almost exclusively, without wine. A young man, the son of a farmer, took a sudden offence with his father, and said that he would never work again. For many years he affected to be an invalid. He was cured by his father's telling him one day that the doctor considered that there was nothing the matter with him. —*d.* Malarious Affections since July 1st, simulating nephritis, colic, and peritonitis. These affections were preceded (in June) by catarrhal pneumonia of a fatal form.

CORRESPONDENCE.

ULCERATION OF INTESTINE CAUSING SUDDEN DEATH.

SIR,—In your impression of the 25th instant is a report of a case of "ulceration of intestine causing sudden death." The gentleman in attendance, Dr. Kibbler, stated that "he had never before either met with or heard of a case of a similar character." I therefore beg to offer the following account of a case very similar which happened to myself, when residing in Hampstead, in October 1865.

I was summoned late one night to a girl aged 17, said to be dangerously ill, and on my arrival found her dead. The gentleman in attendance gave the following history.

The deceased had not been very well for a little time, and had come up from the country for a change. On the morning of the day of her death there was some diarrhœa and discomfort, for which medicine was obtained from a druggist. In the evening, as she was worse, a medical attendant was summoned: he arrived about 7.30, and found her suffering from sickness and diarrhœa, for which he prescribed a calomel and opium powder, which gave decided relief to the pain, the patient expressing herself better. He was hastily summoned again about 12 P.M. with the information that the sickness had returned with greater force, and they feared that she was dying. On his arrival, he found her dead.

On *post mortem* examination, 35 hours after death, the body was found to be well nourished. Rigor mortis was passing off. The abdomen was distended by gas. The lungs, heart, liver, stomach, spleen, were all healthy. There was general congestion of the mesentery. An abundant exudation of healthy lymph took place from the cavity of the pelvis: a small ulcer was discovered, which had perforated the bowel near the lower end of the ileum, the tissue for some distance around the ulcer being congested. I may add, that the patient was menstruating at the time of her decease.

I am, etc., EDWARD MAHONY, M.R.C.S., L.S.A.
13, Hardman Street, Liverpool, Sept. 1869.

PUNCTURED FRACTURE OF THE SKULL.

SIR,—In the JOURNAL of October 2nd, a brief allusion is made to two fatal cases of punctured fracture of the skull, unattended by immediate symptoms of cerebral injury. I cannot help thinking that a principal source of danger in these accidents is still sometimes overlooked, and thus patients are lost who might have been saved. A punctured fracture often carries with it spicula of bone, which may irritate and penetrate the dura mater, and thus give rise to inflammation and death. The external wound may be small; no cerebral symptoms may exist; and, therefore, according to modern practice, trephining would be deemed an unwarrantable proceeding.

My hospital experience afforded many instances of these injuries, and established beyond a doubt the importance of at once removing the source of irritation with a small trephine. In one interesting case, a

boy was admitted with acute inflammation of the brain following such an injury. I enlarged the wound, and removed a small circle of bone containing spicula sticking in the dura mater. The boy from that moment began to mend, and speedily recovered. But it will not do to wait for symptoms. The wound should be at once enlarged; and if, as usual, there be reason to apprehend that any fragment of bone has been driven in on the dura mater and brain, the trephine should be applied; and I am fully justified in saying that, if that be done, recovery will be the rule.

I am, etc., W. F. MORGAN,
Honorary and Consulting Surgeon to the Bristol Royal Infirmary.
Bristol, Oct. 1869.

OBITUARY.

WILLIAM HENRY COLBORNE, M.D., CHIPPENHAM.

THIS much esteemed member of the profession and of our Association died at Chippenham on September 27th, at the early age of forty-seven. His family are said to have been settled in Chippenham for several centuries, and to have always occupied a high position. His father, the late Mr. William Colborne, died last year, at an advanced age.

Dr. Colborne studied medicine at University College in the years 1842-5, where he was noted as a steadily working and highly intelligent student. He always took a high position in the prize competitions into which he entered; and filled creditably several of the students' offices in the hospital—including that of house-surgeon to Mr. Liston. He graduated at the University of London, taking the degree of M.D. in 1853. Before this, he had joined his father in the old-established practice in Chippenham.

The cause of his death was exhaustion in the course of an attack of typhoid fever; his powers having been severely taxed, for the last two or three years, by overwork and anxiety.

Dr. Colborne was a man of extensive literary and scientific attainments. He was President-Elect of the Bath and Bristol Branch of the British Medical Association; and Vice-President of the Poor-Law Medical Officers' Association, in whose work he had lately taken much interest. The *Devizes and Wiltshire Gazette*, in noticing his death, says: "A more kindly disposed and amiable man—a man more full of anxiety for his patients—more charitable to the poor, both with purse and medicine—more ready to help them to the attainment of health and contentment by the warm interest he took in all that concerned them—never lived. His loss will be irreparable to many a poor family in the neighbourhood; while to his widow and seven children (the eldest only sixteen years old), the unexpected blow has fallen with a force to which it would be difficult to give expression.....Much might be said about the Doctor's consistent course of public life, for which he had gained the respect not only of those who agreed with him in opinion, but of those who took a different view. He was a member of the Town Council, and the inhabitants were looking forward to his mayoralty next November, when he has been cut off in the full career of his usefulness."

FRANCIS CODMAN ROPES, M.D., OF BOSTON, UNITED STATES.

ON the 15th ultimo, died one of the most rising surgeons in the city of Boston. A brief notice of his career in a British Journal of Medicine seems called for, inasmuch as the subject of the memoir was resident for some time in this country, and, in particular, made himself many friends at Edinburgh.

Dr. Ropes was educated at the Harvard University. After taking his doctor's degree, he came over to visit various European schools. By way of qualifying himself to profit fully from his continental studies, he spent his first winter in Dresden, where he worked diligently at languages, and also fostered, by way of relaxation, his love for music. He next worked in Berlin, under Virchow and Recklinghauser, and went, also, to Vienna and other schools of note. He remained some time in Paris, on his way to England, and next proceeded to Edinburgh, to spend the winter of 1863-4. Here, the writer of this notice first met him. He came prepared to work and learn, and make the best use of his time; and he was soon installed as an extra clinical clerk under Dr. Laycock. He devoted himself, with great assiduity, to urology, and undertook, for some months, the daily examination of the urine of forty patients, accurate reports of which he registered. He was constantly in the infirmary wards. His heart, however, was set upon surgery, and he looked forward to practise this department in his native city. He was so desirous to possess a British diploma in surgery, that

he underwent the examinations for the conjoined licenses of the Royal Colleges of Physicians and Surgeons, during his stay in Edinburgh, and he had the great gratification, ere he left that city, of being elected a Fellow of the College of Surgeons. He returned to Boston at the end of 1864, during the great war, and was soon engaged in the service of his country as an assistant-surgeon in the army. He was never in any action, but did some heavy duty at the military hospital of Readville. He lost a brother in the earlier part of that long struggle. At the end of the war, he established himself in surgical practice at Boston, and, in 1867, was appointed one of the surgical staff of the City of Boston Hospital. This gave him work in which he delighted and shewed great zeal.

An attack of scarlatina, some years ago, left behind it traces of renal mischief, and Dr. Ropes suffered from albuminuria, more or less, ever afterwards. He trusted that, with care, he might not suffer to any serious extent. Gradually, however, he failed in health, though carrying on his work with remarkable energy. His last illness was of only a fortnight's duration. A few days after its commencement, he described a peculiar sensation which he experienced in his head, a kind of explosion, and from that time he was delirious, and, finally, succumbed to the effects of uræmia. His age was thirty-two.

Dr. Ropes was beloved by all who knew him. His career was, in all respects, a most exemplary one. He inspired energy and vivacity wherever he went. His life was pure and blameless. Our profession can ill spare such men.

JOHN T. LIPSCOMB, ESQ., ST. ALBAN'S.

It is our painful duty to record the death of one of the oldest and most respected medical practitioners in Hertfordshire—John Thomas Lipscomb, of Saint Alban's. He died on September 25th, one day before completing his seventy-seventh year. He was the son of Charles Lipscomb, Esq., of Woodcote Hall, Hants. He commenced his medical career as pupil of Mr. Lyford, of Winchester, a gentleman of the highest standing among provincial hospital surgeons. With this gentleman, he remained five years, and became a favourite pupil. He afterwards became a pupil of the united hospitals of Guy's and St. Thomas's, where he pursued his studies for three years. He then migrated to Middlesex Hospital, where he performed the duties of dresser for one year, and of house-surgeon for another. It was his intention to practise in London; and, no doubt, his abilities and varied professional and social accomplishments, would have opened for him a brilliant career. But his health failed from over study, and a country life, for a long period, became necessary. Circumstances arose which led him to settle at St. Alban's, in the year 1815. Two years later, he married the eldest daughter of the Rev. J. P. Nicholson, the highly respected Rector of the Abbey.

Mr. Lipscomb twice filled the office of Mayor; first in 1819, and, again, in 1836. Since 1836, he has been an active borough magistrate, fulfilling the duties with great firmness and kindness.

In 1832, he successfully performed the difficult operation of tying the popliteal artery. He retired from general practice in 1863, but continued to discharge the duties of magistrate, with great punctuality, to a very late period. Few medical men have been held in greater esteem by their brethren, and, probably, none have more thoroughly deserved such esteem. His advice and assistance, whenever needed, were always rendered promptly and cordially. He was kindly in manner, and he will be long missed with regret.

His mortal remains were, on October 1st, consigned to their last resting place, in the new burial ground of the Abbey Church; and, in accordance with his expressed wish, the ceremony was conducted with as much privacy as his well deserved popularity would permit. The members of the town council and the borough justices resolved to attend in their corporate capacity, as the last token of respect and esteem which they could pay to their oldest member, whose decease, though at an advanced period of life, cannot but cause a deep feeling of regret, not only to his immediate friends and brother magistrates, but generally to all his neighbours and fellow-townsmen, who remember the firm buoyant step, happy, cheerful countenance, and bright, active mind, which held out, till very lately, the delusive hope that his physical and mental energies were still far from exhausted. Most of the houses and shops in the town were partially closed during the day.

SINGULAR COURSE OF A BULLET IN ATTEMPTED SUICIDE.—A case is recorded (*California Medical Gazette*) in which the bullet from a Deringer pistol held in the mouth, passed through the palatine process of the superior maxillary bone, crushed part of the base of the vomer, and then fell back into the nostril, and was swallowed, being forty-eight hours afterwards expelled *per anum*.

THE POOR-LAW MEDICAL SERVICE OF GREAT BRITAIN AND IRELAND.

CHARGE OF NEGLECT AT BARNSELEY.

A CHARGE of neglecting a patient, whose thigh had been amputated, has been brought against Dr. Smith, the Medical Officer of the Barnsley Union. The patient was a woman named Ann Hobson, admitted for a large ulcer over the tibia of four years' duration, and another on the back of the leg. The leg was very painful, and she was anxious to have it removed. Amputation was accordingly performed five days after admission, after consultation with Mr. Wainwright, who also assisted at the operation. Some secondary hæmorrhage occurred, and a tourniquet was applied to the femoral artery. Gangrene of the flaps, extending to the knee-joint, set in; a line of demarcation formed; and amputation through the thigh was resorted to, eighteen days after the first operation. After this, the patient gradually sank. The tissues in front of the end of the femur ulcerated down to the bone; and a ring of ulcers formed in the upper part of the thigh, at the level at which the tourniquet was applied. She died on the seventeenth day, tetanus having supervened. Dr. Smith saw her regularly for seven days, and then was telegraphed for to Scotland, and left the patient in charge of an unqualified assistant for a week, when the master of the workhouse sent for Mr. Blackburn, who had been appointed by the guardians to attend in the absence of Dr. Smith. Dr. Smith had left instructions for Mr. Wainwright (not Mr. Blackburn) to be sent for, if necessary. No question was raised as to the propriety of either operation. The charge was simply that of leaving a woman whose case was considered utterly hopeless, and who might die in a day or two, in charge of an unqualified man. The Board passed a vote of censure on Dr. Smith for not requesting Mr. Blackburn, his recognised deputy, to take the case in hand in his absence; and there can be no doubt that this was just, though there was no evidence to show that Mr. Blackburn or any one else could have done the woman any good.

MEDICAL NEWS.

APOTHECARIES' HALL.—Name of gentleman who passed his examination in the science and practice of medicine, and received certificate to practise, on Thursday, October 7th, 1869.

Furnivall, Henry Wallace, Hutton, near Weston-super-Mare

The following gentleman also on the same day passed his first professional examination.

Newman, Ashwin Conway, Guy's Hospital

As an Assistant in compounding and dispensing medicines.

Wheeler, Frederick William, Bedford

MEDICAL VACANCIES.

THE following vacancies are declared :—

ABERDEEN UNIVERSITY—Three Examiners for Graduation in Medicine.

BANBURY UNION, Oxfordshire—Medical Officers for the Cropredy and Hornton

Districts: applications, 20th; election, 21st.

BARNSELEY UNION, Yorkshire—Medical Officer for the Darton District.

CAHERCIVEEN UNION, co. Kerry—Medical Officer for the Derrynane Dispensary District: applications, 18th; election, 20th.

EDINBURGH ROYAL INFIRMARY—Physician.

GLASGOW UNIVERSITY—Waltonian Lecturer on the Eye.

HULL GENERAL INFIRMARY—Resident House-Surgeon: applications, 18th October.

MIDDLESEX HOSPITAL MEDICAL COLLEGE—Lecturer on Materia Medica and Therapeutics; Demonstrator of Anatomy.

MONAGHAN UNION—Medical Officer for the Glasslough Dispensary District: applications, 18th; election, 21st.

PRIVY COUNCIL—Medical Inspector.

ROSCREA UNION, co. Tipperary—Medical Officer for the Ballybritt Division of the Roscrea Dispensary District.

ROYAL COLLEGE OF SURGEONS, Edinburgh—Conservator of the Museum.

ROYAL KENT DISPENSARY, Greenwich—Resident Medical Officer.

ST. GEORGE AND ST. JAMES DISPENSARY, King Street, Regent Street—

Two Physicians: applications, 21st Oct.

ST. MARYLEBONE GENERAL DISPENSARY, Welbeck Street—Physician: 20th Oct.

SURGEONS' HALL, Edinburgh—Lecturer on Physiology, and Lecturer on Clinical Medicine.

SUSSEX COUNTY HOSPITAL, Brighton—House-Surgeon: applications, 3rd November; election, 24th November.

SWANSEA INFIRMARY—House-Surgeon: applications, 24th Nov.; election, 1st Dec.

UNIVERSITY COLLEGE, London—Professor of Medical Jurisprudence.

WESTMORELAND LOCK HOSPITAL, Dublin—Resident Apothecary: applications, 22nd; election, 23rd.

WIGAN UNION, Lancashire—Medical Officer and Public Vaccinator for the Wigan District and the Workhouse: applications, 21st Oct.
WYCOMBE UNION, Bucks—Medical Officer for District No. 8.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*WARD, J. Bywater, B.A., M.B. Cantab., appointed Assistant Medical Officer to the Warwick County Asylum, Hatton, *vice* R. F. Neil, Esq., resigned.

BIRTHS.

CARVER.—On October 12th, at Cambridge, the wife of *Edmund Carver, M.B. of a daughter.
LITTLE.—On October 4th, at Aylsham, the wife of *Frederick Little, Esq., Surgeon, of a son.
MONCKTON.—On October 7th, at Brenchley, Kent, the wife of *William Monckton, Esq., Surgeon, of a daughter.
SHONE.—On October 6th, at Great Malvern, the wife of W. J. Shone, Esq., Surgeon, of a daughter.

MARRIAGES.

BALL, Tertius, M.D., Army Medical Department, to Sophia Anna, second daughter of James MATTHEWS, Esq., of Forest Hill, on October 9th.
BRADDICK, William H., Esq., to Mathilde Maria, youngest daughter of S. T. PARTRIDGE, M.D., of York Place, Portman Square, on October 9th.
*BUZZARD, Thomas, M.D., of Grosvenor Street, to Isabel, youngest daughter of the late Joseph WASS, Esq., of Lea, Derbyshire, at Dethick, Matlock, on October 5th.
CUNNINGHAM, R. W., M.D., H.M. Bengal Army, to Robina, daughter of the late George F. HANNAY, Esq., of Kingsmuir, Fifeshire, on October 7th.
FORSYTH, Charles, Esq., of Hornsey, to Marion Emilia, only daughter of George HENTY, M.D., of Hildrop Road, Tufnell Park, on October 6th.
HILSON, Archibald H., M.D., Surgeon H.M. Bengal Army, to Alice Park, daughter of the late Alexander ANDERSON, M.D., of Jedburgh, on October 4th.
LAWRENCE, Sir Trevor, Bart., only son of the late Sir William Lawrence, Bart., to Bessie, only child of the late John MATTHEW, Esq., of Dorking, at St. George's, Hanover Square, on October 6th.
PERKINS—HOLMES.—On October 7th, at Castle Bromwich, Warwickshire, by the Rev. Edwin Kempson, uncle of the bride, assisted by the Rev. W. H. Perkins, father of the bridegroom, John Robert Perkins, of Hendon, N.W., late House-Physician to the Royal Hospital for Sick Children, Edinburgh, etc., to Emma Kate, third daughter of the late Jasper Holmes, Esq., of Upper Tulse Hill, Surrey.
*PHILPOTS, Edward Payne, M.B., C.M., Leamington, to Charlotte Elizabeth Mary, youngest surviving daughter of the late Arthur THOMSON, Esq., of Aberdeen, on September 30th.
SMALLEY, Henry, Esq., Captain Royal Madras Engineers, to Emmeline Matilda, youngest daughter of Thomas DAVIDSON, M.D., of Bayswater.
WEBSTER, Marshall Hall, Esq., Surgeon, sixth son of *George Webster, M.D., of Dulwich, to Eliza Jane, youngest daughter of the late George T. STUCHBURY, Esq., of London, at Ipswich, Queensland, on June 24th.

DEATHS.

BINDLOSS.—On October 2nd, at Pendleton, Manchester, Martha, wife of *James B. Bindloss, Esq., Surgeon.
*DAVIES, Francis, Esq., Surgeon and Captain 2nd Battalion Worcestershire Rifle Volunteers, aged 69, on October 8th.
DICKSON, Samuel, M.D., at Bolton Street, aged 67, on October 12th.
GRABHAM.—On October 11th, at Pontefract, Harriet, wife of C. Grabham, M.D.
MURRAY.—On October 9th, at Green Street, Grosvenor Square, aged 4, Antoinette N. T., only daughter of Gustavus C. P. Murray, M.D.

BEQUEST.—Mr. William Sinclair of Sowerby, near Thirsk, has left £500 to the Redcar Convalescent Home, and £200 to the Harrogate Hospital.

KENT AND CANTERBURY HOSPITAL.—The appeal for donations and subscriptions towards the expense of making alterations and additions has already produced upwards of £2,600; a further sum of £1,400 is required.

DEATH FROM TOBACCO ADMINISTERED BY A QUACK.—A man was lately poisoned at New York by a quack woman doctor, who administered tobacco for the cure of "fever and ague." The woman was released on bail, while the Coroner's report was sent for investigation to the Board of Health!—*Med. and Sur. Reporter.*

DR. LIVINGSTONE.—Sir Samuel Baker adds, in a postscript to a recent letter:—"I see a letter in the papers from Mrs. Burton, proposing an expedition in search of Livingstone. Although well meant, it would be an useless undertaking, as I shall arrive south of the Albert long before any expedition from Zanzibar could reach Tanganyika. There I shall be certain to hear of him, as I shall be within a few miles of the latter lake. Should any white man be in the country, the chiefs or kings of the various tribes are sure to have the information, and I shall have both the force and supplies necessary for his assistance, with a direct communication established to Khartoum." A telegram from Bombay dated October 6, reports that Dr. Kirk has received a letter from Dr. Livingstone, dated July 6, 1868 (?) reporting that he was in good health and spirits, and that he found what he believed to be the sources of the Nile, between 10 and 12 deg. south.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.
WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.
THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
SATURDAYSt. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Mr. Henry Hancock, "On a peculiar form of Syphilis of the Neck simulating Epithelioma"; Dr. Andrew Clark, "On the part which Pleurisy plays in the Production of Phthisis."
TUESDAY.—Pathological Society of London, 8 P.M.
THURSDAY.—Harveian Society of London, 8 P.M. Mr. G. Gascoyen, "On Varicocele."
FRIDAY.—Clinical Society of London, 8 P.M. Mr. Howard Marsh, "A Case of Cleft-Palate"; Mr. De Morgan, "Case of Fracture of the Skull, with subsequent Coma and Hemiplegia: Recovery: Sudden Death"; Dr. Headlam Greenhow, "Diphtherial Paralysis".

EXPECTED OPERATIONS AT THE HOSPITALS.

QUEEN ADELAIDE'S DISPENSARY, Pollard Row, Bethnal Green Road, Saturday, October 16th, at 3 P.M. Ovariectomy—by Mr. Maunder.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

A METROPOLITAN STUDENT.—The registration of students closed on the 15th inst. On making an application to the President and enclosing a certificate from the gentleman who attended you in your illness, you will no doubt be allowed to register on Monday.

A USEFUL INVENTION.—The *Journal Officiel* says: that a chemist has discovered a method of illuminating letters, whereby the names of streets, numbers of houses, and inscriptions, become more distinct as darkness increases. The process is described as very simple, and consists in the application of a peculiar kind of liquid to the letters.

DRUGGISTS' CHARGES FOR PRESCRIPTIONS.

SIR,—The letters of "Pharmaceutical Chemist" and "Thorn", in the JOURNAL of September 18th, do not touch the evil complained of. There is a question of great importance to members of the medical profession just now above that implied in the correspondence.

I have been in practice for nearly twenty years. When I first entered into partnership in my present firm, I found the custom of this place to be to charge for medicine supplied; viz., 2s. 6d. for mixture, 1s. for powders, 1s. for pills, etc. I altered this plan, and introduced the custom of charging 3s. 6d. and 5s. per visit (medicine included). For the last three or four years, I have tried to get my patients to pay 5s. and 7s. per visit, and to have their medicines made up by the druggist. This year, I have all but succeeded, now sending medicine to a few old families only. I find, however, that I have greater difficulties to overcome than I had in changing the custom of the firm in the first instance; and several persons have asked me to go back to the older plan, and send them the required medicine. They say that the druggist's bill is greater for medicine only than it used to be for medicine and attendance too under the old plan. On inspecting the druggist's bills, I find that the charges for medicine are really greater than used to be charged by our firm twenty years ago.

This introduces a great impediment to the change which all intelligent medical men earnestly desire. It promotes the custom of writing prescriptions in a concentrated form; and prevents many from doing as I have done. It is a subject of great importance. It has a material bearing upon the social future of our profession.

Can you not get at the views of the profession upon this point; and also bring to the notice of the pharmaceutical body a subject which interests them quite as much as it does ourselves?

September 21st, 1869.

I am, etc.,

SUBURBAN M.D.

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

M.D. (Wolverhampton).—You will find an abstract of the case in "Wilcox Laws relating to the Medical Profession".

THE ACTION OF MERCURY.

SIR,—Born in Worcester on July 14th, 1780, I was early destined for the medical profession, and my cousin, Mr. Yates, being then House-surgeon to the Infirmary, I spent my holidays and spare time there for two years before my apprenticeship to a surgeon here, where I have been ever since, with the exception of five years in London. Fond of my profession,

"The master's passion in the breast,
Like Aaron's serpent swallows all the rest."

Among other means, I was a constant reader of the *Lancet*, till and some time after the birth of our JOURNAL, at which I was somewhat of a coadjutor of my most valued friend its founder. *Pax manibus*. To the former I occasionally contributed, and to ours oftener, wherein are several of my letters on other subjects; but the occasion of the present resumption of my pen, is a letter of Dr. Allfrey, of Chislehurst, in our JOURNAL last week, on "The Action of Mercury." As to the Edinburgh Committee, for the pains they have taken in their laborious investigations into the action of mercury upon the bilious secretions, I would ask, *Cui bono?* for look at the difference of constitution of the two beings; so that it may be said, truly the experiments are altogether valueless. Dr. Allfrey goes on to say: "Has mercury any advantage not possessed by other aperient drugs as favouring the expulsion or passage of bile. The experience of many seems to point to such superiority in certain cases of digestive derangement."

In functional congestion of the liver, the bile is always impure; consequently, there is digestive derangement; and the numerous ills arising therefrom are too obvious to need description, and the longer this continues the greater is the evil, till at last the viscus becomes organically diseased, and then life soon ends by some cruel death. In functional derangement of the liver only, be its congestion ever so vast and the bile ever so vitiated, mercury is so far a cholagogue, administered according to my directions in my quondam letters in our JOURNAL, as not only completely to emulge it of its noxious contents, but to restore it to its usual size and to its pure and healthy secretion, as evidenced by palpation, the ability to lie on the left side, by the natural appearance of the feces and urinary excretion, by the colour of the eyes and skin, and other symptoms indicative of health; and these benign appearances generally are preceded by more or less of salivation, but the less the better.

The maligners of mercury, I would rank as little superior to those of the vaccine lymph; these two blessings are certainly divine, and cannot be too highly eulogised—this vanquishing the small-pox, that syphilis—for, generally speaking, this cannot be eradicated without mercury; so that we may form some idea of the danger of those practitioners who pretend to cure this horrid disorder without this inestimable drug, thus transmitting the taint from generation to generation. Those who would discard mercury are of different calibre; some are sincere; others I know not how to designate; and one I know as an arrant touter. To all I would say, be orthodox, or get your living in a less dangerous way.

Dr. Allfrey's letter comes very opportunely, and requires serious attention. Hoping that this may appear in our JOURNAL,

I am, etc.,

THOMAS POPE.

Clebury Mortimer, August 23rd, 1869.

A TOURIST in the United States says: "It is quite a mistake to suppose there is any prejudice here against individual Englishmen. The Germans and Americans look down very much on the Irish. The whole of the western country is almost peopled with Germans. In St. Louis especially, where there are 100,000 Teutons, you might fancy yourself in Bavaria. This German interest is immensely antagonistic to the Irish; and, I am disposed to think, the Hibernian day is gone by in this country; between Germans and Chinamen, Paddy will go to the ground. Even in New York, the German will soon be the dominant interest."—*Times*, September 25th.

NOT A TRUE TAIL.

SIR,—In your number of Sept. 4th, Mr. Owen relates that, many years ago, he delivered a woman of a child who had a true tail; an appendage which was attached to the extremity of the spinal column, and supplied by muscles and nerves. He adds, that he removed this, and sent it, with an account of the case, to the museum of Guy's Hospital, where it is now preserved. As I am not aware that any of the stories of human beings with tails have been authenticated, the case of Mr. Owen, if true, would be most valuable to science; but he will pardon me for saying that his memory has betrayed him as to the true nature of the malformation; and therefore, with his and your permission, I will copy the account given in the Museum Catalogue. The history is taken from his own report; and the short description of the specimen is my own, written some years ago, when I re-examined nearly all the specimens in the museum.

Prep. 2546⁵⁰.—A congenital growth, removed from the back of a child, and styled a tail. It is of conical shape, and between three and four inches long. It was said to be muscular; but nothing now can be discerned in it but cellular tissue, fat, and integument.

Mrs. R., a very excitable and sensitive woman, had had four children, one of whom was said to have been web-footed, owing to the mother having had some favourite ducks. The fifth child was born in February 1842; it was well grown, but said to have a tail. This was a conical body, growing from over the last lumbar vertebra, as seen in the specimen. Its end was curled up, and it was said was readily excited to move when it was touched; the nurse, moreover, said it curled itself round her finger. It appeared to be attached to the integument only, having no connection with the vertebræ, which were continued on to the sacrum and coccyx as usual. A fortnight after birth, a ligature was applied, and soon the growth dropped off. The child thrived; but, when a year old, it could not stand, being only able to crawl about. When four years old, it could only stand upright for a moment, the feet also being inverted and the bladder paralysed. Subsequently the tendons of the feet were divided, and the child was able to walk about on crutches. An examination of the back at that period showed the spinal column quite continuous to the sacrum, and not open at any part. The cicatrix was surrounded by a fatty substance. The mother attributed the malformation to her constantly feeding one of a litter of pigs. This little pig had a mode of curling its tail, which so excited the mother's notice, that she often alluded to it.—Presented by Mr. B. Owen of Finchingfield.

I am, etc.,

SAMUEL WILKS.

7, Grosvenor Street, W.

EDUCATION AND LEGAL POSITION OF WOMEN.—The local correspondent of the *Independence Belge* says, that one municipal body of the town of Vienna has ruled that 7000 women, paying taxes, etc., and complying with legal conditions, shall be admitted to an elective vote. The male population seem comparatively unconcerned. Many in this country must be unaware that the question of women's rights has been at all considered in Austria. It would seem that Mr. J. Stuart Mill has triumphed in at least one European capital. A stir is also being made in Russia. It is said that Mr. Mill's book is read extensively; and the Emperor is reported to look favourably on the idea of women being placed on an equality with men. A mechanical school for women has just been opened at Warsaw, under the immediate superintendence of Government, its object being to train young women of the lower classes in all the lighter kinds of handicraft, such as may be pursued without injury to their health. The project appears to be generally popular, and much good is anticipated from it.

ERRATUM.—We are requested to state that Dr. Fothergill, whose name occurs several times in the report of the Medicine Section of the Leeds Meeting, is not Dr. Fothergill of Darlington, but Dr. J. Milner Fothergill of Morland, Westmorland.

THE ANNUAL MUSEUM.

SIR,—In the current number of *The British and Foreign Medico-Chirurgical Review*, appears an article upon the Annual Museum of the Association. The shortcomings of the Leeds Exhibition are spoken of somewhat severely. The writer more than hints that this is due to insufficient effort on the part of the Leeds Committee. In particular, he says that the events would have been very different, had application been made to the medical officers of large hospitals, etc. In reply, allow me to say that we were here very much disappointed indeed with the meagre display and in the museum; but that we did not and do not blame ourselves for it.

Both Mr. Wheelhouse and Dr. Eddison took a great deal of pains about the museum, and were much disappointed that their success was so small. The printing of the catalogue was delayed to the last moment in order to increase, if possible, the published list of objects, and many objects arrived so late that the naming and arranging of them was scarcely possible. As to the plan suggested by the reviewer, I have farther to say that it was exactly carried out as he proposes. A full printed circular was addressed to all booksellers, instrument-makers, and others likely to help us. A bundle of circulars was sent to every hospital, under cover to some member of the staff, and I myself wrote to personal friends on the staffs of almost all, if not all, the London hospitals, begging them to see that each member of the staff received a circular, and had his attention drawn especially to it. The fact is, the trouble of packing and sending specimens seemed to be too much for busy men.

As the reviewer himself admits, Messrs. Williams and Norgate set an admirable example by their remarkably successful exhibition.

I am, etc.,

Leeds, Oct. 11th, 1869.

T. CLIFFORD ALLEUTT.

DEATH FROM HÆMORRHAGE FROM A SELF-INFLICTED (?) WOUND IN A VARICOSE VEIN.—A gentleman, aged 67, residing in Islington, had exhibited symptoms of aberration of mind for some time, and, by medical advice, a man was engaged to watch him during the night. When the attendant woke on the morning of the 17th, he found his charge dead, having evidently bled to death from a wound in the leg. He had suffered from varicose veins, and it was supposed that the inconvenience from them, in his unsound state of mind, had led him to attempt suicide, by making a cut across one of them. The wound was clean cut. For some time, no knife could be found capable of inflicting it, but, ultimately, such a one was discovered on a stove, covered with dust, close to the bed, and within reach of the deceased. His left hand was marked with blood, but there was none whatever on the knife. Dr. Allen's opinion was, that he had held his vein with the finger of the left hand, and, after cutting the vein, had placed the knife on the stove. The case presents several curious points. First, as an example of actual death from hæmorrhage from a varicose vein. Bleeding to alarming syncope, under such conditions, is common enough, but actual death very rare. Secondly, there can be little doubt that the case was one of self-inflicted wound; inasmuch as the attendant had no motive for murder, and the method selected was one which, it is not probable he would have thought of. What, then, had become of the instrument of suicide? That the knife found was the one, can scarcely be believed. The hypothesis suggested at the inquest, that the blood could run off the blade like ink off a greasy steel pen, is not tenable for a moment. The medical evidence seems clear that it was a wound in the vein, and not a rupture.

VISIBLE ARTERIAL PULSATION.

SIR,—In reply to the query under the above heading, contained in your column of correspondence (JOURNAL, Sept. 18th), may I venture to advise your correspondent to consult the Chapter on "Aortic Disease", in Dr. Stokes's valuable work on *Diseases of the Heart and Aorta*.

I think practical experience fully bears out the truth of the observations of Dr. Stokes and Sir Dominic Corrigan, to whom Dr. Stokes gives the credit of being the first to correctly diagnose permanent patency of the aortic valves. These observations tend to the following facts.

1. Visible arterial pulsation has been noticed where there was no valvular disease.
2. Visible pulsation, to be valuable as a diagnostic symptom, must be accompanied by other corroborative signs.
3. These signs are *bruit de soufflet*, generally double; *frémissement* in the principal arteries of the neck; *collapsing* pulse; and evidences of enlargement of the left ventricle.

Of course, these symptoms are not all invariably present together, nor do they present themselves at all stages of aortic valvular disease. Dr. Corrigan's original memoir on this disease is to be found in the *Edinburgh Medical and Surgical Journal*, vol. xxxvii, pp. 227-228.

I am, etc.,

Bath, September 21st, 1869.

A. B. BRADAZON.

ERUPTION FROM INSECT-BITES.

SIR,—A gentleman who had been staying at a fashionable hotel in Pimlico for a few nights about a fortnight since, upon his arrival here consulted me for an eruption precisely similar in character to that described by Mr. Hutchinson, which was reported in the JOURNAL of October 9th. The fact of the eruption being confined exclusively to the face and hands, and each blotch having a little dark spot in the centre, induced me to conclude that the eruption was caused by the bite of some insect. I heard soon afterwards that mosquitoes had abounded in Pimlico, and that many persons had suffered in a similar manner to my patient, and had been no less alarmed about themselves, as no one seemed to have any recollection of being bitten.

I am, etc.,

GEO. WORTHINGTON, L.K.Q.C.P.I., etc.

1, Heene Terrace, West Worthing, October 11th, 1869.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

MEDICAL TITLES.

SIR,—I am afraid I am intruding, as I suppose ladies may not write to your JOURNAL; but, seeing your leading article on my husband's study-table last Saturday (Sept. 25th), I was delighted. Allow me to express my sympathy with every word of it. You know, Mr. Editor, I have had the misfortune (fortune, I should have said) to marry a doctor, and my friends think I have lowered myself by it; but, when they come to see me, I take care to bring them into the company of old Dr. B. of our neighbourhood, who is in with all the top county families, and is himself quite a squire in his own way; only the worst of it is that, just a few doors from us, there is a low snobby fellow, calling himself "surgeon", who keeps an ugly open shop, with fly-papers and treacle and such like in the window, and my provoking brother will have it that my husband is no better than one of that sort. Now, your article just convinced me that if all medical men could have one common title of "doctor", it would give an air of respectability to all; but, on second thoughts, it would not, unless with the uniform title and portal system they could all have one sense of honour. No doctors must be allowed to keep open shop or to sell medicines, except such as they supply to their own patients. Do, Mr. Editor, add this in your next article, and save me from the slighting sneers of my relatives.

I am, etc., ELEANORA.

P.S.—When women have seats in Parliament, things will, no doubt, soon be changed; but, meanwhile, could not the existing medical schools give their diplomas only on condition that those who hold them should not keep shops and advertise, and act just like petty tradesmen?

SIR,—In Sir Wm. Jenner's Address in Medicine at the late meeting of the British Medical Association, I observed that he adverted to a particular influence of the bromide of potassium upon disorders of the generative function. Can you, or any of your correspondents, kindly inform me as to the peculiar action alluded to by Sir William?

Dublin, October 4th, 1869.

A CAREFUL READER.

DR. WHITMORE'S REPORT ON GAS.—The gas of three Companies was analysed by Dr. Whitmore in August and September. In the samples from two Companies there was excess of sulphur and ammonia; and in the third, excess of sulphur. He observed, however, that sulphuretted hydrogen was not detected in any case.

J. W.—The Degree of Doctor of Medicine (Edinburgh) is a medical qualification. There is no power of preventing any one holding such a qualification from attending surgical cases; but it is very improbable that he could recover charges for the same in a court of law.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Oct. 6th; The New York Medical Gazette, Sept. 25th; The Parochial Critic, Oct. 6th; The New York Medical Record, Sept. 25th; The Boston Medical and Surgical Journal, Sept. 23rd; The Madras Mail, August 4th; The Indian Medical Gazette, August 30th; The Herts Advertiser and St. Albans Times, Oct. 9th; The Birmingham Daily Post, Oct. 9th; The Western Mail, Oct. 12th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. J. A. McBride, Cirencester; Mr. F. Dunn, Wolverhampton; Dr. H. Blanc, Southampton; Dr. Whitmore, London; Dr. Mushet, Colney Hatch; Dr. Burder, Clifton; Mr. Craven, Hull; Mr. A. Trow, Cleobury Mortimer; N. H. O. T., Sudbury; Mr. W. B. Langmore, London; Dr. C. F. Buchan, Runcorn; Mr. W. H. Masters, Thrapstone; Dr. Dudfield, London; The Secretary of the Medical Club; Dr. Bryan, Northampton; The Secretary of the Clinical Society.

LETTERS, ETC. (with enclosures) from:—

Mr. F. Le Gros Clark, London; Dr. R. Farquharson, Rugby; Mr. S. Wood, Shrewsbury; Mr. P. C. Little, Dublin; Dr. W. H. Robertson, Buxton; Dr. J. M. Fothergill, Morland; Mr. Steele, Clifton; M.R.C.S. London; Dr. B. W. Foster, Birmingham; Dr. J. T. N. Lipscomb, St. Albans; Dr. J. Gardner, Box; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Lomas, London; Dr. Treutler, Kew; Mr. R. Craister, Bromley; Dr. Wadham, London; Mr. J. Sampson Gamgee, Birmingham; Mr. C. H. Moore, London; The Registrar of the Medical Society of London; Mrs. Baines, London; Dr. George Johnson, London; Mr. W. Smith, Clifton; Mr. J. B. Curgenvin, London; Mr. R. S. Fowler, Bath; Mr. W. Monckton, Staplehurst; Dr. J. Beddoe, Clifton; J. W., New Quay; Mr. G. Worthington, Worthing; Mr. J. Becke, Northampton; Dr. T. Clifford Allbutt, Leeds; Mr. W. J. Wilson, Chesterfield; Mr. G. Southam, Pendleton; The Secretary of the Obstetrical Society; Mr. Laffan, Dublin; Dr. Laycock, Edinburgh; Mr. J. T. Gabriel, Queenstown; Mr. C. F. Maunder, London; Dr. D. McVeagh, Coventry; H. H. P., London; and Mr. Paget, London.

BOOKS, ETC., RECEIVED.

Anatomy: Descriptive and Surgical. By Henry Gray, F.R.S. Fifth Edition. By T. Holmes, M.A. London: Longmans. 1869.
Exercises in Practical Chemistry. By A. G. Vernon Harcourt, M.A., F.R.S., etc., and H. G. Madan, M.A., F.C.S. Series I. Oxford: 1869.
The Cry of the Children: a Lecture. By Dr. Syson. Manchester: 1869.
Provident Societies and their Medical Staff. 1869.
On Chloroform. By C. Kidd, M.D. London: 1869.
Two Cases of Chromidrosis: with Remarks. By A. Wynne Foot, M.D.T.C.D. Dublin: 1869.
Manual of Comparative Anatomy and Physiology. By S. M. Bradley. London and Manchester: 1870.
Report of St. Mary's Hospital for the year 1868-69.
On the Presence of Sulphocyanides in the Blood and Urine. By Arthur Leared, M.D., M.R.I.A., etc. London: 1869.
A Guide to the Examination of the Urine. By J. Wickham Legg, M.D.

Results of Meteorological Observations, for the week ending Saturday, October 9th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.							Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	WIND.										RAIN.		
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.			Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell.	Amount in inches.
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm, etc.				
BATH..... Dr. Barter, F.M.S.	30.131	0.311	57.0	54.3	51.8	83	74.0	48.0	26.0	66.7	49.5	116.2	..	4	6	..	0.7	..	2.3	0.3	..	0.4	0.3	2.7	1.2*	0	0	
BOURNEMOUTH..... Dr. Compton, F.M.S.	30.151	0.330	57.8	55.0	52.5	82	70.5	47.1	23.4	64.5	50.6	118.0	43.8	1.3	2.8	..	..	..	2.7	1	0.7	1.7	0.3	0.7	1.1	0	0
DOVER..... Dr. Parsons.	30.139	0.745	58.0	56.0	54.2	87	66.6	38.6	28.0	62.9	43.7	..	..	3.2	..	..	..	1	2	0.3	0.7	0.3	2.7	0.7	1.9	1	0.33
DUBLIN..... Dr. J. W. Moore.	30.086	0.257	59.2	57.0	55.0	87	69.2	52.5	16.7	64.1	55.0	..	46.3	5.4	..	..	..	6.9	2.1	1.4	0.6	0.7	..	1.3	1.1	1	0.36
KEW..... Dr. Treutler, F.L.S., etc.	30.181	0.410	56.1	54.3	52.6	88	72.2	45.9	26.3	65.5	49.5	119.1	..	1.8	1.6	0.3	..	..	1.3	0.3	..	1.3	0.3	3.3	1.2	1	0.03
LLANDUDNO..... Drs. Nicol and Dalton.	30.081	0.664	58.7	55.9	53.4	83	75.3	49.2	26.1	65.9	51.7	..	..	5.1	..	..	..	2	..	1.3	1.3	2.3	..	..	0.8	2	0.35
MALVERN..... Messrs. W. and J. Burrow.	30.154	0.356	58.0	55.5	53.3	84	75.0	48.2	26.8	67.7	51.0	133.0	40.4	4.2	2.1	0.7	..	..	1.3	1.3	1.7	1	0.3	0.7	2.9*	1	0.02
SCARBOROUGH..... Dr. Fox, M.R.C.P.	30.153	0.339	55.0	53.5	52.0	90	68.3	46.7	21.6	61.5	50.4	119.7	42.1	6	6.4	0.7	0.7	..	..	1	1	1	1.3	1.3	2.5	2	0.33
SIDMOUTH..... Dr. Mackenzie, F.M.S.	30.122	0.328	58.6	57.0	55.6	89	68.5	50.0	18.5	64.8	52.7	..	..	2.4	5.6	..	..	..	2	4	1	..	..	..	0.7	1	0.02
WORTHING..... W. J. Harris, Esq., M.R.C.S.E.	30.165	0.382	59.1	57.1	55.3	88	69.1	46.8	22.3	64.8	53.5	116.7	39.4	2.7	3.2	..	..	1	2	..	..	0.3	0.7	3	1.4	0	0

* Mean hourly velocity in miles, as measured by a Robinson's Cup and Dial Anemometer.

REMARKS.—Atmospheric pressure has been considerably higher than last week. It rose rapidly on the 1st day of the week,—the rise amounting on an average to 0.400 inches, and the variations after this were very small indeed. The range has been rather less than that of the week before. Mean temperature has been on the whole very slightly higher, and the maxima have in almost all cases exceeded those of the foregoing week by several degrees. The range has been greater. Winds have been much more variable in character, and of very light force. Rain has fallen in but small quantities, and the sky has been much more free from clouds. An Aurora Borealis was seen on the evening of the 6th, at Bath, Dover, Dublin, and Worthing. The weather of the week has been fine and of a very settled nature; marked by rather high day temperatures and comparatively chilly nights; during which there was generally a copious formation of dew; in the mornings, and, in some cases, in the evenings too, fogs and mists prevailed; but these had mostly cleared away by 9 or 10 a.m. The days have been bright and warm, with only light breezes; while the nights were calm and generally clear. Lightning was seen to the East in Dublin on the 3rd, at 11 p.m. At Bath a few cases of typhoid fever have occurred; but the general health is good. In Dublin scarlatina caused 13 deaths, measles 9, and diarrhoea 20, during the week ending October 2nd; the number given in the last report having reference to the week ending September 25th.

Kew, W., October 13th, 1869.

W. J. TREUTLER.

A LECTURE

ON

THE TREATMENT OF CATARRH AND BRONCHITIS.

By GEORGE JOHNSON, M.D., F.R.C.P.,

Professor of Medicine in King's College; Physician to King's College Hospital.

AN ordinary catarrh, although not a dangerous or a very serious disease, is yet, with many persons, an oft recurring malady, which occasions a great amount of discomfort and annoyance both to the patient and to his associates; and, as treatment has considerable influence upon the progress of the disorder, it is worth while to give the subject careful consideration.

The exciting cause of a catarrh, in the great majority of cases, is a chill, or some unknown atmospheric influence, which tends to suppress the action of the skin; and the most successful plan of treatment consists in the employment of means for restoring the free action of the skin. The popular domestic treatment consists in the use of a hot foot-bath at bed-time, a fire in the bed-room, a warm bed, and some hot drink taken after getting into bed, the diaphoretic action being assisted by an extra amount of bed-clothes. Complete immersion in a warm bath is more efficacious than a foot-bath; but the free action of the skin is much more certainly obtained by the influence of hot air—most surely and profusely, perhaps, by the Turkish bath. The Turkish bath, however, is not always to be had, and, even when available, its use in the treatment of catarrh is attended with some inconvenience. In particular, there is the risk of a too speedy check to the perspiration after the patient leaves the bath. On the whole, the plan which combines in the greatest degree efficiency with universal applicability consists in the use of a simple hot-air bath, which the patient can have in his own bed-room. All that is required is a spirit-lamp with a sufficiently large wick. Such lamps are made of tin, and sold by most surgical instrument makers.

The lamp should hold sufficient spirit to burn for half-an-hour. The patient sits undressed in a chair with the lamp between his feet, rather than under the chair. An attendant then takes two or three blankets and folds them round the patient from his neck to the floor, so as to enclose him and the lamp, the hot air from which passes freely round his body. In from a quarter to half-an-hour there is usually a free perspiration, which may be kept up for a time by getting into bed between hot blankets. I have myself gone into a hot-air bath suffering from headache, pain in the limbs, and other indications of a severe incipient catarrh, and in the course of half-an-hour I have been entirely and permanently freed from these symptoms by the action of the bath.

Another simple and efficient mode of exciting the action of the skin consists in wrapping the undressed patient in a sheet wrung out of warm water, then, over this, folding two or three blankets. The patient may remain thus "packed" for an hour or two, until free perspiration has been excited.

I may mention, in passing, that the hot-air bath and the wet packing are very useful in the treatment of many forms of disease. I constantly employ both in the treatment of renal disease; and not long since I believe that by the wet packing I saved the life of a lady, in whom very alarming symptoms were associated with the imperfect outcoming of the rash of scarlatina.

Now, to return to the treatment of catarrh, let me impress upon you that the sweating plan of treatment, to be successful in cutting short the disease, must be adopted early—I mean within a few hours from the commencement of the symptoms.

Another mode of treating catarrh, which is very successful with patients who are tolerant of opium, consists in giving a dose of opium, or morphia, at bed-time. Within half-an-hour after the opiate is taken, it frequently happens that the unpleasant coryza, and every other symptom of catarrh, have passed away. If the patient can avoid exposure on the following day, the cure may be complete, and there is no need to repeat the dose.

It is probable that the good effect of the opiate is partly due to its diaphoretic action, which may be increased by combining it with ipecacuanha; but, besides its action upon the skin, there must be some direct influence on the nerves and vessels of the inflamed mucous membrane to explain the speedy relief from discomfort which follows the opiate dose. The opiate treatment of catarrh is not so generally applicable as the sweating plan, for the reason that many persons are intolerant of opium, or they cannot take it without suffering from headache, nausea, and other distressing symptoms, which render it an un-

desirable remedy for them. In any case the opiate treatment, like the diaphoretic method, is more successful in proportion as it is resorted to early in the attack.

In some persons, repeated doses of ammonia have the effect of lessening the coryza and other distressing catarrhal symptoms. Five grains of sesquicarbonate of ammonia, or a drachm of the aromatic spirit, may be taken in water every three hours. A single dose of ammonia at bed-time is an efficient and useful diaphoretic, its action being aided by external warmth. Some catarrhal patients experience great relief from an occasional dose of spirit of camphor. The usual dose is from ten to thirty drops in a wineglass of water. In ordinary catarrh, as a rule, no change of diet is required. A catarrh which has gone on unchecked for a few days, is sometimes much mitigated by a generous diet and an extra glass of wine.

Those who are especially liable to catarrh should be careful to keep their feet warm and dry; and they should be warmly clothed, wearing woollen next the skin. They should avoid excessive wrapping up; since this, with even gentle exercise, tends to overheat the body, and so to increase the risk of a subsequent chill. The practice of wearing a hare-skin, wash-leather, or thick folds of flannel over the chest, is to be condemned as at once filthy and unwholesome.

It may be well to remind catarrhal subjects that the nose is a natural respirator, so that, in passing from a hot room into the open air, if the mouth be kept closed, the air, in its passage through the nostrils, has its temperature raised before it enters the chest.

There is reason to believe that the daily use of a cold sponge-bath, or a shower-bath, has a wholesome hardening influence upon those who adopt it, and that it renders them less liable to attacks of catarrh.

Treatment of Acute Bronchitis.—Acute bronchitis is an exaggerated catarrh; the two diseases are essentially the same, and they require the same principle of treatment, only modified according to the character of the symptoms.

In the early stage of acute bronchitis, when the mucous membrane is dry and swollen, the hot-air bath or the wet packing may be employed once or oftener with advantage. Another very useful remedy in this stage is tartar emetic, in doses of one-sixth of a grain, combined with liquor ammoniæ acetatis. This mixture exerts a diaphoretic action both upon the skin and the mucous membrane of the air-passages; thus it brings on the stage of secretion, and with this a mitigation of the vascular engorgement. The patient should remain in bed, and the temperature of the room should be maintained at from 60 deg. to 65 deg., the air being kept moist by steam from the spout of a kettle, or a special boiler on the fire. The inhalation of steam, repeated several times in the course of the day, is often very soothing and beneficial. Hot fomentations may be applied to the front and back of the chest by means of spongio-piline, or flannels covered with mackintosh. A mild mustard-poultice to the front of the chest is a good remedy for a sense of tightness and dyspnoea; but I advise you not to excite painful inflammation of the skin by mustard or turpentine, or by any other means.

When dyspnoea, with a feeling of tightness and oppression at the chest, is urgent and distressing, the application of a few leeches to the chest, or a moderate abstraction of blood by cupping, often affords prompt, decisive, and permanent relief. Venesection is very rarely required; though, in the case of a plethoric subject suddenly seized with general capillary bronchitis, and threatened with death from apnoea, venesection may prove a life-saving remedy. Milk and beef-tea form the most suitable diet during this stage of the disease. Stimulants and opiates are to be avoided, as a rule, on account of their tendency to increase the congestion and dryness of the inflamed mucous membrane. In the second stage, when a free secretion has been established, antimony and acetate of ammonia are to be discontinued. At this period, a combination of sesquicarbonate of ammonia, with spirit of chloroform, is useful as a stimulating expectorant and antispasmodic. Brandy or wine in moderate quantities may now be required to sustain the strength. When, in the advanced stages, there is a profuse purulent secretion, with copious perspirations, the ammonia mixture may be replaced by one, each dose of which contains a grain of sulphate of quinine, two grains of sulphate of zinc, and twenty minims of aromatic sulphuric acid. This combination often checks very rapidly the excessive secretion from the bronchial mucous membrane. The stimulating expectorants are sometimes useful at this stage of the disease—I mean senega, squills, ammoniacum, and the compound tincture of benzoin. If, as sometimes happens, the stimulating expectorants suddenly check secretion, tighten the breath, and increase dyspnoea, their employment must at once be discontinued. When the secretions accumulate and threaten suffocation, the patient being blue, and cold, and drowsy, and the cough nearly or quite ceasing, an emetic of sulphate of zinc is often wonderfully efficacious in clearing the air-passages.

Here I must give you an especial warning with regard to opium. A patient who has been sitting up in bed, labouring for breath day and night, naturally craves for sleep, and begs for an opiate. Now, a small dose of opium given in such a case, has caused fatal narcotism in numberless instances. The opiate stops the cough, and, of course, the expectoration; the patient sleeps more and more heavily; meanwhile the secretion accumulates, and causes fatal apnoea. Never, therefore, give an opiate to a bronchitic patient who has the slightest blueness of the lips. When the expectoration is quite free, and the lips are florid, you may sometimes venture to give a small opiate with antimony or ipecacuanha, or you may give a drachm of the compound tincture of camphor, or twenty minims of chlorodyne. The good effects of a few hours' sleep thus procured are sometimes very manifest.

When bronchitis is associated with blood-contamination consequent on Bright's disease, diaphoretics, purgatives, and dry cupping over the loins, are amongst the most useful remedies.

The treatment of *chronic bronchitis* is essentially the same as that of the acute form of the disease. They merge into each other by imperceptible degrees. An acute attack may subside into a chronic condition, and exposure to cold will quickly convert chronic into acute bronchitis.

Amongst other remedies in the chronic stage, the inhalation of the vapour of creasote, or oil of turpentine, by means of a Nelson's inhaler, is often beneficial. These vapours facilitate expectoration at the same time that they tend to check the profuse purulent secretion. The abundant secretion may sometimes be checked by inhaling, in the form of spray, a solution of tannic acid.

In treating diseases of the air-passages by the inhalation of vapours, bear in mind that these vapours rapidly pass beyond the lungs: they are quickly absorbed and enter the circulation, causing, in some instances, headache and other discomforts. The necessary contamination of the blood by the inhalation of vapours, renders this mode of medication less generally useful than it otherwise might be in the treatment of bronchial inflammation and catarrh.

Change of air, and, in particular, a residence in a mild, dry, and equable climate, are amongst the most important remedial and preventive measures.

OBSTETRIC MEMORANDA.

[UNDER this head, we shall, from time to time, as materials come to hand from correspondents, publish records of cases remarkable in themselves, or illustrating points of interest in obstetric practice, therapeutic or manipulative. We shall probably in this way preserve from oblivion the notes of very many useful and instructive occurrences in private practice; for the great obstetric experience is that—for the most part hitherto unwritten—of the great body of general practitioners throughout Great Britain. We will only ask those who may forward cases for record, to relate them with the utmost brevity, and equally to condense any appended remarks.]

CASE OF FEMALE TRIPLETS.

By FREDERICK THOMAS COATES, M.R.C.S.

ON December 20th, 1868, I was requested to see Mrs. J., of Compton Mews, aged 25, who was about the end of her third pregnancy. I found that she had anasarca and great dyspnoea; the urine was very high coloured, and scanty in quantity. Considering that the dropsy was due to pressure on the renal vessels, little could be done until after confinement. However, I gave diaphoretics, diuretics, and purgatives.

At five o'clock in the morning of December 22nd, 1868, I was requested to attend, when I found that she had been in labour some hours. The pains were frequent, but with little effect. I applied a binder, and gave ergot and brandy. The pains soon became stronger; but, on account of the abdomen being of an enormous size, the abdominal muscles could be of little use. On my arrival, the membranes were entire, and a breech presented. This child was born at twenty minutes past 6 A.M.; a second child twenty minutes afterwards; and a third at twenty-five minutes past 7, that being a footling. All were born alive. I removed the placenta, on account of the hæmorrhage. The uterus contracted after giving opium and brandy. My patient was very much exhausted. I had her well kept up with beef-tea and brandy. However, she had no milk at all. The three children had to be fed; they all died, one after each other, from want of the mother's milk, and, being very delicate children, within a fortnight of their birth. The dropsy nearly left by the end of the month. My patient quite recovered. I may just add, that I attended her on January 14th, 1868, with a fine boy, making four children in one year.

HOSPITAL VERSUS HOME PRACTICE.

By J. MATTHEWS DUNCAN, M.D., Edinburgh.

THIS important question is now so fully occupying the attention of the profession, that its nature and general bearings do not need to be pointed out. The decision of it is made to depend upon statistical statements and reasonings to a degree which I cannot approve. I think that other considerations bearing upon the question deserve much more attention and respect than they get; but at present I shall not even enter upon them. I propose to consider the statistical statements that are adduced, and to whose sole arbitration the profession is asked to bow.

Now, the first thing to be considered in a statistical statement is the worth or reliability of the data. I do not mean to inquire into, far less dispute, the desire on all hands for truth. I mean to inquire into the value of the data brought forward as the foundation of true conclusions. If the data be true, a great point is made out. If the data be false or not trustworthy, the whole statistical reasoning is false or not trustworthy. If the data be true, it does not follow that the conclusions drawn from them are valid or true. Before that is admitted, the reasoning also must be carefully scrutinised.

Two great sets of data are brought forward for comparison—hospital statistics, and statistics of home practice. They are further subdivided into surgical and obstetrical data.

Hospital statistics, whether surgical or obstetrical, are generally accepted as reliable. I know of no serious challenge of their truth. Nothing further need be said of them. Only, in discussing their farther consideration, it may be added that their very alarming aspect, at least at first sight, is favourable to the idea that they are true; for institutions, like individuals, have a tendency to make things look pleasant—a quality in which hospital statistics are certainly deficient. Quite recently (*Lancet*, Oct. 2nd, 1869, p. 477), an attempt has been made to injure the character of hospital statistics of amputations. While I have no doubt that hospital statistics are imperfect, I have also no doubt that all other statistics are very much more imperfect and unreliable. If hospital records be not trustworthy, what faith can be placed in a collection of private records such as Sir James Simpson offers as the basis of his arguments and conclusions?

The statistics of home practice are in a very different position from those of hospitals; and it is a very serious and indispensable duty at present to inquire into their value. The statistics of home practice are got from individual practitioners or private practice, and from dispensary or home practice of public institutions. In order that any confidence in such data may be expected, the following conditions are necessary.

1. They must not be derived from memory.* It is almost useless to insist on this point. No one, even very slightly acquainted with human nature, will trust the memory in such circumstances. Trusting this frail record, I have repeatedly heard practitioners of large experience in midwifery say that they never had a death in childbed; and this even when they condescended on the number of their cases. Trusting this frail record, I have heard practitioners of large experience say that they never saw any great evil or death result from the use of intra-uterine pessaries; yet, very fortunately for the female sex, this boasted remedy has fallen into almost entire disuse. Trusting to this frail record, let us hope, is part of the explanation of the present delusion of the profession as to the safety and efficacy of the treatment of dysmenorrhœa and sterility by splitting of the cervix uteri. Trusting to this frail record is probably the explanation of the great success at one time attributed to iodine injections in ovarian dropsy. Examples of the evil abound. Had men noted down and numbered their cases, we should never have had the succession of therapeutical delusions, calamitous to the female sex, which have risen and fallen of late years. Any man who does not note down and number his cases should, in the present day, when the value of statistics is admitted, be ashamed of coming forward as recommending new remedies. Certainly he cannot be implicitly trusted. Sir James Simpson believes all statistics of amputations derived from memory to be "horribly fallacious".

2. The second condition necessary is, that the items should be noted down at the time of their occurrence. In the present investigation, two items require to be noted down: first, the operation or the confinement;

* "All conclusions drawn from the memory are, observes Malgaigne, horribly fallacious; and it is, he adds, to their employment that we owe the astonishing delusions almost generally professed regarding the real danger or fatality of amputations."—Simpson's *Obstetric Works*, vol. ii, p. 546.

and second, the recovery or death. Items noted down after a lapse of time are nearly as misleading as if the memory, entirely unaided, were trusted to. This noting down of two items at separate times leads to a demand for great care; and I am satisfied that, in the case of public institutions for home practice, this care is not always taken; and the result is data of no value. Take obstetric practice of dispensaries. Cases are all entered when allotted to different midwives or students; but the entry of the delivery is often omitted, and the upshot of the whole case is often not recorded. The midwives or pupils forget this duty, or go away from the place, and cannot fulfil it. This is the way in which my own dispensary statistics are rendered unsound, and it is the best account I can give of the manifest imperfections of dispensary statistics elsewhere. In like manner, in surgical practice, I can easily conceive that an operator, especially if he operate far from his abode or for a neighbouring practitioner, never hears the upshot of the case, or sometimes forgets it if he does.

3. The third condition is, that the statistics of dispensaries or of private practice yield credible results. This may appear to some a supererogatory demand; but I am sure it is not, and I shall show it. Again, I shall take as an example the statistics of midwifery dispensaries. Le Fort and Sir James Simpson proclaim a mortality of 1 in 212 in the home practice of midwifery. I shall show that this result is absurd, by an appeal to the absurdity of the data on which it is founded. Preliminarily, I may say that, so far as I can make out, ordinary midwifery practice in good hands yields a mortality of not less than 1 in 120. In its particularly fortunate years, the Dublin Hospital has seldom gone far above this. Private practice on a large scale goes above this, probably, quite as seldom. But Le Fort and Simpson ask us to believe that the average mortality of home practice of midwifery is 1 in 212. This is a very small part of what they ask us to gape and swallow, shutting our eyes. The data upon which this mortality of 1 in 212 is based contain, among others, the following stupendous successes (*Des Maternités*, p. 32). The Westminster Benevolent Institution, in 4,761 confinements, lost 8 mothers, or 1 in 595! Who is to understand this? How can practitioners, who generally lose about five times as many, believe it? How can a gentleman (Simpson's *Obstetric Works*, vol. ii, p. 639), who in two years of his private practice loses 1 in 45, believe it? Here is another of Le Fort's items. The Stettin Polyclinique, in 375 cases, lost 0. That is still more wonderful, and likely to be fruitful in equally wonderful conclusions, when it is the basis of an argument. The Westminster General Dispensary, in 7,717 cases, lost 17 mothers, 1 in 453! Come from such statistics of Le Fort and Simpson to the sad statistics of comparatively rural practice. Mr. Ellis (*BRITISH MEDICAL JOURNAL*, Jan. 22, 1859, p. 64) and his brother had 2,157 cases of labour; they lost 19 mothers, or 1 in 113. I am sure the Messrs. Ellis cannot find the mortalities above recorded to be credible by them. Mr. Harrinson, in 1,000 cases, lost 1 in 111 (*BRITISH MEDICAL JOURNAL*, Nov. 12th, 1859, p. 909). How can these gentlemen be expected to give credit to the extraordinarily small mortality above recorded? If they do give credit to these remarkable statistics, they must also be very sorry that they acquired skill and experience and got practice among well-to-do people. They must long, for the sake of their patients, to have the filth, the bad air, the poverty, of London dispensary practice, imported into their rural localities; and with them the imperfectly educated midwives and medical students who achieve the successes.

I am not a surgeon, and must speak with some diffidence on an unsettled surgical point; but I cannot avoid saying that some of Sir James Simpson's surgical data are very like the incredible obstetrical data which I have just given. For example, he is in my eyes a marvellous, or, to use a term of Mr. Holmes's, a "miraculous" surgeon, who has performed fifty-two primary amputations without a death; yet he finds a place in Sir James Simpson's statistics (*Edinburgh Medical Journal*, March 1869, p. 827).

4. The last desirable condition of good statistics is, that they should be collected with no particular object in view. The tendency is to produce the kind of figures that is wanted; and for this there are several pretty evident reasons. No one, so far as I know, has so often as Sir James Simpson dwelt upon the advantage of a statistical collection being made without a view to an argument, or with a view to oppose a favoured opinion. These advantages are certainly carefully excluded in the present argument, so far as private practice goes; for, in his letter (*Edinburgh Medical Journal*, March 1869, p. 820) to his country friends, asking for their data, Sir James Simpson has reiterated the opinion which he hopes to prove by the data for which he asks.

To conclude: I find the new statistics adduced in the present argument against hospitals to be worthy of no confidence. For, first, we have no assurance whatever that the statistics of amputations in private practice are not derived from memory, and therefore "horribly fallacious"; second, we have no assurance that the items were noted down by the observers at the time of their occurrence, in the statistics which are peculiarly relied on by Le Fort and Simpson; thirdly, some of the data in the peculiar statistics of the same gentlemen are "miraculous" or incredible; fourthly, the collection of amputations from private practice is damaged by the very terms of the letter which led to their return.

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

NOTES ON THE PRESENCE OF THE BODY-LOUSE IN PRURIGO SENILIS, AND ON THE OCCURRENCE OF LICE ON THE HEAD IN ADULTS.

By EDWARD NETTLESHIP, Esq.

[THE connexion between pediculi and eruptions on the scalp or skin generally (pedicularia) has for some years received much attention amongst Mr. Hutchinson's out-patients at the Hospital for Diseases of the Skin, Blackfriars. The following statistical notes as to Mr. Hutchinson's recent experience on the point, may be of interest. They strongly support the opinions of Hebra, which have been ably advocated by Squire and others in our own country.]

In examining the notes of a number of cases of prurigo in adults and aged persons, it is found that lice were looked for in fifty-five, and found in fifty-two. The cases in which this examination was made were not selected in any way, except with regard to the time at our disposal. In eight cases, the lice were found only on the head. In seven of these, however, no search was made on the body; and we may fairly presume that they would have been found, if looked for. We have then remaining forty-four cases (80 per cent.) in which lice were actually found on the clothes or bodies of the patients. This fact alone is strongly in favour of the doctrine that "prurigo senilis" depends upon the presence of pediculi on the body; and the evidence would no doubt be more conclusive, if we were always able to make repeated examinations of the under-clothes of our patients; for many of them (especially women) put on clean linen immediately before coming to hospital, and this adds greatly to the difficulty of proving the presence of lice or their ova. With regard to the general opinion that lice are rare on the head in adults, it appears that in sixteen of the above cases there were lice both on the head and on the clothes, the average age of fourteen out of this number being forty-eight years. One patient, aged 60, had lice on his head, without any prurigo of body; and he would not admit the presence of pediculi in the latter situation. In many of these cases, however, there did not seem to be many lice on the head; and in all the absence of irritation of the scalp was remarkable, and contrasted strongly with the severe eruptions so often seen on the heads of children from the same cause.

There does not seem to be any relation between the number of lice on the body and the severity of the pruriginous rash; and the same may be said of the porrigo in children from head-lice; and, on the other hand, it is probable that many adults are affected with lice, who never suffer from prurigo (just as we often find a child's head full of ova, and yet devoid of irritation.)*

It seems possible that a single attack of pedicularia may establish, in persons of irritable skins, a more or less permanent pruriginous condition; so that very slight causes (*e.g.*, increase of external temperature or moisture) may afterwards induce repeated severe attacks of prurigo. Some of the cases of relapsing prurigo, which are so troublesome to the patients and unsatisfactory to the surgeon, may perhaps arise in this way.

A CASE IN WHICH AN ARTIFICIAL TOOTH-PLATE WAS SUCCESSFULLY EXTRACTED FROM THE LOWER PART OF THE OESOPHAGUS.

By JOHN DEARDEN, M.R.C.S.L. & L.A.C., Church, near Accrington. H., aged 30, presented himself at my surgery at noon of the 30th August, and stated, that on taking a glass of water to drink, a front false tooth and the gold plate had become dislodged, and that he had swallowed them. He appeared to be much distressed, and complained

* The nurse of a children's ward in the London Hospital affirms that she has never (in her present situation) seen a patient brought into her ward whose head was quite free from lice. She thinks that body lice are commonest on children suffering from medical diseases, from their having been longer confined to bed, than in the majority of surgical patients.

of great pain in the epigastric region. I asked him to drink a little water. After doing this, he complained of great pain and difficulty in swallowing about the spot above described. I proceeded to pass a probang, measuring fourteen inches, about eleven inches of which passed readily enough, when it came against some hard resisting body, which I took to be the tooth. I immediately tried to force it down, but to no avail. Having no forceps long enough, I at once fixed on the probang about twenty nooses of strong horse-hair, the nooses lying upwards. I passed it down, and with great difficulty succeeded in getting it past the obstacle. I then made gentle traction and manipulating, until I found that some of the nooses had become fixed. I then increased the force, but found the resistance so great that it seemed impossible either to bring up the probang or the tooth. At last, the horse-hair gave way, and the probang came up, leaving the latter in the same place. I repeated the operation several times with little better success; the hair being most often cut through. Once, the tooth was drawn as high as the cricoid cartilage. I resolved upon trying fresh materials for the nooses; and, having some very fine steel wire which I used for sutures, with this I armed the probang and proceeded to pass it, only more readily than before; and, after a little careful management, and considerable force, to the intense relief of the patient, I succeeded in extracting the tooth. The time occupied, from first to last, was about forty minutes.

On September 8th, with the exception of soreness for the first few days after the operation, and restricting himself to a farinaceous diet, he had felt no other inconvenience; and is now perfectly well.

The measurement of the plate from point to point is one and a quarter inch, and from the apex of the tooth to the edge of the plate is five-eighths of an inch; there is a spike at one end five-sixteenths of an inch in length: its use was to secure the tooth more firmly, by being received into a hole drilled in the old stump. I need scarcely make any remarks about the difficulty of extraction, when the number of points, and the very irregular outline of the plate, are taken into consideration.

DEATH FROM BICHLORIDE OF METHYLENE.

By PETER MARSHALL, ESQ.

A FATAL case of the administration of the bichloride of methylene having occurred at the Charing Cross Hospital last week, in my hands, and as it is the first case of the kind that has taken place, it is important to know all the facts. The patient was a man, thirty-nine years of age, the subject of malignant disease of the left antrum, extending upwards and pressing upon the malar bone, producing slight ecchymosis under the eye; the tumour protruded likewise from the nostril. There had been one or two attacks of hæmorrhage during the progress of the disease, which had been rapid. From the unfavourable aspect of the case, Mr. E. Canton, under whose care the patient came, refused to operate; but, on the following day, the friends of the patient, and the patient himself, strongly urged an operation; and, as a day's delay would lessen the chances of his recovery, it was decided to be performed at once. Mr. Canton having called upon me to explain the nature of the case, and the patient's knowledge of the risk he ran in all its bearings, I agreed to administer the anæsthetic. The patient, when brought into the operating theatre, looked somewhat pale and anxious. The pulse was a fair medium one, and not frequent. One drachm (by measure) was put into the mouthpiece, which was capacious, and this was administered, slowly and cautiously, for about three minutes, as nearly as I can judge, not being timed by the watch. The house-surgeon kept the left radial artery under his finger, while I kept mine on the right, at the same time observing the breathing. The methylene being exhausted, I now put half a drachm, first examining the pupil, which was slightly dilated. The countenance changed, but not suddenly. I called the attention of the medical staff to the condition of the patient, with the view of asking whether I should proceed further, when the patient's head gradually fell back; the pulse, which had become feeble, now ceased; but there was no stertor nor lividity of countenance. He was removed from the chair, and laid in a horizontal position. Artificial respiration and galvanism were applied, but with no good result.

I presume that this death was due to a combination of circumstances, rather than to any single cause; and that these circumstances were:

1. His feeble condition arising from hæmorrhage, and the exhausting effects of the disease, from which he had suffered for about three months; 2. The mental depression; 3. The want of expiratory power (if I may use the term), which was increased by the necessary bandage round the abdomen, to prevent struggling during the operation. The case was one *in extremis*, where medical and surgical aid were invoked against hope. I have said that the cause of death was to be traced to a

combination of circumstances; but I have no doubt that the actual, though unforeseen determining cause of death, was the mechanical inability of the patient to expire, as his weakened muscles began to feel the paralysing influence of the anæsthetic. There was no period whatever of excitement, and the death was so perfectly calm that, at first, it was almost imperceptible.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

MIDDLESEX HOSPITAL.

THE two following cases are fairly marked specimens of relapsing or famine fever, which now threatens to become epidemic, and which, until last year, had not been seen since 1855 in this country. The first case observed in London seems to have been that of a woman admitted into the London Fever Hospital in July 1868, from Whitechapel, and noticed by Dr. Murchison in his Annual Report for 1868 of the cases admitted into that hospital. Several other cases were admitted shortly afterwards from the same neighbourhood. In addition to these, several were admitted into the German Hospital between September 1st of last year and February of this year. In May, a few instances were again observed in the London Fever Hospital; and, during the last few weeks, the number of admissions has rapidly increased. Cases have also been observed in the German, the Middlesex, and King's College Hospitals. The early cases were mostly occurring in Polish Jews; and, as relapsing fever had been prevalent in Prussia and Poland for some time, and a number of Polish emigrants had arrived in London during last year, Dr. Murchison is of opinion that probably they had introduced the disease into England. In cases of relapsing fever, there is sudden invasion, the symptoms usually observed being shivering; rapid, full, and bounding pulse; high temperature; sickness; enlarged and painful liver and spleen; with, sometimes, jaundice, severe headache, and occasionally acute delirium, terminating with copious diaphoresis. There is no eruption. The patient remains well from this time, when a relapse takes place about the fourteenth day from the commencement, with a repetition of the symptoms, but terminating about the third day of the relapse. The disease must be treated on rational principles, no remedy appearing to have any specific effect. The mortality is small—from 2 to 5 per cent. The *post mortem* changes observed are usually enlargement of the liver and spleen. It has been remarked that, when typhus fever is also prevailing, the proportion of relapsing fever has been greater at the commencement of the epidemic, and that typhus fever takes its place towards the close. For further particulars of the disease, we would refer our readers to Dr. Murchison's standard *Treatise on the Continued Fevers of Great Britain*, and Dr. Hudson's admirable *Lectures on the Study of Fever*.

We are indebted to Dr. George Simpson, Resident Physician's Assistant, for the following notes.

CASE OF RELAPSING FEVER.

(Under the care of Dr. ROBERT LIVEING.)

Robert Wait, aged 13, residing at Crown Street, Soho, was admitted into the Middlesex Hospital on August 25th, under the care of Dr. Liveing. The patient said that he had been ill for six days previously, with pain in the head, back, and limbs. There had been no diarrhoea. He was much emaciated, and in a weak state. He stated that he had left for the sea, and had walked from London to Yarmouth on foot, with scarcely any money, and endured a great many privations on the way. Having got on board a ship, he there met a German sailor who was ill with what the rest called fever. He returned with his ship to London, getting very little food, and that little bad. A few days after his arrival, he fell ill, and on the sixth day was admitted into the Middlesex Hospital. There was not much heat of skin; no eruption, nor diarrhoea. On the 26th (seventh day), the bowels were not moved. From the 27th up till the evening of September 3rd (the fifteenth day), he felt quite well; but on the latter day he relapsed. Sickness came on. There was no tenderness of abdomen; it was not retracted. No enlargement of the spleen could be discovered. On the 5th, he complained of great pain over the liver and spleen, chiefly over the latter. Vomiting still continued. On the 6th, he felt much better; the vomiting ceased; the splenic dulness decreased; and there was no tenderness. The patient continued well, with no further relapse, and was discharged.

The treatment consisted of a saline mixture during the first attack; in the interval, of quinine and iron; and during the relapse, of citrate of potash in an effervescing form. Brandy was also administered occasionally.

Date.	Day of Fever.	Pulse.	Temp.
Aug. 25	6th	76	95.1
" 26	7th	76	97.3
" 27	8th	70	97.4
Sept. 3	15th, 9 P.M.	100	102.4
" 4	16th, 9 A.M.	112	103.4
	9 P.M.	112	102.2
" 5	17th, 9 A.M.	102	102.4
	9 P.M.	116	103
" 6	18th, 9 A.M.	68	97.3
	9 P.M.	70	97.2

CASE OF RELAPSING FEVER.

(Under the care of Dr. GOODFELLOW.)

Robert Wait, tailor, aged 40, residing in Crown Street, Soho, was admitted into the Middlesex Hospital on Saturday, September 15th, under the care of Dr. Goodfellow. The patient said that he was *suddenly* seized on the previous Tuesday, the 14th, with pain in the head, legs, and back, with general uneasiness, and tenderness over the regions of the liver and spleen. There was no diarrhoea, but bilious vomiting; no delirium. He had been living in a poor manner lately, owing to want of work. He had come to the hospital to see his son, who was a patient suffering from relapsing fever, and whose case we have just given. When admitted, the tongue was furred; pulse 110, jerking, and compressible; temperature 102; no eruption; slight tenderness over the liver and spleen. The boundaries of the latter could not be precisely defined, but it appeared enlarged. There was no jaundice. He was bathed in a profuse perspiration. He was ordered a saline mixture and pill of aloes and hyoscyamus, as his bowels had not been moved for a day or two. On the 19th (sixth day), the pain in the abdomen had entirely left. On the 20th (seventh day), he felt quite well. He was ordered gentian and quinine. From the 20th up to the 26th, the patient continued well, and his appetite was improved. But on the 26th (thirteenth day), about 4 A.M., he awoke with headache and loss of appetite. There was no chilliness, however. The tongue was white and moist. The bowels were moved three or four times yesterday with a pill, but not since. The tenderness in the abdomen returned. From the 27th up till August 1st, the symptoms declined; and on the 2nd he declared he felt as well as ever.

Date.	Day of Fever.	Pulse.	Temp.
Sept. 18	5th	110	102
" 19	6th	68	97.4
" 20	7th	62	97.5
" 21 to 26 ...	8th, 9th, 10th, 11th, and 12th	72	97
" 26	13th, 9 A.M.	92	102.2
	9 P.M.	100	102.4
" 27	14th, 9 A.M.	96	100.4
	9 P.M.	106	100.4
" 28	15th, 9 A.M.	100	100
	9 P.M.	114	101.7
" 29	16th, 9 A.M.	108	99
	9 P.M.	76	97.3
" 30	17th, 9 A.M.	80	97.2

UNIVERSITY COLLEGE HOSPITAL.

OPERATION-DAY, WEDNESDAY, OCTOBER 13TH.

A MAN, about 35 years old, was operated on by Mr. Erichsen for Disease of the lower end of the Radius. The patient had suffered for some years from chronic inflammation of the bone, and Mr. Erichsen had some time since, in the hope of giving relief, cut down upon the bone with a Hey's saw. This operation was followed by good results for a time, but again the part became affected by repeated attacks of inflammation, accompanied by severe pain, requiring a second operation. Mr. Erichsen now cut down on the bone, and found that it was thickened and softened; he therefore excised a circular piece of bone with the trephine, believing that this would relieve the repeated attacks of inflammation in the parts around. The case presented many of the symptoms of abscess of the bone; but he did not think that it was abscess, as there was pain in one particular spot. As it was, the operation which he had performed was equally effectual for the relief of abscess of the bone.

Mr. Wharton Jones next removed the anterior portion of the eyeball from a child, for Staphyloma, the result of neglected ophthalmia after birth. There was, he remarked, scarcely any inflammation of the eye more easily and successfully treated than ophthalmia of infants. As many as 99 per cent. would get well if proper and early treatment was adopted. On the other hand, if it was not attended to in time, or badly treated, it was a great chance if both eyes were not seriously affected, or entirely destroyed. He thought that if men went into practice without knowing the proper treatment of these cases, they acted very improperly.

The next operation was one by Mr. Erichsen for Cancer at the end of the Penis. The patient was about fifty years old. There was no other course but to amputate the organ. Before doing so, Mr. Erichsen pulled the skin of the penis well forward, as the stump always retracts, and the skin, if not thus treated, is too long, and interferes with the treatment. With one sweep of the knife the amputation was effected about half way down. The canal of the urethra was further opened for about a third of an inch, and the mucous membrane dissected off and attached to the integument, as the cicatrization is apt to close the orifice of the urethra. A catheter was then passed to allow the urine to run off. In this operation, Mr. Erichsen employed for the first time a new penis-compressor for the arrest of hæmorrhage, invented by Mr. Clover. It consists of two attached broad vulcanite plates, notched on their opposed edges, which slide one above the other, and, when closed, compress the penis. The plates are then held in position by a screw. In the present instance it answered admirably, almost entirely arresting the hæmorrhage. The horizontal plates are also convenient by supporting the penis and keeping the parts clean around.

Mr. Erichsen next proceeded to perform a Plastic Operation on a man aged about 40, for a severe burn, involving the left arm and almost the entire back, but most seriously the left shoulder and axilla. The contraction which had resulted from the accident had tied down his arm so as to prevent the man properly carrying out his employment. Mr. Erichsen, to relieve this, divided the cicatrix on the outside of the axilla, where the cicatrix had not yet healed, and interposed a flap of neighbouring skin by a process of gliding. The back of the flap was made broad, to prevent sloughing. Mr. Erichsen remarked that it was desirable to interfere as little as was necessary with the wound; to use torsion instead of ligature as much as possible, and not to employ much pressure, so as to give every chance of good union.

THE LONDON HOSPITAL.

TRIALS OF CHLORAL.

IN last week's number of the *Lancet*, there is a notice of the employment, by Dr. Ogle, of the hydrate of chloral, in small doses (five or ten grains), with great benefit. We have seen it tried in the London Hospital in two cases, but in much larger doses. A dose of half a drachm was given to a man with disease of the elbow-joint; and, as this produced no effect in three quarters of an hour, a second dose was given. No appreciable effect followed, except that the man complained of a griping pain in his stomach. He had complained of this before, however. A dose of half a drachm, on the same night, was given to a patient with disease of the ankle-joint; and then a second, in about three quarters of an hour. This patient slept a little during the night. He complained of a good deal of headache in the morning. The next night, this patient had three doses of half a drachm each, at intervals of half an hour. In half an hour after the last dose, he was sound asleep. The sleep seemed quite natural. He woke two or three times in the course of the night; and when he woke in the morning, said he had been troubled with a frightful dream. He had no headache, and seemed well satisfied with his sleep. That night, he had a dose of a drachm, without appreciable effect, and then half a drachm was given, after which, he went to sleep. He did not sleep continuously, but, when he woke in the morning, was without "dreams" or headache, and felt quite refreshed.

The first patient did not care to have the medicine again the second night, but, on the third, he took a dose of a drachm without effect. A second dose of half a drachm sent him to sleep, but he woke in the night, the nurse said. In the morning, he expressed himself as quite comfortable. The cases were under Mr. Hutchinson's care.

It appeared, therefore, that doses of half a drachm, at intervals of half an hour, were quite safe in adult males, and would procure natural sleep. In neither case was sleep produced within half an hour of the last dose. No further trials, however, were made, on account of the expensiveness of the drug. If Dr. Ogle's small doses should prove effectual in checking mental iniquitude, the expense will, of course, not be so serious an objection. The chloral used at the London Hospital was obtained from Mr. Squire.

REVIEWS AND NOTICES.

REPORT ON EXCISIONS OF THE HEAD OF THE FEMUR FOR GUN-SHOT INJURY. War Department, Surgeon-General's Office, Washington. 4to, pp. 141. Government Printing Office: 1869.

THIS official Report, embodying the experience acquired in the "War of the Rebellion" in the United States of America, in regard to excision of the head of the femur for gun-shot wounds, is issued by Surgeon-General Barnes, in the form of a circular addressed to the medical officers of the army. The Report itself has been prepared by Surgeon and Brevet Lieutenant-Colonel G. A. Otis, of the United States' Army. In arrangement, it resembles the circular by the same reporter on *Amputations at the Hip-joint for Gun-shot Injuries*, which was published at Washington in July 1867. The present circular, indeed, may be regarded as a continuation of that Report; for it not only contains a comparison between the results of coxo-femoral excisions and amputations, but also describes a number of amputations at the hip-joint additional to those furnished in the former Report on this particular subject. In the special circular on hip-joint amputations, notes were given of one hundred and eight examples of this operation, collected from various sources, together with the histories of fifty-three such amputations performed in the Federal and Confederate armies during the United States' civil war; while these numbers are increased in the present Report to sixty-two instances of the operation in the United States (forty in the Federal, twenty-two in the Confederate, service), and one hundred and twenty-one from other sources. While referring to this subject, we may mention that, though the numbers are thus increased, the same formidable ratio of mortality remains as heretofore. The circular shows that, when the whole 183 cases are estimated together (and these may now be regarded as a summary of all the authentic cases of hip-joint amputations for gun-shot injuries published up to the present date), the death-rate has been 90.9 per cent. When, however, the cases are separated into groups, according as the amputation has been performed, in one set for the direct, in another set for the indirect or consecutive, effects of gun-shot wounds, the latter closely resembling in their nature the majority of the cases in which the operation is resorted to in civil practice, then we see, as might be expected, very different ratios of mortality exhibited. The report divides the 183 cases into 79 primary, 76 intermediate, and 20 secondary amputations, with 8 re-amputations: the death-rate being in the primary, 98.68; in the intermediate, 92.10; in the secondary, 65.0; in the re-amputations, 50.0 per cent.

Let us return to the special subject of this Report—viz., *excisions at the hip for gun-shot injuries*. The circular commences with a historical review of the operation, from the year 1769, when Mr. Charles White, of Manchester, in a paper read before the Royal Society on a case of excision of the head of the humerus, maintained the opinion that the operation of excision of the head of the femur might be done with great prospect of success, down to the year 1861, when the operation had been performed twelve times for gun-shot injuries, of which six were in the Crimea, one of these being successful—the well known case of Dr. O'Leary. Subsequently to this time came the war in the United States; and the experience gained therein includes no fewer than sixty-three authenticated cases of the operation for gun-shot wounds, forty-eight being performed by surgeons of the Federal, and fifteen by surgeons of the Confederate, armies. Forty-three of the patients subjected to the operation had been wounded by conoidal rifle-bullets; twelve by musket-balls, the forms of which have not been recorded; one by a fragment of a mortar; six by fragments of shell; and in one instance the nature of the missile that had caused the injury was unknown. The Report states that it is probable the history of the operation approaches completeness as regards the United States armies; while, in reference to the Confederate experience, it is probably incomplete.

The sixty-three excisions above mentioned are divided in the Report into thirty-two primary, *i. e.*, cases in which the operations were performed within twenty-four hours of the reception of the injury, and in most instances within two or three hours; twenty-two intermediate, including intervals varying from two to twenty-eight days after the date of the injury; and nine secondary operations, in which the shortest interval was thirty-three days, and the longest nearly seven months. A separate chapter is devoted to the description of each of these categories, the cases themselves being successively related in detail, in the order of their chronological occurrence. Space will only admit of a brief notice of these three divisions of the cases.

All but two of the thirty-two *primary* excisions proved fatal, thus showing a death-rate of 93.75 per cent. for this particular series. The Report states that the majority of the patients died in two or three days,

from the shock of the injury and operation combined; but in one instance life was prolonged for two months. The first of the two successful primary excisions was performed by Surgeon Dement, on May 5th, 1864; the patient being a Confederate soldier, who had been wounded in the left hip by a rifle-ball. The head, neck, and a portion of the shaft of the bone, were excised. The fragments, when put together, measured four and a half inches. No untoward complication occurred during the progress of recovery, except the formation of some abscesses attendant on exfoliation of a ring of bone from the upper end of the shaft. The cicatrix was firm at the end of nine months. The limb was shortened three inches, and was useless for purposes of locomotion, necessitating the use of crutches; but the man enjoyed good health until November 1865, when he died from an attack of diphtheria. This recovery is all the more remarkable from the exposure and movement to which the patient was at first subjected; for he lay on the ground, unattended to, for about twenty-four hours after he was wounded; and, shortly after the operation, he was conveyed in an ambulance-waggon to a place twenty-five miles distant, and thence by railway seventy miles farther. The second successful primary excision was performed on an officer of a regiment of New York Volunteers, by Surgeon Leet, in October 1864. The result has been most satisfactory; the patient, at the date of the report, having survived the operation four and a half years; and the mutilated limb being of a certain amount of utility, enabling him to dispense with crutches, and to walk with the aid of a cane. The fragments excised comprehended the head, neck, and part of the shaft of the femur, the latter being divided by a chain-saw about the level of the trochanter minor. Altogether, about four inches of bone were removed. The subsequent suppuration was very profuse. In January 1865, a ring of bone, nearly an inch in length, exfoliated. After that occurrence, the improvement was uninterrupted. In November 1868, the patient wrote: "With the exception of the limb being quite weak, it only troubles me in damp weather, when it has a dull heavy ache. The wound is firmly healed. The flesh on the outside of the thigh is quite numb, and my knee is stiff. The limb measures three and one-eighth inches shorter than its fellow." A full-length drawing of the patient accompanies the history of the case; and from this it would appear that the limb is well nourished, with considerable muscular development.

Two also of the twenty-two cases classed as *intermediate* excisions resulted successfully, one very remarkably so. The death-rate in this series of cases was, therefore, 90.9 per cent. The causes of death in the twenty fatal cases are stated to have been: in one, profuse venous secondary hæmorrhage; in two, frequently recurring capillary bleeding; in one, peritonitis; in one, diarrhoea; in six, pyæmia; and in nine, exhaustion. In one instance, the patient survived seventy-five days; in another, twenty days; and the average duration of life in the twenty unsuccessful cases was twelve and a half days. The results of both the successful cases have been remarkably favourable. In the first case, ten months after the operation, the patient reported that he was able to bear considerable weight on the limb; that he had discarded his crutches, and was walking about in a high-heeled boot with the use of a cane. In the next case, the result has been as satisfactory as it has ever been after excision of the head of the humerus, for the functions of the limb have been thoroughly restored. "The man has survived the operation five years, and is now in excellent health. He walks long distances without a cane or other assistance, ascending lofty ladders, carrying heavy burdens, and performing the various duties of a day-labourer." The history of this case is given very fully in the circular, and is accompanied by a drawing of the excised portions of the femur, and one from a photograph of the patient taken three and a half years after the operation. The patient, a private of robust frame in a New York Volunteer regiment, had the neck and trochanters of his right femur shattered by a rifle-bullet, which lodged among the fragments, on May 5th, 1864. On May 27th, excision of the injured portions of bone was done by Dr. Mursick at Washington. The cure was protracted by successive exfoliations of dead bone, repeated abscesses about the limb, an attack of erysipelas, etc. About the middle of March 1865, the man was able to get out of bed, and to walk about the ward on crutches. In May 1865, he left hospital without being able to bear much weight on the limb. The shortening amounted to five inches. In the spring of 1866, he was working as a farm-labourer, walking well, without crutch or cane, on a high cork-soled shoe, with free motion of the hip, but very little at the knee. On being examined, it was found that "the resected end of the femur was firmly attached to the pelvis by ligamentous tissue an inch and a half long; and that the limb was quite under control. The man could flex and extend it slightly, and adduct it to a limited extent; the power of rotating and abducting was lost." Gradual gain of power followed this date; so that, on being examined again in November 1868, "the at-

tachment of the femur to the pelvis was strong; the cicatrices were firm and healthy. All the movements of the thigh were performed with almost as much facility as in the normal state; rotation even, as well as flexion, extension, adduction, and abduction. His general health was good. He still worked as a day-labourer." As the reporter remarks, the history of this case settles the question of the alleged inutility of the lower extremity after decapitation of the head of the femur for injury.

The nine excisions classed as *secondary* operations remain to be noticed. One of these terminated successfully. The average duration of life in the eight unsuccessful cases was sixteen days. The causes of death were: in nine instances, exhaustion; in two, shock; in one, secondary venous hæmorrhage. In the successful case, the excision was performed six months after the date of the original injury. Five years afterwards, the subject of the operation is stated to be in robust health; but, though he could bear some weight on the limb, he was still obliged to use a crutch in walking. Another successful secondary excision of the hip is noticed in a later part of the report; but this occurred subsequently to the civil war in the United States. It was performed in New Mexico, in June 1868; the operator being Dr. Gibson, of the United States Army.

The reports of the three categories of cases above noticed are followed by accounts of some unclassified or doubtful cases of excision, and then by histories of two hundred and seventy-four cases of gun-shot wounds of the hip-joint, which were treated without operative interference. The comments of Surgeon Otis on the comparative merits of the expectant and operative modes of treatment, as illustrated by these numerous cases, well deserve careful perusal and consideration; but we have only space to quote the general conclusions to which they have led him. Surgeon Otis writes: "I continue to share the convictions of Guthrie and the elder authors as to the uniform fatality of such injuries when abandoned to the resources of nature."

It only remains to notice the very liberal manner in which the United States' Government has provided the means for the publication of these reports. No expense has been spared in their production. The report under review, like the preceding one on hip-joint amputations, is quite a pattern of typography; and the woodcuts, with which it is profusely illustrated, are admirably executed. The contrast presented by these "circulars" with our "blue-books" on corresponding subjects is sadly against the latter. It is pleasing to find that the liberality of the Government has been turned to so good an account by the Surgeon-General, and by the reporter under his direction, on whom has devolved the task of collecting, arranging, and estimating the intrinsic value of the immense mass of surgical materials which the prolonged war in the United States unhappily furnished. No more painstaking or accurate reporter could have been found for the task than Surgeon Otis has proved himself to be.

PRACTICAL ANATOMY: A MANUAL OF DISSECTIONS. By CHRISTOPHER HEATH, F.R.C.S. Second Edition. Churchill and Sons. London: 1869.

THIS edition, just out, has been thoroughly revised, and about sixty pages and twenty woodcuts have been added. Amongst the new matter is an account of the anatomy of the convolutions of the human brain, with woodcuts copied from Mr. Marshall's paper on the Brain of a Bushwoman; this being the simplest the student can have for reference when studying the more complex brain of Europeans. Several illustrations have been added, showing the relative position of the different structures in transverse sections of the trunk and limbs. These will, we are sure, prove acceptable to many students, giving them much clearer ideas than they might otherwise obtain of relations of parts in a case of amputation, and also useful knowledge as to certain favourite questions at examining boards.

We must, however, call Mr. HEATH's attention, to Fig. 210, as slightly tending to mislead. It represents a section of the neck at the level of the fourth cervical vertebra; and reference in a foot-note is made to the trachea and œsophagus, as having been divided. Now these structures do not commence till opposite the fifth cervical vertebra. We can easily imagine a testy examiner being much annoyed by a student making such a blunder.

At page 210, the internal oblique muscle of the abdomen is stated to be inserted into the last seven ribs. Ellis is content with three. Gray and Quain give four. At page 415, the base of the heart is said to reach from the sixth to the ninth dorsal vertebra. Ellis and Gray say from the fifth to the eighth. Quain says from the fourth to the eighth. At page 429, the horizontal part of the arch of the aorta is given as extending from the second right costal cartilage to the fourth dorsal vertebra. Quain and Ellis stay at the second. At page 430, the termination of the arch is stated to be at the fifth dorsal, in place of the third, as in Quain and

in Ellis. At page 438, the trachea is said to extend to the fifth dorsal vertebra, instead of to the third. The length, however, remains four and a half inches, as in other works on anatomy. At page 444, we find that the thoracic aorta commences at the fifth dorsal vertebra, instead of the third, as usually given. The number of intercostal branches is not altered, but is stated to be nine or ten.

If these variations from the descriptions given by other authors be inserted purposely, we think some notice of the reasons ought to be given. If they be simply accidental, we hope to see them corrected in a new edition.

The book is undoubtedly the best dissector's manual extant, excepting the more detailed one of Ellis. It seems to us that more information on certain points might easily be inserted in smaller print, without interfering with the requirements of first year's men.

ANATOMY, DESCRIPTIVE AND SURGICAL. By HENRY GRAY, F.R.S. Fifth edition, by T. HOLMES, M.A. London: Longmans. 1869.

MR. HOLMES's name is a guarantee that this new edition is not behind its predecessors in its claims on the gratitude of the student on account of the completeness of its information and the clearness and copiousness of its illustrations. An Introduction on General Anatomy and Development, occupying one hundred and thirty pages, and containing sixty illustrations, forms a new and important feature in the present edition. The surgical portion bears traces of thorough revision.

Having given this general praise, which the work thoroughly deserves, we should be wanting in our duty as reviewers if we did not point out a few of what seem to us omissions.

On referring to the anatomy of the special senses, we were rather surprised to find no alterations in the description of the minute structure of the internal ear. We should have thought that much had lately been made out, not only quite necessary for a student to know, but also of a much more interesting and explanatory nature than what was known at the time the account in the text was written. In the account, at page 589, of the lamina spiralis membranacea, no alteration has been made in the description of Bowman's denticulate lamina; nor of the "cochlearis muscle", so called, now named the spiral ligament. No mention of the canalis membranacea (or membranous cochlea), nor of its communication with the sacculæ of the vestibule, is made. The organ of Corti is not even mentioned; nor, of course, its supposed connexion with the nerves. In the account of the ciliary muscle of the eye, its action is still stated to be that of drawing the lens forwards. Surely this might be altered.

Several new diagrams have been added; but we are sorry to say that, at first glance, they disappoint us. We doubt their being of much use to students. The representation of the structures in the posterior mediastinum (Fig. 365) is, however, excellent; so also is Fig. 345, which ought to bring the foramen of Winslow within the comprehension of the dullest. Of Fig. 334 we cannot speak with praise. On the black board, it was probably very effective, but is too diagrammatic for reproduction as a woodcut. Fig. 395 is also open to the same criticism. A friend, to whom we showed it, remarked that the sciatic nerve and pyriformis looked "just like labels tied on a physic-bottle, as in olden times." The rectus seems to us scarcely drawn in a proper direction; and Poupart's ligament is surely made to occupy an impossible relation.

Mr. Heath, in the first edition of his *Practical Anatomy*, pointed out that Mr. Gray's Fig. 393 had been copied (with acknowledgment) from Wilson, but with the addition of the spinal column in such a way as to make the view an impossible one. The woodcut remains, we observe, still unaltered; and we may just notice, in passing, that, in the last edition of Holden, the same figure is copied with the same mistake.

The modern nomenclature of the cerebral convolutions has not been introduced; nor are there any diagrams on this subject. The relations of the aorta with reference to the walls of the chest have been altered, but, it appears to us, not quite consistently. At page 319, the transverse portion of the arch "passes from the second right costal cartilage to the left side of the third dorsal vertebra" (instead of the second, as in Quain and Ellis). At page 321, it is said to reach from the second right costal cartilage to the second dorsal vertebra.

HUMAN OSTEOLOGY. By LUTHER HOLDEN, F.R.C.S. Fourth Edition. London: Churchill and Sons. 1869.

It is unnecessary to say more respecting this work than that it has no rival, and ought to be in the hands of every student learning his "Bones". No alterations of any importance have been made in the present re-issue.

NOTES ON BOOKS.

On the Detection by the Microscope of Red and White Corpuscles in Blood-Stains. By JOSEPH G. RICHARDSON, M.D., Microscopist to the Pennsylvania Hospital. (*Monthly Microscopical Journal*, Sept. 1869.)—This paper is long and elaborate, and we give only the result. Dr. Richardson believes that, with the use of high magnifying powers, human red blood-corpuscles can be detected by careful measurement; differences of diameter, which are unreliable when low powers are used, becoming constant and characteristic when we have to deal with magnified images of from half to five-sevenths of an inch in diameter. Further, the author describes a method for restoring dried blood-corpuscles to a spherical shape, without altering their size to any material extent. The method consists of continuous irrigation of a fragment of clot with water, by which the colour is removed; but the red corpuscles retain their outlines, and can be detected and measured under a high objective—*e. g.*, one-twenty-fifth of an inch. Dr. Richardson also found that the *temperature and rate of drying* did not materially influence the diameter of the corpuscles. The paper bears the marks of great care and skill, and it is to be hoped that Dr. Richardson's results will be confirmed by other skilled microscopists.

MUSEUM NOTES.

RECOVERY WITH A BULLET LODGED WITHIN THE SKULL.

THE specimen which the appended woodcut illustrates is No. 1,332 in the Museum of the Leeds School of Medicine. It consists of the front half of the cranium of a young woman, and shows a bullet within the skull, just below the inner angle of the right sphenoidal fissure. The bullet is firmly fixed in its place by a margin of bone, which in some degree imbeds it. It is close to the anterior clinoid process, which has been pushed upwards so as almost to obliterate the optic foramen. This process, as



compared with the one on the opposite side, is short and stumpy, as if it had been fractured. The catalogue states that the bone was obtained from the body of Maria Tyler, aged 23, who died of typhus fever, and was afterwards brought to the Leeds dissecting-room. Nothing whatever was known as to her injury, the bullet being found unexpectedly in the course of dissection. It was not even known that she was blind of the left eye; although, from the condition of the optic foramen, such must have been the case. No scar had been observed on her face. There is considerable irregularity about the inner wall of the orbit, showing that the bullet had struck against that part in its way through the sphenoidal fissure. In looking at the dry specimen, it certainly strikes one as very remarkable that the bullet should have stopped exactly where it would appear to have escaped from all resistance; but in explaining this we must not forget that probably it was still under the dura mater, and that the strength of this membrane was the real means of bringing it to a stand-still. A more narrow escape from death could not well have happened.

A MORPHINE EATER.—A labourer residing in Brunswick, Maine, has paid out during the last fourteen years about 1,300 dollars (about £260) for morphia, for the use of his wife. This expensive helpmate for a working man once walked twenty-four miles to get her usual supply.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 23RD, 1869.

IMPROVED EXAMINATIONS.

IT would be ungrateful not to recognise and applaud the great improvements in our diploma-examinations which have been effected during the last twenty years; and we believe that our several Colleges are at the present time most anxious to improve them to the utmost. At the College of Surgeons, for instance, a project is now under consideration to make a bedside examination a part of that required for the membership. This is in the right direction; but the subject appears to us to demand a wider consideration than it has yet received. A "bedside examination" sounds well, but in practice it must necessarily be very brief and imperfect, and we fear that it is often a mere farce. Our diploma-examinations should be regarded as having two definite ends—one, to secure the public against ignorance, by ascertaining the qualifications of those who aspire to obtain a legal right to practise, and the other, to develop and encourage medical education. Of the second of these far too little has been thought. A skilful examiner can, with a few well chosen test-questions, very soon gauge the attainments of a candidate, and may, without giving much time to it, accept or reject with no very great risk of injustice. He can tell whether or not a man has crammed, and can easily make a differential diagnosis between genuine knowledge and mere parrot phrases. This is, we believe, about the extent of the task which our more popular examining boards have set themselves; and we freely admit that they have, in a somewhat rough and ready style, done it fairly well. We repeat, however, that there is a second great object to be served by these institutions, and that it has been far too much neglected. There has been no adequate attempt to aid students in acquiring knowledge, and but little thought has been devoted to the development of their inducements for doing so.

When the College of Surgeons divided its examination into two—one for anatomy and one for surgery—it did on a small scale that which it seems very desirable now to attempt on a larger one. Why not have COMPULSORY ANNUAL EXAMINATIONS throughout the students' curriculum? Those engaged in teaching know well how efficient the prospect of an examination is in making men work. Not only does it make men work, it helps them in their work. It gives definiteness of aim and clearness of purpose to many who can attain them at no other time. If a student has to wait three years, and then be examined in a great number of subjects at once, taking his chance as regards many that nothing will be asked, he feels during the first two-thirds of the period much at his ease. As the time comes nearer, he begins to realise his necessities, and usually his diligence increases; but still he works somewhat vaguely, picking out what he supposes it is likely he may be asked about, and leaving almost wholly aside a great deal which it is very important that he should know. At a hundred turns the mischievous suggestion occurs to him—"I shall never be asked this or this." Now it

is of course impossible that a diploma-examination, or a series of them, should take the candidate through the whole range of professional knowledge; but still we assert that much more might be done by a little system than is now attempted, and with great benefit to all. There is surely no reason for assuming that, because a man knows what a Colles' fracture is, that he therefore knows what to advise for prurigo senilis; or because he is well up in the treatment of carbuncle, that he could prescribe for catarrhal ophthalmia. It is impossible to impress diploma-examiners too strongly with the sense of their own power in helping medical education. Whatever they demand, students will learn; and whatever students wish to learn, that the schools will teach. The demands of the examiners must, however, be made clearly and widely known. If it were announced to-morrow that in future candidates would be shown living specimens of *dulcamara* nightshade and *belladonna* nightshade, and be required to distinguish them; or to assign a function to the ciliary muscle, and explain the respective causes of myopia and presbyopia, students would find no difficulty in getting them up, nor their teachers any in instructing them. More detailed examinations than our present ones would help medical education immensely; they would be in themselves a means of emphasising a student's knowledge; they would find out for him some of the things in which he is ignorant, and they would greatly increase the respect which he feels for his diploma, and for those who confer it.

It will occur to some to remark that examinations of the kind to which we refer are such as should be conducted in connection with our schools rather than by our licensing colleges. This is, we think, a mistake. At our schools it is found practically impossible to reach a certain class—perhaps we might say the lower half—by any kind of competitive examinations. The men who gain school-prizes,—or, we might almost assert, the men who compete for them,—are those who need but little aid and no compulsion in their studies. With them our examiners need scarcely concern themselves. A large class, however, do need a great deal of help, and are all the better for being well looked after at every stage; and it is this class which eludes the efforts of the lecturer, and would be caught by the examiner. Besides this reason, we may also urge that the thing should be done well, authoritatively, and on system, instead of being left to the unequal and irregular efforts of individual teachers. Let our colleges examine, and examine thoroughly, and our schools will then teach thoroughly: let the respective duties be properly divided, and they will then be done once for all, and done well.

Greater detail in our examinations is, however, only one of the modifications, on the importance of which we wish to insist. Increased frequency appears to us at least an equal necessity. An annual examination, conducted carefully, chiefly in writing, and with its results numerically recorded, would have the effect of keeping a certain class of medical students at their work in a fashion which at present they do not attempt. It would take away all possibility of cramming up for the pass during the last few months—a possibility which we are glad to believe to be even at present a very slight one, but which certainly suggests itself to the minds of many, and prevents their cultivating habits of industry. Such annual examinations would, of course, proceed by gradation. At the end of his first year, the student might be examined in botany, chemistry, natural philosophy, the essentials of anatomy and physiology. At the end of his second, he might proceed further with anatomy and

physiology, and take, in addition, minor surgery, materia medica, and some parts of forensic medicine. The third examination would include midwifery and the more easy parts of medicine, in addition to going still further into the subjects of the second. The fourth and final would require a sound clinical knowledge of medicine, surgery, and midwifery, in all their departments. At each stage the student should be made acquainted with the number of marks obtained; and there might suitably be a modicum which would require a re-examination in the same subjects next year, in addition to the others; and a minimum, which would be equivalent to absolute rejection and thus cause loss of the year.

Students and their friends would, under such a plan, have *data* by which to judge how things were going on with them: the idle would be forced to work, and the industrious encouraged to work harder. As a collateral benefit, it might be hoped that, now and then, one whom Nature never meant for the profession, would be weeded out at an early period, to the advantage of those remaining, and with the result of saving his own time and money.

Examinations of the kind of which we have been speaking, repeated in frequency and detailed in character, would, of course, necessitate much increase of trouble and expense. Surely, however, the object is well worthy, and the means would easily be provided. For the earlier examinations, it would be necessary to employ younger men, with more leisure than those now in office. But have we not always on hand a number of young physicians and young surgeons waiting for practice who are just fitted for such work, and for whom it is very desirable that work and its appropriate remuneration should be found? We should need, also, larger examination-halls, and a great multiplication of conveniences for practical examinations; but surely these could be got. Those now in use are already quite inadequate for even the present method, and might be very appropriately employed for other objects. The object is a national one, and would, we have no doubt, if properly proposed, be provided for by the nation.

In reference to testing a student's attainments, let us remark that it is not enough that at its conclusion the examination should in some sense be carried on at the bedside: at every stage it should be clinical; or, to be more explicit, objective. In botany, the living specimens should be shown for identification; in chemistry, the experiments should be performed; and so on through all departments. The various instruments of modern medical research should be put into the student's hands—not merely talked about. Good museums—not necessarily large ones, but selected for their special purposes—would be essential, and they ought to comprise instruments and appliances, as well as specimens in anatomy and pathology.

The amount of knowledge required for a well-trained medical man is now very large indeed—so large that some whose opinions on this matter we sincerely respect, have almost quailed before it, and been inclined to advocate limitation as the only resource. Now there is, we believe, one way, and one way only, in which what a medical man wants can be obtained, and obtained easily by most; and that is, by objective methods of study. Let students once understand that things must be seen and handled, not merely read about, and they will soon learn with pleasure, and find it easy to remember matters which they now from a distance view with distrust and dislike. There is, we are convinced, no need to narrow the basis of medical study, but, on the contrary, every inducement in an opposite direct-

tion. Our examiners must, however, set the key. If they require but little, and test that little in an arbitrary and imperfect manner, then it will be all but impossible for our schools to meet the requirements of the age, and our profession must retrograde in public estimation and in public usefulness. We have no fear of such a result. There are many indications that our affairs are at present in the hands of thoughtful and earnest men, and we trust that the profession at large will do its appropriate share.

SYPHILOGRAPHY FOR LADIES.

THE *Westminster Review* for July contains an article which attracted sufficient notice to require a second edition. The article in question is a detailed and, on the whole, able exposition of the subject of prostitution and its results. It does not mince the matter in the least, but, in the plainest possible terms, lays open to its readers the stores of information which modern research has accumulated on this disheartening topic. Nor does it stop with the exposure of the sin itself, its prevalence, and its moral results. The main intent of the reviewer is to enlighten his readers not so much as to the details of the practice, but as to its physical consequences—to teach what syphilis is. On this subject, he avows his belief that the language of simplicity is the purest, and the least calculated to offend a delicate nature; and, after premising that he will “say nothing but what the most delicate and refined woman might listen to from her physician—nothing but what every woman, if she be capable of understanding it, should know,”—he deals with venereal diseases exactly as they might be dealt with in a medical work. For many of our readers, if not for almost all, we have, we doubt not, said enough to stamp the article in question as an offence against good taste, if not against common decency. It is inserted in a journal intended for social reading, which is circulated by our libraries, and may find its way to the hands of our wives or daughters. That possibly it may not do so to any very serious extent, cannot be alleged by its author in any extenuation of his act, for it is avowedly written that it may reach them. Whether that object be attained or not, is not to the purpose; and the question we wish to ask is, whether it is a good one. We wish to put this question fairly and without prejudice, fully recognising the great importance of the subject, and also the rectitude of purpose which has induced the deed. The review in question is not only an able one, it is a thoroughly earnest one. There is no pandering to vicious taste in it—no indulgence in the flippancy of expression which so often marks disquisitions of this kind. It is in sober earnest. Its author is aghast at the miseries which syphilis brings in its train, at its prevalence, and at the state of unsuspicious ignorance in which, as he thinks, most of the non-medical community remain. He admits to some extent the impropriety, but justifies himself by the assertion that the plan which he has taken is the only efficient one.

“Thus,” he writes, “the social malady which we now propose to discuss is vitally interesting to woman; it affects her both as a wife and as a mother; and, while destroying the health of herself and of the dearest objects of her affections, too often blights those affections themselves. Suffering as she does from its effects, shall she be restrained by conventional prohibitions, or even by her own sensitive delicacy, from manifesting her interest in it, from exerting her influence at once to repress it and to remove its causes, or from labouring in every possible way to place herself and those related to her out of danger? On the contrary, we believe that this is precisely one of those subjects which it is her solemn duty to examine for herself.”

Now, the subject to which the *Westminster Reviewer* alludes in the last paragraph we have quoted is not prostitution, but syphilis; and, after careful consideration of his arguments, we feel compelled to protest against his conclusion. If a physician were to undertake to explain

to a lady-patient the doctrines of syphilis, under any circumstances excepting those of the most urgent necessity, he would be guilty, we think, of a gross departure from his duty. We admit that “a trusting maiden, radiant with happiness, health, and beauty,” may possibly be doomed to find a fearful interest in this loathsome disease; but we deny that any possible good could come of enlightening her before marriage as to her risks. To show that the interests of any given person are great in any given fact, is a very different thing from proving that it is desirable to afford him full information respecting it. There are many subjects respecting which ignorance surely comes much nearer to bliss than knowledge could. To suppose that the “trusting maiden” could possibly direct her conduct for the better if made untrusting by the information that her intended husband may possibly be tainted with syphilis, is certainly to make a large demand on our credulity. If suspicions have arisen, they are for her father or her brothers to deal with, but surely not for herself. Can we believe that the happiness of the young wife will be increased, if she be made knowing enough to suspect the nature of every trivial symptom, whether displayed by her husband or by herself; and to see the dire phantom of syphilis in every spot which her baby may present? There are few states of mental distress more painful to witness than what is known as syphilophobia; and, distressing as it sometimes is in men, it is often far worse in women. That the review in question is likely to produce such states, and in some cases to aggravate them by causing suspicions as to conjugal fidelity, we cannot doubt. Should its information ever unfortunately become the property of the female sex, it will, without reducing the physical evils one iota, produce an amount of domestic misery which will, in its extent and character, far surpass those evils themselves. We may admit that the reality does occasionally, and but too frequently, cause “the blighting of the dearest affections”; but shall we forthwith, by way of remedy, proceed to scatter the not less baleful suspicion far and wide? He who adopts such a course owes it to society to show not only that he has a good motive, but that he has also a good reason. Now, on careful reading of the article in question, we have failed altogether to find its justification. That women can do anything to shield either themselves or their offspring from the risk of syphilis, is not even attempted to be shown; and, whilst thus powerless, surely they are better ignorant also. Cases are of frequent occurrence in which the surgeon has to do his utmost to prevent the origin of a suspicion which would, he knows, be destructive of family peace.

Now, if such knowledge is of no use in the conduct of life, it surely needs no argument to show that it is, when not necessary, essentially degrading to the mind. Flimsy indeed is the pretext that whatever is true should be made known. Courageous as he is, even the author of this review would not, we trust, dare to insult the purity of the feminine mind by initiating it into all the arcana of the sexual passion; yet all the facts are equally true. No, there are sights in nature perfectly natural and dreadfully true, from which it is yet our highest interest, unless at the call of duty, to avert the eyes. Nothing short of the most cogent necessity ought to induce us to allow a woman to discuss “the unity or duality of the venereal virus,” “the influence of the natural secretions of the mucous membrane of the husband as the medium of transmission,” or the manner in which “the free secretion of the seminal fluid acts as a natural emunctory by which the symptoms of the constitutional disease are kept in abeyance.” Such knowledge is for those who have to use it—for those only; and may it ever be kept from her, for whom we covet,

“Thy memory be as the dwelling-place of all pure thoughts.”

The review in question is the work of an alarmist, and it naturally propounds alarmist doctrines. The public is asked to believe—and to believe too, on the authority of the leaders of the medical profession—that it is the prevalence of syphilis which is shortening the average duration of life in England; that it is syphilis which accounts to a large extent

for gout, for scrofula, for rickets, for consumption, for cancer. With a death-rate increased from 22 to 23 per 1,000 annually, it is asserted "that there must exist some secret or imperfectly recognised degenerative agent, which is slowly but surely destroying the health and strength of the British people." Following this assertion, we have the question, "Is this agent syphilis?" And this "each reader is left to meditate on and determine for himself." Now, we must protest that this is precisely one of the questions upon which those surgeons who have worked hardest yet feel themselves unable to pronounce, and with which the non-medical reader is ludicrously incompetent to deal.

We are no advocates of reticence on any subject on which knowledge is valuable, nor would we, as regards the female sex, attempt to draw any arbitrary limits. For some, it may even be desirable that they should know that there is such a thing as venereal disease; that it is a very serious malady, and that it is connected essentially with prostitution. Those engaged in questions of social reform, in the conduct of certain philanthropic undertakings, may require such knowledge; and they are usually those whom such knowledge will nowise hurt. They are those who are entitled to claim the right—

"I would be bold, and dare to look into the swarthiest face of things"; though perhaps not, in this instance, urging the precise reason which Mrs. Browning appends. The limit must, however, be drawn somewhere. To define the word *delicacy* might, perhaps, be a little difficult, but that the beautiful quality of mind usually intended by that designation, would be likely to be interfered with by obtruded information on subjects such as we have referred to, we can feel no doubt. For the female sex, with but very few exceptions, the state of ignorance which Shakespeare has attributed to Desdemona, is certainly to be most highly prized. If it be necessary to instruct the few, let it be done in an appropriate manner, and with due precautions; and let not the loathsome knowledge be thrust under our eyes in association with essays on history, philosophy, and poetry. We could easily find stronger language, quite justifiable, were it not that the review in question is, as we have said, written with evident sincerity of purpose. It is a breach of taste only, not of morals. We fear, however, that the practice may have imitators; and the conviction that no good can come of it, has led us to ask the attention of the profession to it, and to record our protest.

MUSEUM NOTES.

We commence to-day the publication, under the above heading, of descriptions of some of the more valuable contents of our Pathological Museums. We have long been impressed with the conviction that there is an immense amount of very valuable material hidden, as it were, in these depositories, and not made nearly so useful as it deserves to be. This is more especially the case at provincial museums, and at those hospitals to which no school is attached; and to these we shall give chief, but not exclusive attention. When desirable, woodcut-illustrations of specimens will be introduced. We are already in possession of a considerable amount of material, collected at various hospitals—Netley, Leeds, Bristol, Paris, Dublin, etc.—which will be available for our purpose, and hope, soon, to collect much more, and also to obtain the valued assistance of our friends.

None but those who are fond of museums, and have frequently examined them, can have any appreciation of the value of their contents. In them, we have pathology in its utmost concentration; many a specimen there preserved, with a brief quarter-page of description, has cost a week's work to the zealous investigator who put it up; and many of these short notes, never intended for publication, are of far greater value than much that finds its way into print.

In compiling these Notes, we shall keep several objects in view: 1. To select by preference such collections and such subjects as may seem to

have comparatively escaped notice; 2. To describe rare specimens; and, when possible, to bring into juxtaposition the rarities of one collection with similar ones in another. There are some diseases or forms of injury of which no museum possesses more than a single specimen, but concerning which very trustworthy data may be collected by putting all together. 3. We shall by no means restrict our attention to rare specimens, but shall introduce general remarks as to those more common, and the lessons, medical, surgical, or pathological, which they teach. We hope in some degree to supply a sort of general index to the sterling facts which the numerous museums scattered over the country contain. That our objects will be attained only in a very imperfect and fragmentary way, we are well aware; but we are nevertheless convinced that the field is a promising one, and that it will yield, at any rate, some good fruit.

DR. J. WICKHAM LEGG is a candidate for the vacant Assistant-Physicianship at the Brompton Hospital.

PROFESSORS HEBRA and Von Sigmund have been promoted from extraordinary to ordinary professorships: the former to that of Dermatology, the latter of Syphilography.

WE are glad to hear that Dr. H. Beigel has been appointed Physician for the Department of Skin Diseases at Charing Cross Hospital. Dr. Beigel has made several valuable contributions to the literature of cutaneous pathology.

TANTALISED.

RESPECTING medical students, Mr. Paget writes, in the article from which we have already quoted: "Of course, in watching and reflecting on the careers of my pupils, I have come to some strong beliefs on the subjects of medical education; but this is not the place for publishing them." We can only express our earnest hope that Mr. Paget will shortly find a suitable place. There is, perhaps, no one whose experience and whose qualities of mind and of heart so well fit him to express opinions upon this urgently important subject. The whole profession would receive his views with the utmost attention. We trust that they will not be reserved for expression in the secret conclave of the Council of the College of Surgeons, but that we shall all be privileged to read them, and that, too, at an early period.

TWICE TANTALISED.

THE editor of the *Westminster Review* concluded the article of which we have already spoken by the following remarkable statement, "We pledge ourselves to prove that this question" (the mitigation of the physical results of prostitution) "can and ought to be practically dealt with; that the plan of dealing with it now vigorously pressed on the legislature, of extending the Contagious Diseases Act to the civil population, will both signally fail to accomplish the object in view, and will itself entail evils far greater than those it is intended to remedy; and that there is a plan open to no such objection, in harmony with the free spirit of English institutions, which, if practised, will be successful." Not the slightest hint was given as to what this successful method of preventing the evils of syphilis consists in, and our curiosity was not a little aroused. We waited with some impatience for the next issue of the *Review*, in which, to our great disappointment, the solution of this great problem, although, as we have seen, asserted to be accomplished, finds its publication still postponed. It is, however, definitely promised in the next number.

PREVALENCE OF THE FOOT-AND-MOUTH EXANTHEM.

WE learn from the *Veterinarian* that the foot-and-mouth disease exists in nearly thirty English counties. In Schleswig and Holstein, milk from animals affected with this disease is not given even to pigs until it has been boiled, and not at all to human beings. The *Veterinarian* considers this precaution a necessary one; and adds that "the milk, when given warm to young animals, is poisonous to them."

SPECIAL HOSPITALS.

OUR special hospitals die but slowly. The Committee of St. Mark's (for fistula, etc.) are, we see, desirous of adding twenty additional beds to theirs, and expect to obtain the needful funds.

SELF-CRUCIFIXION.

THE French papers contain a strange story of a monomaniac, who attempted to crucify himself. The poor man forgot that he could not possibly complete his design. He was found with both feet and one hand nailed to a cross which he had placed on the floor.

UNIVERSITY OF CAMBRIDGE: APPOINTMENT OF EXAMINERS.

ON the 14th instant, a grace passed the Senate of the University of Cambridge, appointing Messrs. Bradbury and Danby Examiners for the first examination, Dr. Robert Liveing and Dr. Drosier for the second examination, and Dr. Paget and Dr. Barclay for the third examination, for the degree of M.B.; Messrs. C. Brooke and Savory Examiners for the degree of Master in Surgery.

TEMPORARY DUMBNESS FROM MORAL SHOCK.

THE details of the case referred to in the following would be very interesting to the medical psychologist. We extract from Captain Du Cane's Report on Military Prisons. The Governor at Aldershot reports that a prisoner, being checked at drill by one of the warders, wished that "God Almighty would strike the warder dumb". The prisoner himself was struck dumb on the spot, and did not recover his speech for seven days. He was very much frightened; and, on recovering his speech, made great promises of amendment; but his good resolutions vanished, and he was soon in prison again.

FATAL ERYSIPELAS FROM A NEEDLE-WOUND.

A TAILOR named George Ford, aged 45, died on Saturday at St. George's Hospital from erysipelas, following a punctured wound. On the previous Saturday, he ran a needle into his knee to the depth of an inch. It was extracted by the house-surgeon of the Hospital, who advised him to become an in-patient. He delayed entering, however, till Monday, when erysipelas had set in. He died a week after the receipt of the injury.

WHAT BECOMES OF MEDICAL STUDENTS?

UNDER this title, Mr. Paget favours us with a short but most interesting paper in the *St. Bartholomew's Hospital Reports*. The chief statistical data are thus given. Of 1,000 students whose careers were known, 23 achieved distinguished success; 66, considerable success; 507, fair success; 124, very limited success; 56 failed entirely; 96 left the profession; 87 died within twelve years of commencing practice; 41 died during pupillage. "In this table, they are classed as having achieved distinguished success who, within fifteen years after entering, gained, and to the end of the time maintained, leading practices in counties or very large towns; or held important public offices; or became medical officers of large hospitals; or teachers in great schools, as the professors of anatomy in Oxford, Cambridge, and Edinburgh, all of whom it was my singular good fortune to have for pupils." This last very gratifying circumstance may be employed as a set-off against the fact that one of the number was hung—the notorious Palmer. It is added respecting Palmer, "He was an idle, dissipated student, cursed with more money than he had either the wisdom or the virtue to use well." "Those who failed entirely were of a very mixed class. Of these, fifteen were never able to pass their examinations." "It will seem strange to any one that so many as ninety-six—that is, nearly 10 per cent. of the whole number—left the profession." "Against these, we have only seven who came to us from other professions; and of these, five again left us." Of those who gave up the profession, sixteen left while pupils; two retired on private means; four, after engaging in practice, had to leave in disgrace; one, speculating in mines, lost, committed forgery, and is in prison; three became actors; four entered the army with commissions; three enlisted as privates. Twenty-seven left the profession for various

other pursuits. Three became homœopaths; but, says Mr. Paget, "took to that class no repute for wisdom or working power." The fact that data exist for the compilation of such a report as this is a most creditable indication of the supervision given by St. Bartholomew's teachers to their students. We should be glad to quote even more than we have done; but it would be unfair to the original article.

EXCISION OF THE TONGUE IN CANADA.

THE *Canada Medical Journal* records two cases of excision of the entire tongue for cancer, by Dr. Fenwick of Montreal. The plan of Nunley (*écraseur*) was the one adopted, and in both cases with good immediate results. In both, however, the disease soon returned in the glands of the neck. In one, the patient enjoyed a five months' interval of health; and in the second, death occurred from cancerous cachexia, etc., four and a half months after the operation. In both, the operation would appear to have been a benefit to the patient, ridding him of a local source of misery. When the disease is really carcinoma, we suspect that return in the glands of the neck is sooner or later an almost invariable event. The difficulty of diagnosis between cancer and syphilis is often very great; and when we hear of permanent recoveries after excision, an involuntary suspicion on this point will occur. Dr. Fenwick's two cases are probably fair examples of what must be expected in cases of *bonâ fide* character, for epithelial cancer of the tongue, when once declared, is one of the most rapidly fatal forms of malignant disease with which the surgeon has to deal.

THE METRIC SYSTEM IN AUSTRIA.

WE mentioned some time ago that, in the new Austrian Pharmacopœia, the metric system of weights was adopted. This change has created some confusion. According to the *Weiner Medizinische Wochenschrift*, the Stamp Office has declared that it will take two and a half years to provide all the apothecaries in the monarchy with weights stamped according to the metric system. This, says the *Wochenschrift*, is an unexampled way of treating with *nonchalance* a business of pressing importance. As a further instance of absurdity, the official tariff of medicines, issued about a month ago, calculated the charges according to ounces and grains, while the Pharmacopœia has adopted *grammes*. This causes confusion in prescribing, and is likely to throw both doctors and druggists into despair. The official decree has introduced the metric system without taking care that the necessary weights were provided: conscientious physicians obey the order, which, however, is frustrated by the want of stamped weights for dispensing, so that the apothecaries have to reduce the weights to grains and ounces—sometimes to the injury of the patients. The *Wochenschrift* remarks, that all this tends to prove the pressing necessity for a reform in the management of public medicine, unless the whole of the medical organisation of Austria is to become the laughing-stock of the world.

IMPORTED MEAT.

IN 1868, 2.4 per cent. of the sheep landed at the London wharves or at Thames Haven were killed for disease, owing to variola in August, in a cargo of 1,300 sheep from Holland. The disease was detected in one single case only out of this cargo—a fact which speaks well for the efficiency of the veterinary inspection. The same year, 3.8 per cent. of pigs imported at the same places were killed, chiefly on account of "eczema" (foot-and-mouth disease?) and "cholera". In 1867, these percentages were, .5 for sheep, and .9 for pigs. The number of food-animals imported into the whole United Kingdom in 1868 was not quite half what it was in 1866; while, as regards dead meat imported (*into London alone*), we find 28 per cent. less of all kinds in 1868 than in 1867; *the decrease of fresh mutton and beef being 81 per cent.* It appears, also, that there has been an increase in the quantity of meat "preserved otherwise than by salting", from 747 cwt. in 1864 to 17,954 cwt. in 1868. The last quantity amounts to about 11 per cent. of the total importation into London; while, taking the corresponding amounts for the whole kingdom, we find that only 4.4 per cent. of the total dead meat imported is "preserved otherwise than by salting".

VALUABLE PRIZES.

DR. LACAZE of Paris, who has lately died, has left to the Faculty of Medicine an annual income of 5,000 *francs* (£200), for the purpose of founding a biennial prize of 10,000 *francs* for the best treatise on typhoid fever or phthisis; and to the Academy of Sciences an annual income of 15,000 *francs*, to found three biennial prizes of 10,000 *francs* each, to be awarded to authors of works in physics, chemistry, and physiology.

THE PROFESSOR OF CHEMISTRY IN OXFORD.

SIR BENJAMIN BRODIE, the Professor of Chemistry in the University of Oxford, has been permitted by Convocation to appoint a deputy to deliver part of his public lectures, and has been relieved from the necessity of residing more than four months in Oxford during the year ending at the beginning of Michaelmas Term 1870. We regret to learn that this permission has been rendered necessary by the state of Sir Benjamin's health.

EXTENSION OF THE QUEEN'S HOSPITAL, BIRMINGHAM.

WE are glad to observe, from newspapers which reach us every week, and sometimes oftener, that the Working Men's Fund, zealously promoted by Mr. J. Sampson Gamgee, is steadily progressing. It has been taken up by various departments of the Birmingham trade, and special collections amongst the workpeople have been made. It is likely not only to help forward an excellent charity, but also to extend amongst the labouring classes a perception of their interest in the work. We hope, however, that care will be taken to correct an impression very likely to result, that the donations now given confer the right of gratuitous assistance when required. There is great danger in this direction when the poor, or those only just above them, are asked to contribute to the support of a medical charity.

AMALGAMATION OF THE LONDON MEDICAL SOCIETIES.

AT the special general meeting of the Pathological Society held on Friday evening, the 15th instant, to consider the Royal Medical and Chirurgical Society's scheme for the union of the various societies, the report of the Pathological Society's Council was unanimously adopted, after very little discussion. It was to the effect that they considered some union of the societies desirable; and, holding in view the general interest of the profession, they considered that the scheme could not be agreed to without changing to a great extent its several parts, and allowing the Society abundant funds for publishing its *Transactions*. Resolution XXI allows each Society to spend only one-half of its annual subscriptions on its *Transactions*, whereas the Pathological Society had for some years past expended the greater part of its annual subscriptions for that purpose. The Council further recommended that three delegates should be nominated to meet those from other societies. The President, the Treasurer, and Surgical Secretary, were accordingly appointed.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

THE first meeting of the Society for the present session took place at the Royal Kent Dispensary, on Wednesday evening, October 13th; Dr. Prior Purvis being in the Chair. The following gentlemen were elected to fill the various offices:—*President*: Prior Purvis, M.D. *Vice-Presidents*: J. C. Thorowgood, M.D.; E. Clapton, M.D. *Council*: J. Anderson, M.D.; J. M. Burton, F.R.C.S.; W. Carr, M.D.; R. Gooding, B.A., M.D.; W. Lockhart, F.R.C.S.; C. Nind, M.R.C.S.; R. Venables, M.A., M.B. *Treasurer*: Prior Purvis, M.D. *Secretary*: A. Roper, M.R.C.S. *Librarian*: J. P. Purvis, M.R.C.S. The President having delivered the inaugural address, a discussion followed, in which Dr. William Parr, Dr. Ralph Gooding, and Mr. Lockhart, took part. A vote of thanks being accorded to the President, the Society adjourned. Dr. Ralph Gooding showed a specimen of aneurism of the arch of the aorta, which gave rise to no symptoms during life, but suddenly caused death by bursting into the substance of the left lung.

PROPOSED HOSPITAL FOR INCURABLES.

A NEW Hospital for incurables is about to be built at Cowley, near Oxford. It is especially intended for those not absolutely destitute. Its chief promoter is Miss Sandford of Cowley, who has been induced to undertake it by a donation of £1,000, conditional on the plan being carried out. There can be no question as the great need for such institutions, and all must wish Miss Sandford success in her noble work. In the list of the Provisional Council, we observe the names of Sir Thomas Watson and Dr. Freeborn of Oxford.

ST. BARTHOLOMEW'S STATISTICS.

WE are very glad to have learned, since the appearance of our notice of the *St. Bartholomew's Reports* last week, that the vital statistics of the year, although omitted from the volume, have been published in a separate form. Next year they will as usual, we understand, appear in the volume, their most appropriate place. The separate issue of such statistics is inconvenient, as they do not then find their way to the hands of nearly so many as would otherwise get them; nor are they so secure for permanent reference. St. Bartholomew's has hitherto been conspicuous for praiseworthy attention to statistics, and we should have regretted much to lose the annual contribution.

PATHOLOGICAL SOCIETY: FIRST ORDINARY MEETING.

THE first ordinary meeting for the session of this Society was held on Tuesday; Dr. Quain, President, in the chair. The specimens exhibited were considerably below the mark in interest, the only case of special value being an exceedingly well marked example of villous disease of the kidney, shown by Mr. J. H. Roberts. The President called the attention of members to the new regulations, which are printed in the usual way on the cards: That members intending to exhibit specimens to the Society must send the report to the Medical Secretary at least a week before the meeting at which the specimen is to be shown. In the case of specimens, however, which have been removed from the body during the week preceding the meeting at which they are to be shown, the reports may be deferred until the meeting afterwards, it being sufficient that notice of exhibition be sent to the Medical Secretary as early as may be convenient; that specimens should be in the room a quarter of an hour before the time of meeting, and duly labelled. It was announced also that notice of the specimens to be exhibited would, as far as possible, be published in the medical journals of the previous week.

A VACCINATION TRACT WANTED.

AN excellent suggestion, which has no doubt occurred to all who have been engaged in trying to counteract the present anti-vaccination outcry, found expression last week in the *Saturday Review*. It is, that the Privy Council should issue a tract or leaflet explaining in the least technical terms the real facts, and that this should be distributed gratuitously at vaccination stations and elsewhere as widely as possible. We think that the suggestion ought certainly to be carried out at once. The facts are so simple, so definite, so telling, that we cannot but think that an explicit statement of them, such an one as the medical adviser of the Privy Council could do to perfection, would be of the utmost use in allaying fears which are in many cases not the less real because they are groundless.

THE BRIGHTON MEDICAL MUSEUM.

THE Pathological Museum and Medical Library of the Brighton Hospital, which have hitherto been accommodated in the buildings of the latter have grown to such a size that the rooms at disposal for the purpose are too small. With great public spirit a movement has been set on foot for the erection of a new and commodious building, to be specially devoted to their custody. A new department which we begin in this week's JOURNAL indicates sufficiently the very high value which we attach to collections of this kind, and we need not add how heartily we wish success to the Brighton scheme. The fact of overgrowth is

most creditable to the medical staff of the Infirmary, and we believe we shall not err much, if out of many workers we single Dr. Ormerod as one to whom credit is specially due. The Brighton profession is quite right in letting it be understood that the cost of such undertakings should be borne by the public, and that the profession does its share in the time and scientific labour which it devotes. The scheme is to be carried out in no niggardly spirit; £1500 is asked, and we are glad to hear that there is every prospect of obtaining it.

SCOTLAND.

DR. JOSEPH BELL has been appointed Assistant-Surgeon to the Edinburgh Royal Infirmary. The selection is an excellent one.

UNIVERSITY OF ABERDEEN.

DR. BRUCE of Crimond, Dr. Kerr, and Dr. Angus Fraser, were on Thursday elected Examiners in Medicine in the University of Aberdeen.

THE OUTBREAK OF FEVER ON BOARD THE CLYDE TRAINING SHIP "CUMBERLAND."

We are happy to be able to state that the boys from the *Cumberland*, twenty-three in number, are all progressing as favourably as can be expected; in fact on Wednesday as many as nine of them were considered so far convalescent that they were permitted to return from Greenock Hospital to their ship.

SURGEONS' HALL, EDINBURGH

At a meeting of the lecturers in the Medical School, Surgeons' Hall, held on Monday, October 18th, Dr. Arthur Gamgee, F.R.S.E., was appointed to the Lectureship on Physiology, rendered vacant by the election of Dr. Sanders to the Chair of General Pathology in the University.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.

At a meeting of the Royal College of Surgeons of Edinburgh on the 20th instant, the following office-bearers were elected for the ensuing year:—*President*: J. D. Gillespie, M.D. *Treasurer*: J. Gairdner, M.D. *Librarian*: A. Inglis, M.D. *Secretary*: J. Simson, M.D. *President's Council*: J. S. Combe, M.D.; Andrew Wood, M.D.; J. Dunsmure, M.D.; James Spence; J. A. Hunter, M.D.; H. D. Littlejohn, M.D. *Ex-officio*: J. Gairdner, M.D. *Examiners*: W. D. Dumbreck, M.D.; A. Inglis, M.D.; R. Omond, M.D.; J. Dunsmure, M.D.; P. D. Handyside, M.D.; J. D. Gillespie, M.D.; H. D. Littlejohn, M.D.; P. H. Watson, M.D.; D. Wilson, M.D.; John Smith, M.D.; D. M. C. L. Argyll-Robertson, M.D.; Joseph Bell, M.D. *Assessors to Examiners*: J. S. Combe, M.D.; W. Brown; A. Hunter, M.D.; J. Spence. *Officer*: J. Dickie.

THE NEW ROYAL INFIRMARY, EDINBURGH.

It was definitely settled, at a meeting of governors held last week, to sell Watson's Hospital and Grounds at the price previously agreed upon. As we long ago remarked, as soon as Watson's Hospital grounds were settled upon as the site upon which the new Infirmary was to be built, subscriptions would again begin to flow in. We now hear that the Lord Dean of Guild Law has intimated his intention of contributing £1,000 towards the building fund, on the condition that the new Infirmary be erected on that site; and that many others are willing to give additional subscriptions, upon the same condition; and also that another gentleman has intimated an additional contribution of £500.

THE MORTALITY OF LEITH.

It seems that the mortality returns for last month were not at all favourable. The mortality in South Leith had risen so high as 49 per 1,000. The report of Mr. Gilbert Archer showed that the deaths last month were 70, and the number of deaths in the same month last year 39. The deaths during the month were: in South Leith, 70; in North Leith, 40; total, 110; which was equal to an annual mortality of 49 per

1,000 in South Leith, and 32 per 1,000 in North Leith, or 34 per 1,000 over the entire burgh. This death-rate was unusually high. In North Leith, it was accounted for by the mortality of scarlet fever, no fewer than 13 deaths from that disease having been reported. In South Leith, consumption, scarlatina, and bowel complaint were the most fatal diseases. A few cases of typhoid fever had also occurred. With the fall of the barometer, diseases of the respiratory organs seemed to have again increased.

FEVER IN GLASGOW.

TYPHUS was more fatal than usual at Glasgow last year and this spring. The percentage of fatal cases at the Glasgow Fever Hospital was 13.8, against 9.05 in 1867-68. The mortality from the same cause at the London Fever Hospital for 1868 was 15.1 per cent. Dr. Jas. B. Russell, in his Report on the Glasgow Fever Hospital for the year ending April 1869, mentions that overcrowding exists now to an unusually great extent in that city; in connection with which fact it is interesting to notice that of 1,240 cases admitted into the Hospital, 1,023 (83.3 per cent.) were cases of typhus. The mortality was highest during March, April, May, and June. It is curious that typhus was much more fatal to males than females during the past year at Glasgow, both at the Fever Hospital and at the Infirmary: this is contrary to general experience.

IRELAND.

TRINITY COLLEGE: SIR P. DUN'S HOSPITAL.

It is said that the office of Surgeon to Dun's Hospital, now vacant, will be filled by the Board on the 30th instant.

ROYAL COLLEGE OF SURGEONS.

THE Introductory Address in the School of Surgery will be given on Monday, at one o'clock, by Professor McNamara, President; and at two the Professor of Physiology will begin his course, the first ten lectures being devoted to comparative anatomy and physiology.

THE ALLEGED POISONING CASE IN DUBLIN.

A VERDICT, expressing no opinion as to the cause of death, has been returned in the case of the man in Church Street, Dublin, who, it was supposed, might have been poisoned by a draught of liniment compounded by the Apothecaries' Hall, and given to him in mistake. Analysis did not allow the chemical or the medical witness to arrive at any decision.

QUEEN'S UNIVERSITY IN IRELAND.

A MEETING of the Senate of the Queen's University was held, for conferring degrees, on the 14th instant. In the Faculty of Medicine, according to the report for the academic year, 124 candidates had undergone the first University examination, and 62 the degree examination. Of the 124, 92 had passed; and of the 62, 50. Out of 47 candidates for the degree of Master of Surgery, 32 had passed. In the Army Medical Service, 12 candidates had been successful, and in the Navy 5.

CLINICAL EXAMINATION AT THE QUEEN'S UNIVERSITY.

THE examination of the candidates for the degree of M.D., of whom there were thirty-one, were examined by Professor Cuming at the bedside of patients in the South Workhouse Hospital, Dublin, by the permission of the medical officers and the Guardians. As a better class of cases in surgery could be had at hospitals, Dr. Mapother, the examiner in that subject, selected four cases from the admission-rooms of St. Vincent's and Mercers' Hospital, which had not been made the subject of clinical instruction. These were then subject for diagnosis and suggested treatment at the College of Surgeons, where the examination in operative surgery was also held, by kind permission of the Council. The answering for the degrees of M.A. and M.Ch. was very satisfactory. The College of Physicians has the practical mode of examination now under consideration, and many of the clinical hospitals have offered facilities for conducting it.

THIRTY-SEVENTH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION.

Held in LEEDS, July 27th, 28th, 29th, and 30th, 1869.

SECTION E.—STATE MEDICINE. *President, W. FARR, M.D., D.C.L., F.R.S.*

Thursday, July 29th, 1869.

THE SANITARY STATE OF TOWNS.

THE PRESIDENT, in opening the business of the Section, said: There is a very earnest desire on the part, not only of the medical profession, but of the whole community, that the question of Public Medicine should be ventilated as much as possible; and the Government has done all it can to carry out that wish by appointing a Royal Commission. On that Commission our respected ex-President, Dr. Acland, has a seat, and so have Sir Thomas Watson, Mr. Paget, Dr. Stokes, and Dr. Christison. That Commission deserves the confidence of those who are wishful to see the sanitary state of the country placed on a different footing. Its members will receive evidence, and would be glad to hear suggestions. Under these circumstances, I ventured to suggest to the Council of this Association that they should request health-officers, who have great experience in the administration of the law as it now is, to be good enough to meet here, if they could do so conveniently, and hold a sort of free conference. We are not going to pledge ourselves to any special line, but we wish to hear mainly from men who have had experience in the working of the existing acts, whether they have anything to suggest in the way of improvements. We shall begin by hearing some papers read which bear upon the subject. I have before me some very distinguished names of gentlemen who are present, and who will address the meeting.

Dr. WILTSHIRE, the Secretary, stated that he had received letters of apology from Mr. Baines, M.P., and many other gentlemen, who were unable to be present. They expressed the greatest interest in the Convention about to be held. Dr. Rogers, the President of the Poor-law Medical Officers' Association, wrote that the Council of that Association would gladly co-operate with the British Medical Association in urging upon the Government the necessity for some stringent enactment in matters affecting the prevention of sickness amongst the labouring classes.

The Defects of the Sanitary Acts. By EDWARD BALLARD, M.D. (Islington).—Dr. Ballard spoke more especially of the sanitary laws as carried out in the metropolis. He thought that it was highly desirable that all laws having for their object the improvement of public health shall be administered in each district by one body, however it was constituted. Sanitary work was so important that it deserved to be entrusted to a special department of the State—a department of public health. He did not see how the local authorities were to be dispensed with in this matter, seeing that they were the best acquainted with local requirements. The Royal Commission now sitting ought, he thought, to obtain returns, showing to what extent the permissive Sanitary Acts had been adopted throughout the country. In any consideration of the sanitary laws, he thought that there ought to be some central authority to take action in the event of local authority neglecting its duty, or not discharging it efficiently. Every district in England ought to be under the supervision of medical officers of health, whose opinion should guide the local authority in all matters relating to public health. The districts should be formed of not less than 200,000 inhabitants; and the salaries of the officers would not be extravagant at £400 for every 100,000 of population. The medical officer of health ought also to be the factory inspector of the district; and if he was not the registrar of births and deaths, he ought to be the superior officer. He might also be the food analyst. He was strongly of opinion that there ought to be a registration of sickness throughout the country, and that might be carried out by the officer of health. The law as to the overcrowding of houses was in a very confused condition; and, in his opinion, it required improvement and consolidation. He especially dwelt on the importance of a constant supply of pure water, and the necessity there was for strict provisions against the adulteration of food. Speaking of contagious diseases, he said that the great fault of our legislation was, that there was nothing systematic about it; and made suggestions which, if adopted, would, he thought, be more effectual in arresting the spread of such diseases.

Four Years' Experience as a Health Officer in Bristol. By DAVID

DAVIES, Esq.—The paper contained an account of the means carried out for improving the health of Bristol. In 1865, Mr. Davies was appointed Medical Inspector of Health. No special instructions were given him: but he was desired to find out the best measures for improving the public health. The city of Bristol is divided into four districts, each under the superintendence of an inspector chosen from among the police. His own duty he described as consisting in making weekly reports of work done; in giving medical evidence in court when required; in meeting the district inspectors daily, receiving their reports, and giving such advice as may be necessary with regard to cholera, typhus, enteric fever, measles and whooping-cough, etc. At his recommendation, a mortuary had been erected; and a carriage provided for the conveyance of persons suffering from infectious diseases.

On the Practical Working of the Sanitary Act of 1866, and the Diseases Prevention Act of 1865. By T. J. DYKE, Esq. (Merthyr Tydfil). [The paper was read by Dr. Wiltshire.]—The paper exposed what the writer spoke of as the circumlocution which had to be encountered before the sanitary laws could be put in force.

Dr. GAIRDNER (Glasgow) said that he did not think that the Sanitary Acts failed by the want of the absolute legal powers, so much as in consequence of the want of the desire to apply these powers in many instances, and the want, both amongst the public, and, he was sorry to say, also amongst the medical profession, of the general diffusion of the vital interest in sanitary work which would lead them to co-operate thoroughly with health-officers, and to obtain the application of the existing powers for particular cases. He did not know of any one single clause that could be added to the last Sanitary Act obtained for Scotland (1867). If there were anything, it was the suggestion he threw out at the meeting of the Association in Dublin, in connection with the prevalence of fever in large tenemented houses. He thought that if it could be made consistent with English law, it would be a good thing not to turn the people out of their houses by law, but, the moment any epidemic was ascertained to have broken out in a tenemented house, to give the medical officer absolute power to stop the reception of any new persons into such a house—to prevent the reception of any new blood, so to speak, and to keep it tenanted by the old blood, until it was shown that the epidemic had gone. Such a plan, in the first place, would prevent the spreading of the epidemic; in the second place, in touching the pocket of the proprietor, it would make him feel that the bringing in of his rents depended upon his keeping his house free from epidemic disease. He had mentioned this to the Town Clerk of Glasgow, and was met with a lawyer's view of the subject. He said it was "confiscation"; and he (Dr. Gairdner) said "it is confiscation that would be in the interest of the public and of house-proprietors themselves." Taking the law as it stood, he must say that it worked well in Glasgow, where in the working of the Public Health Acts, he had had the most full and able assistance from his colleagues, the medical officers of health. Altogether, he thought the organisation of the matter there was not bad; but, as every one knew, a reduction of the death-rate did not appear as yet. The causes of this were too intimately mixed up with the social condition of Glasgow, and were far too complex for him to attempt to state them there. His own conviction was, that the house-accommodation was at the bottom of the whole thing—that, until the influx from the country lower-class people, and of young and lusty blood, which comes to be greatly deteriorated and physically degraded by the manifold evils that abound in our great towns, could be checked or limited; until something was done towards providing suitable house-accommodation for these people, and in the way of not allowing them to come to the towns until there was good accommodation; until this could be done, he did not think we should ever improve the sanitary condition of our great towns to any extent. The poor and degraded classes were being driven off the land; every pains were taken to prevent their multiplying on the estates of country gentlemen. But they flocked to the towns, because they had an idea that labour was plentiful there. Labour was plentiful at times; and this system of immigration was all very well when hands were wanted and trade brisk, and it was then that colony after colony of people were sent to our towns. But after a while, these people, pinched to the utmost possible degree, crowded into the lowest dens they could find. Until we made dens impossible, the state of our towns would grow worse, because we were making each generation worse than the generation which preceded it. There was no doubt at all about it in the physical sense, whatever was to be said about it in the moral sense, that the more we allowed house-accommodation to be small, the worse would grow the degradation of our people. He had the authority of the gentleman who had the superintendence of police in Glasgow, for saying that never in his experience were drunkenness and physical degradation anything like as bad as they were now. This was beyond the

control of the present Sanitary Acts altogether; and if the Commission could do anything towards dealing with the evil, it would be perhaps the best direction in which they could go.

Dr. C. B. NANKIVELL (Torquay) spoke briefly in favour of the appointment of some central authority to enforce the sanitary Acts. He said there was no difficulty in his district in the way of carrying out the Acts, so far as support was concerned. The difficulty that arose was as to whom the power of carrying out the Acts was intrusted.

Mr. LEIGH (Manchester) said that the impurity of atmosphere which prevailed in our large towns was, in a great measure, due to the emanations from open cesspools, privies, and sewers. It was said that the introduction of water-closets would do much in the way of a remedy; but there were many towns into which it was not likely that they would be generally introduced for many years, and it would be unwise to allow these towns to remain without anything being done in the way of an improvement. He thought it would be worth while if the Association took the matter into serious consideration. The best mode of ventilating sewers was a very important question, and was, perhaps, not very easily settled. He believed that to the state of atmosphere to which he had referred was due much of the diarrhoea that prevailed in towns. There was a large amount of mortality in large towns amongst the very young; and a great deal of this was due to causes which were no doubt removeable. He should like to see an Act of Parliament prohibiting women from going to employment within six or eight weeks after confinement. It was a common thing in Manchester for women to go out to work six or seven days after childbirth, and the consequence was that the children, in too many instances, died from the want of proper nourishment from their mothers. As to the observations which Dr. Gairdner had made upon the condition of houses, he entirely concurred. Every one who had inquired into the condition of the lower classes in large towns must admit that the spread of disease and the mortality amongst these classes were attributable often to the frightful state of their dwellings. But, until the laws relating to land could be altered, he did not see how people could be prevented from coming from the country into towns, and occupying, in large numbers, the houses to be found there. To provide accommodation for these people and others, every yard almost in Manchester was being covered over with brick houses. In one of the out-townships, the streets were well paved, and the houses, to look at, seemed good, but the passage at the back was scarcely three feet wide, and the yards were not more than six or nine feet square. There were foul ashpits and cesspools close to the doors; and was there any wonder, therefore, that there should be disease and great mortality? He had been connected with Manchester for a short time as its officer of health, and he had addressed himself, he thought, to a gradual improvement of its sanitary condition. The local authority was the Corporation; and he believed that authority was in earnest in the desire to improve the condition of the town, but the difficulties were great. The question whether a man's private property should be affected by public bodies, created a great deal of annoyance.

Dr. ACLAND (Oxford) said that every one, who was called to consider what practical laws were now requisite for carrying out the sanitary needs of an increasing population, must really ascertain the wishes of those who have had practical experience of the administration of the existing laws. And if he could say anything which he thought could be of real service, it would be this—that, having heard the remarkable statement of Dr. Gairdner, they really should very seriously consider what questions they could bring forward on points of law which had to be remedied. Dr. Gairdner was one of the most energetic sanitary officers living, and he had one of the most important and difficult towns to manage; and yet he had just told them that he was really at a loss to name any one particular in which the Acts required alteration. But he (Dr. Acland) thought that, whether it was absolutely necessary or not to alter the laws, it was not at all difficult to improve them very much. But he did agree with Dr. Gairdner so far as this, that the main difficulty was not actually in the power, but in the question how to apply that power. There were plenty of powers, but there were so many ways of evading them, that many persons who applied their minds seriously to the question could not even find in what way the powers were to be resorted to. There was a great deal of inspection; but the inspection was so disjointed that the machinery went on by what engineers very appropriately called an eccentric motion. He thought that any skilled officer who would be at the trouble to describe to the Chairman of the Sanitary Commission any points in which he knew that the law broke down, would be entitled to the gratitude of the country. He had had enough experience already of the Commission, to know that it was a very difficult thing to drag out weak points. What the Sanitary Commission required was knowledge on these points: and he would answer for this, that, such was the earnestness of Sir C. Adderley, the Chairman of the Commis-

sion, that he would hear no real flaw pointed out without endeavouring to remedy it. There was only one other thing which he would like to say. The Association, in conjunction with the Social Science Association, had earnestly sought the appointment of this Commission; and it happened to fall to his share, being by accident the President at the time, to be called upon as a member, and had felt it his duty to serve. He had noticed repeatedly that considerable misapprehension existed as to what the Commission had to do. Its duty was to look to the necessity of remedying all flaws. It would be perfectly useless to attempt too much. They might upset the coach easily by making suggestions which could not be carried out, or by making suggestions which, from the enormous expense that would be involved, ought not to be carried out. They might purchase some sanitary improvements at a cost which no Chancellor of the Exchequer could possibly justify, or which the House of Commons would let him carry out if he attempted to justify. He would advise those who were present, and others, to deluge the Chairman of the Commission with all the real remedial plans they could detect; and the President of the Section especially, and those who had acted with him, would see the fruits of their labours in an amended Bill before very long. In a very short time the evidence which had been accumulating would be made public, and he hoped it would elicit free and full criticism. He hoped it would do much towards bringing to a successful issue the great object which so many in the room were labouring to see accomplished.

Dr. RUMSEY (Cheltenham) said that, with regard to the constitution of proper central authorities, he would not now offer any suggestions. He thought that, at a meeting largely composed of health-officers, their most important and most profitable occupation was to consider what might answer best with regard to local administration and local duties; and, therefore, while he recognised in the fullest manner the importance of having a certain central authority at the head of the health affairs of this country, he would say that what they had now to consider principally was what should be done locally. It had been said that there should be one board locally for every kind of sanitary action, and that the whole country should be included in the areas subjected to such boards. He had thought so himself fifteen years ago, but he had a little modified his opinion. There were so many classes of functions to be performed and to be devised, that he very much doubted whether they could make one single authority in the country answer all purposes. There was, for instance, one kind of authority required for a small district, and another kind for the larger districts, such as counties, or rather the water-sheds of great rivers; and the water-shed of a very large river, such as the Thames or the Severn, would require a different kind of enactment, a different kind of advice, and a different kind of authorities to carry out the advice, from what would be required for a county or for a parish. The various kinds of sanitary obligations which fell upon the country would require classification before determining the exact nature of the authority, and the exact kind of officer to be appointed to advise the action of the authority. With regard to the most common kind of reforms, all were carried out by authorities, and the duties performed by officers, he was very much disposed to assent to the ground taken up by Dr. Ballard, and to say that, if they embraced as large a population and area as would occupy the entire time of one skilled sanitary officer performing superior duties, they would do that which would be necessary for the more common sanitary purposes. Although a population of 200,000 in large towns might not perhaps be too large, he was sure it would be too large for the majority of the mixed provincial districts, where a population of from 100,000 to 150,000 would fully occupy the attention of a single officer; but the registration districts must be constituted of sufficient extent to occupy the whole time of a skilled sanitary officer. The duties of the officers should consist mainly of inquiry, investigation, record, and report. He did not think they had come yet to a state of sanitary science for medical officers of health to dogmatise, still less should he like to see any stringent discretionary powers given to these officers. He should like the officers, if they wanted to exercise powers, to obtain a magistrate's order, because he thought it undesirable that a scientific officer should be brought into an invidious position by making him the point of attack for all the anti-sanitary people who constituted the majority of every population. He would not require a medical health officer to go into fish-shops and smell stinking fish, or into slaughter-houses and see all sorts of abominations, and get into discussion with the owners of these things. The officer should have proper inspectors to assist him; and he did not think any better inspectors could be found than well-trained police. He thought Dr. Gairdner had been speaking of Scottish law, and Dr. Acland of English law. He did not hesitate to say that the Scottish Act was much better in every respect than the English Acts. Its terms were more precise and full, its powers were more extensive and clear, and the

local machinery more simple and uniform. He believed Dr. Gairdner was referring to that Act, and Dr. Acland to the medley of miserable enactments in England. Dr. Gairdner had shown in powerful terms the result of the system of crowding of town populations, and the effect which it had upon the best blood of the country as it came into the towns. This must be met not by town authorities, but by the nation. Our town population should be more widely distributed, and the railways should be used at the cost of the nation for the conveyance of the working classes to and from the towns in which they were employed. He thought that well-constituted local authorities were of much greater importance than minute laws. He could not view with any great satisfaction a great number of compulsory enactments; he would rather leave discretionary power more largely to bodies, but he would have the bodies better constituted. He would constitute them by Act of Parliament; and he did not think Parliament would be unwilling to grant a better constitution for local authorities.

DR. SYSON (Salford) said that the smoke nuisance in that town had been reduced by about two-thirds, but he attributed much of the mortality that prevailed in Salford to the intemperate habits of the lower classes, as well as to atmospheric impurity. More than fifty per cent. of the children in Salford were doctored by the druggists. He said he knew one place where the main streets were strewn with undocketed pipes. In addition, it seemed to him that syphilis was, to a great extent, undermining the health of our great populations.

MR. DAVIES (Swansea) spoke as to the sanitary state of that town, of which he is health officer, and contended that the contamination of water was a serious cause of mortality.

The PRESIDENT closed the discussion. All the anticipations of those who were interested in calling the conference had been realised. The British Medical Association had, he thought, some reason to be proud of the impetus it had given to the sanitary acts; and he trusted that the Royal Commission would be successful in giving to England an improvement on the Scotch sanitary law. The English registration act was imperfect in many respects; and the Scotch took it up and improved it. They had done the same with English sanitary legislation. They had profited by English blunders, while the English rather perversely stuck to their blundering, and made no serious effort to get rid of it. But after what had happened that day, and what would be heard in evidence, he felt persuaded that the effect of the appointment of a Commission would be to improve the sanitary condition of the country.

QUEEN'S HOSPITAL, BIRMINGHAM.

THE Winter Term at this Hospital commenced on the 8th instant, when Mr. SAMPSON GAMGEE delivered an address, of which a portion is subjoined.

If the study of animal structure and formation teach any one lesson, it is the unity of the plan of construction, the correlation of parts and forces for the preservation of life, and the simplicity of the scheme by which nature attains that end, by the combination of an all but infinite variety of means. Unity of plan, variety of resources, is nature's order, and, as students of nature, it must be yours. In the organic, and especially in the animal kingdom, facts are more complex than in the physical world, and require a proportionate amount of skill, care, and reasoning power to view them in every aspect, to avoid sources of fallacy, and draw just conclusions. A certain amount of information must be gained from books or oral teaching before the facts themselves can be observed, for men's minds are like sponges—they take up very little in their uncultivated dryness. Once the student becomes acquainted with a few facts by his own observation of natural phenomena, he must go back to books for more knowledge, and with its guidance consult nature again, taking written notes of every observation and of every reflection. Take nothing for granted; be the pupil of no master, but of nature; train the mind to keep a sharp look out for fallacies in observation and reasoning; cultivate judicial impartiality; court criticism, and however sharp it may be, learn to take it calmly; and, above all, never tire of seeking information from all quarters. Do not fall into the belief that it is only so-called clever people who can teach you. There are no such dunces in many things, as some people who are very clever in one or two things, special faculties often being developed at the expense of the general powers of the understanding. Some of your most valuable lessons in professional life may be picked up from old women and hospital nurses; and, above all, do not run away with the very prevalent fallacy that members of a hospital staff have any claim to intellectual monopoly in teaching practical medicine and surgery. However ambitious and successful you may be in pursuit of the higher branches of medical science, you will in practice be tested by your

acquaintance with, and ability in carrying out, seemingly trifling details. A man is like a beam in this, that the strength of both is only equal to the strength of their weakest parts. Knowledge of physical diagnosis, animal chemistry, and operative surgery is of the first importance, but every now and then it will not save the professor from cutting a sorry figure, if he cannot make and apply a poultice or a fomentation neatly and comfortably, or bandage a swollen and painful limb with the gentle touch of a lady's hand, and the mechanical accuracy of a skilled artisan. Everything is of the highest importance that enables you not merely to be instrumental in saving life, but in relieving pain. It often happens that by a slight contrivance or a very simple application you can give so much and such prompt ease as to enable the shattered powers of life to rally, and open the way for further assistance, giving you a firm foothold as nature's help-mate. Thus you are enabled to carry your patient through difficulties which must have proved overwhelming but for the most watchful and untiring attention to a number of little things. When one contrivance or application after another fails, success may often be obtained by their combination. I respectfully think that a mistake is every now and then committed by members of our profession in giving way too soon before difficulties which seem to forbode, as a certainty, a fatal termination. It is wrong to encourage vain hopes, which, in a few hours or even moments, may be scattered by death; but it is none the less true that, when all seems lost, many lives are saved by indomitable perseverance, which otherwise must have perished. If in one of those grand struggles for life you are beaten, as you often must be, it will be an inexpressible comfort to survivors to feel that nothing has been neglected, everything tried, and that at the right time, and well.....The resources of nature will be your chief reliance, while those of art will furnish you with countless and most valuable aids. I know no theme on which more nonsense has been talked and written than on nature and art in the treatment of disease. As to the navigator, the engineer, and the artist, nature is our school, and her laws must be our guide; but art—and by that I mean intelligent, painstaking, and scientific art—furnishes an accumulation of rules and helps of the greatest value in working out, directing, and completing natural provisions. In the vast educational work here projected, you will do but little if you fall into the common error of neglecting the accumulated stores of learning of all times and nations. It was Rhases the Arabian who required of him "who aspires to eminence in the medical profession, that, instead of wasting his earlier years in frequenting musical and drinking parties, he should have spent them in conning over the valuable records of ancient wisdom. The man" (he continues) "who gives himself out for a proficient in the art, while he has scarcely even a smattering of learning, will never be deserving of much confidence, nor ever attain any great eminence in his profession. When an acquaintance with former authors is despised, what need be expected from the efforts of a single person? However much he may surpass them in abilities, how is it to be supposed that his private stock of knowledge should be at all worthy to compare with the accumulated treasures of antiquity." There can be no doubt that the modern additions to the science and practice of medicine and surgery have been numerous and of the highest importance, but what I would wish to impress is the necessity of culling learning from all ages and all nations. For depth of thought, originality of conception, completeness of erudition, and eloquence of expression, the old writers are scarcely equalled by any of the modern, while rich as the medical literature of this country is, anyone would form a very imperfect notion indeed of the literature of medicine who neglected the libraries of Italy, Germany, France, and the United States of America. One great advantage of extensive research is, that it teaches toleration of different opinions, and proves that in the intellectual as in the physical world the line of progress is the resultant of opposing forces.

CLUB REMUNERATION.—The Preston Medical Society have unanimously resolved—1. That (on and after the 1st of January) three shillings be the minimum charge per member per annum for attendance on all friendly societies and clubs for adult persons residing within the borough. 2. That no club medical officer be required to attend club patients outside the limits of the borough, except on the payment of mileage, as may be agreed on.

FRENCH SENSATION NEWS.—At Bouhay, France, a man of intemperate habits apparently died, and was laid out. Next day, some women were sprinkling the body with holy water; and, in the act of doing so, one of them raised his arm, which was hanging from the bed. The touch recalled the man to consciousness; and, opening his eyes, he looked round on the bystanders, to their great wonderment and alarm. Restoratives being applied, he soon recovered. His father had been once very nearly buried alive in a similar manner.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

PARIS, Monday, October 18th.

1. *Death of Dr. Cerise.*—2. *Death of M. Sainte-Beuve.*—3. *Diseases now Prevailing.*—4. *Type and Treatment of now Prevailing Typhoid Fever.*—5. *Opening of Winter Medical Session.*

TOPICS presenting themselves to-day, which, for the moment, have a more special interest, I am induced to defer till next week some additional remarks on the new Lunatic Asylums of the Department of the Seine, in addition to those contained in my letter which appeared at p. 403 of the JOURNAL for 9th October.

1. *Death of Dr. Cerise.*—Dr. Cerise [originally Cerisi], one of the editors and founders of the *Annales Médico-Psychologiques* and of the *Union Médicale*, an able and much esteemed physician of Paris, died on the 4th instant from perforation of the intestine. His obsequies were celebrated at the Madeleine, in presence of a large assemblage of physicians, men of science, men of letters, and members of the *Société de Bienfaisance Italienne*, of which he was the President. Funeral orations were pronounced over his grave by Drs. F. Voisin, Morel, F. Thomas, and Foisac, in French; and by an Italian resident of Paris in Italian. Dr. Cerise was a native of Piedmont. He was a graduate of the University of Turin, where he took his degree in 1828: in 1834, having obtained authority to practise in France, he settled in Paris. Though a foreigner, and the holder of no hospital nor professional appointment, he rose rapidly to a high social and professional position, and likewise acquired a large practice both among Italians and French. For a number of years, Dr. Cerise complained of pains—sometimes intense—in the left iliac fossa. He frequently had obstinate constipation, followed by looseness of the bowels. These symptoms led to the belief that there was stricture of the large intestine in that situation. Repeated careful explorations, however, did not lead to the detection of any tumour or swelling.

The following is an extract from the minute of the autopsy made on the 6th October, twenty-seven hours after death, by Drs. L. Labbé and Homolle, in the presence of several pupils.—“*Digestive apparatus.* All the mucous membranes presented an icteric hue. The intestinal convolutions had a pitchy appearance, and were closely united to one another by false membranes: between the convolutions were specks of purulent serosity. The pelvis was entirely filled with a reddish purulent serosity. The peritoneum was throughout moderately injected. The intestine, for about twelve centimeters above the anus, was healthy; but at that point there was a well-marked line of demarcation between the healthy and diseased portions. For an extent of forty centimeters, the intestine was enormously dilated, especially at the upper part of the sigmoid flexure. There was not the slightest stricture of the bowel below this dilatation. Throughout the extent of intestine now specified, the inner surface was uneven. The mucous membrane had entirely disappeared, except at a few points, where it presented isolated hypertrophied patches. The muscular coat, thus left nearly quite bare, had itself disappeared in some places, leaving the peritoneum exposed. In a great many places, the intestinal walls were reduced to the mere peritoneum; and in one of these situations, at the junction with the sigmoid flexure, this parietal thinness had become a perforation with defined edges, and having a diameter of about two centimeters. Around this perforation, the walls of the intestine had become decidedly thinner than in any other situation. Before opening the intestine, the perforation was easily detected. There was a black patch about four or five centimeters in diameter around the perforation.”

2. *Death of M. Sainte-Beuve.*—It is a noteworthy fact that Sainte-Beuve commenced life as a medical student. I have seen his repudiation of Christianity attributed to an evil bias imparted to his mental development by materialistic notions imbibed by him when a youth at the *Ecole de Médecine*. The statement is ridiculous: it would be quite as fair to ascribe to the influence of his medical studies his more enviable celebrity as an author and critic.

Sainte-Beuve died at Paris on Wednesday, the 13th instant, after a considerable period of suffering and broken health. He was born on the 23rd of February, 1804. No one has surpassed, and few have equalled, the deceased as a writer of pure and classically beautiful French. Still, by many, his style is felt to have an immense defect. In truth, it is often cold, when a little geniality and warmth seem to be required. His criticisms please from their clearness and judicial

fairness; but they are often disappointingly frigid. He was, in fact, an intellectual anatomist. No one can read a volume or two of the *Causeries de Lundi*—upon which his fame as a critic chiefly rests—without coming to this conclusion in respect of the ex-medical student, and renowned man of letters, who, on Friday last, was privately buried in the cemetery of Mont-Parnasse. Those who had access to Sainte-Beuve in his last moments announced that he died like an ancient philosopher, cheating death, up to the very last, of all his terrors, by incessant intellectual occupation.

3. *Diseases now Prevailing.*—Small-pox, scarlatina, and typhoid fever, have lately been, and still are, very prevalent in Paris. During the last few days, I have seen a great many cases of these diseases in the general hospitals, where they are far too freely distributed in the ordinary wards along with the non-contagious maladies. In private practice, within the same period, I have seen cases of scarlatina and typhoid fever [dothinen-terial], but not small-pox; which, however, I learn, is by no means confined to hospitals, nor to the classes which furnish the majority of the patients to those institutions. In Orleans, a city of 50,000 inhabitants, situated about seventy English miles south-west of Paris, small-pox is at present alarmingly rife. A perfect panic prevails there in consequence of this, and revaccination is in great demand by the inhabitants.

4. *Type and Treatment of now Prevailing Typhoid Fever.*—When accompanying Professor Peter last Saturday morning in his visit at La Pitié, I was struck with the large proportion of the cases of typhoid fever which presented pulmonary complications; and all the more so, that I had been observing the same thing elsewhere for weeks past. On mentioning the point to Dr. Peter, he said that the present epidemic of typhoid fever was characterised by an unusual tendency to pneumonia and pleurisy: in fact, we have now among us that form of dothinen-terial which has received the name of “thoracic” from the intensity of the thoracic symptoms, and their frequently dominating over the usual abdominal symptoms.

During the thirty years which have elapsed since I first began my acquaintance with French medical practice, an extraordinary change has taken place for the better in the Parisian treatment of fevers. Bleeding, purging, and starving the patients to death, has given place to sustaining them with wine, meat-broth, and as much farinaceous and other food as they can benefit by, so as to keep them alive whilst the malady runs its inevitable course. Trousseau was the chief apostle of this modern and better system, which is now, with a few exceptions, generally adopted by all the hospital physicians of Paris. In pulmonary inflammatory complications, antimonials and depletion are more freely resorted to than is now usual in English practice; but, when blood is taken under any circumstances in cases of typhoid fever, whether by venesection, leeching, or cupping, it is, so far as I have seen, with considerable caution. In the severe bronchitis and pneumonia of typhoid fever, the late Dr. Trousseau was in the habit of relying a good deal upon counter-irritation by the tincture of iodine; and I see that Dr. Peter follows the same practice. It is preferable to blistering in most cases, because the irritation produced is more easily regulated, and the risk of producing a gangrenous sore is obviated. Dr. Peter employs a very efficacious and little known method of subduing the tympanitic distension of the abdomen, so often an urgent symptom in typhoid fever; viz., the use of what may be called *ice-poultices*. Small fragments of ice are scattered over a thick layer of dry linseed-meal: in this way a poultice is formed, which, in consequence of the slow melting of the ice, is kept at the temperature of melting ice. To Professor Monneret belongs the credit of conceiving, and introducing to the profession, this very valuable method of treating tympanites. Dr. Peter, in whose practice at La Pitié I have seen ice-poultices employed, was a pupil of Professor Monneret.

5. *Opening of the Winter Medical Session.*—It is announced that, by decision of the Minister of Public Instruction, the lectures of the Medical Faculty of Paris will commence on Wednesday, November 3rd; and that the registration of the inscription of students will open on the 20th October, and close on the 6th of November. The dissecting-rooms—17, Rue du Fer-à-Moulin—were opened on the 15th current: on and after the 26th, lectures will be delivered there daily at four o'clock, in the following order: Surgical Anatomy, by Dr. Tillaux, on Tuesdays and Fridays; Descriptive Anatomy, by Dr. Nicolaise, on Mondays and Thursdays; Physiology, by the Prosector, on Wednesdays and Saturdays. The Histological Laboratory and the Anatomical Museum will be open daily to students.

THE inmates of the City of London Lunatic Asylum are to be regaled with roast-beef and plum-pudding on the forthcoming Lord Mayor's day, at the expense of the Lord Mayor-elect and the Sheriffs.

ASSOCIATION INTELLIGENCE.

BATH AND BRISTOL BRANCH.

THE first ordinary meeting of the Session of the above Branch will be held at the York House, Bath, on Thursday evening, October 28th, at 6.45 P.M.; C. H. COLLINS, Esq., President.

This meeting will be rendered special—1. To consider the following resolution, notice of which was given at the annual meeting. Proposed by Dr. BUDD, and seconded by Dr. BRITTAN: "That power be given to the Local Councils to fill in any vacancy that may occur in this Council, *ad interim*, to the next annual meeting."—2. On a requisition of the Bath Council: To fill up the extraordinary vacancy caused by the lamented decease of W. H. Colborne, M.D., President-elect.

Papers are also expected, from Mr. Prichard, Mr. Bartrum, Dr. E. L. Fox, and Dr. Fleming.

R. S. FOWLER, } *Honorary Secretaries.*
CHARLES STEELE, }

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

THE first meeting of the present Session will be held at the Midland Institute, Birmingham, on Friday, October 29th, at 3 P.M.

BALTHAZAR W. FOSTER, M.D., } *Honorary Secretaries.*
T. VINCENT JACKSON, }

Birmingham, October 20th, 1869.

SOUTH MIDLAND BRANCH: ANNUAL MEETING.

THE thirteenth autumnal meeting was held at the Stamford and Rutland Infirmary, Stamford, on Wednesday, October 6th, 1869, at 2 P.M.; WILLIAM NEWMAN, M.D., President, in the Chair. There were also twenty-two other gentlemen present.

New Members.—The following gentlemen were then admitted as new members: William B. Deacon, Esq., of Market Deeping, Lincolnshire, and Daniel W. Tomlinson, Esq., of Oundle, Northamptonshire; also to the Branch only (being already members of the Association): H. Lambden, Esq., Rippingale, Lincolnshire, and T. J. Walker, M.D., Peterborough.

Secretary's Report.—Dr. BRYAN read his report. He stated that the funds of the Branch were in a flourishing state. The number of members was about the same, reckoning deaths, secessions, and new members. In his capacity of representative on the Parliamentary Committee, he had attended a meeting in London in July to form part of a deputation to the Lord President of the Privy Council, to present a petition respecting the representation of general practitioners in the Medical Council; also relating to amendments in the Medical Registration Bill. In August last, at a meeting of Committee of Council at Birmingham, which he was unable to attend, a new editor to the JOURNAL (Mr. Jonathan Hutchinson of the London Hospital) was elected. In the transmission of annual subscriptions, Dr. Bryan would feel obliged if gentlemen would send them within the first or second month in the year, and kindly notice the post-office specified in the circular sent by him; and the cheques were, however, most convenient.

President's Address.—Dr. NEWMAN read a short address.

Papers.—The following papers were read. 1. Case of Lithotomy; with Practical Remarks. By G. P. Goldsmith, Esq., Bedford.—2. Lithotomy; with Cases, and Specimens of Calculi Removed. By W. Newman, M.D. A discussion ensued. Several Calculi of extraordinary size were shown by Mr. T. J. Walker.—3. Case of Fracture of the Base of the Skull; with Remarks. By C. Prior, M.D. A short discussion followed.—4. Case of unusually Large Femoral Hernia in the Male Subject; with Complications. By J. Bryan, M.D.—5. Case of Sudden Death in a Man soon after a Blow; Disease of the Heart; Great Extravasation of Blood under the Skull. By R. T. Watkins, Esq.

The meeting broke up at about 4 P.M. and adjourned to Dr. Newman's house at Barn Hill, Stamford, to coffee, etc., having been previously to the meeting entertained at luncheon.

The next Annual Meeting is to be held at Aylesbury, under the presidency of Charles Hooper, Esq.

THE NEW SWANSEA INFIRMARY is to be formally opened on Wednesday next, two days being allowed for inspection by the public, previously to the removal of the patients from the old building.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, OCTOBER 6TH, 1869.

GRAILY HEWITT, M.D., President, in the Chair.

Dr. BARNES exhibited the head of a child delivered by Cephalotripsy, with the instrument (Hicks') attached. A deformed, rickety, creature, aged nineteen, was admitted, in the last week of her first pregnancy, at St. Luke's Workhouse. The conjugate diameter was estimated at from 1'25" to 1'50", and the space on each side of the promontory was about the same. Dr. Barnes passed a bougie in the uterus, on the afternoon of the 13th September, at 3 p.m.; on the 14th, there was some uterine action at 6 p.m. The medium dilator was applied for ten minutes and room was gained for work. Some pieces of the cranial vault were removed by the craniotomy forceps, and then the head was extracted by the cephalotribe, with but little difficulty. The operation lasted one hour. The mother did well. Dr. Barnes believed that the pelvis in this case was the smallest in which cephalotripsy had been successfully performed in this country. The instrument worked admirably, but he thought a less curve would be better. He also exhibited a cast of a head grasped by the straight instrument of Dr. Kidd, of Dublin, kindly lent him by Dr. Kidd.—Dr. HICKS considered this case a very satisfactory proof of the efficacy of the instrument. He adverted to the advantage of using the cephalotribe as a tractor. Although the head may be compressed to not much over an inch at the point of pressure, if the blades be removed, the after-expansion of the bones neutralises the advantages of the compression. An instrument with blades, capable of less approximation, adapted as a tractor, is really more efficient.—The PRESIDENT remarked that one practical deduction to be drawn from Dr. Barnes's case, was the advisability of giving the cephalotribe very little curve. In most cases of pelvic deformity, the pelvis was not only narrow, but shallow, and a nearly straight instrument would be generally applicable.—Dr. HICKS said that his later instruments were not so curved as the early examples. He thought that the quarter turn could always be made so that the concavity should look forwards.

Dr. WOODWARD exhibited his Obstetric Back-Supporter. It consists of a padded plate, on the posterior surface of which two springs are hinged, having their common centre formed by a rack and pinion hinge, by moving which the springs assume an arched form. To the extremities of the springs is attached a belt which encircles the abdomen; so that, in their effort to take a curved form, force is exerted against the pad forming the centre of the arc, and the requisite amount of pressure is exerted on the surface covered by the pad. Dr. Woodward said that he had used this apparatus in many labours, and with much benefit.—Dr. BARNES observed that, in his lecture on "Obstetric Support", he (Dr. Barnes) had quoted Kristeller, who described a method of actually squeezing the child out of the uterus by external pressure. The Dublin School, represented by Drs. Joseph Clarke, Collins, and Beatty, had long practised the application of a binder during the expulsion of the child, and the manoeuvre of pursuing the uterus, in its retreat towards the pelvis, by the hands, during the expulsion of the child, and of keeping up the pressure upon the uterus afterwards, to ensure full contraction, the detachment of the placenta, and the prevention of hæmorrhage. This practice he had himself always carried out. He was not a little surprised to observe that, within the last few years, this method had been promulgated in Germany as a discovery by Credé.—Dr. PROTHEROE SMITH did not think that Mr. Woodward's supporter had anything in common with the instrument which he (Dr. Smith) had exhibited to the Society on the 7th July. Simple compression by a circular bandage with a lumbar pad, as in Dr. Woodward's instrument, would be insufficient to accomplish the objects of rectifying the anteverted gravid uterus, and of supplying sufficient support and compression during labour. On the subject of compression of the uterus with a view to expedite labour, Dr. Barnes's remarks were very pertinent, and he fully agreed with him that there was nothing new in it. It was as old as woman. Nature had furnished her with an apparatus which, though all-sufficient in savage life, was impaired in the civilised woman. By the continued pressure of clothes suspended around the waist, the structure of the abdominal muscles becomes so deteriorated as to lose much of its power of contraction. When this defect exists, or when anaesthetics are widely employed, painful or perilous labour may result. To obviate this evil, after experiments extending over six years, he had produced an instrument which, in brief, he would describe as an artificial skeleton, so constructed as to present, in its pubic, sacral, lumbar, costal, and sternal pads and springs, all the *points d'appui* from

which a properly adjusted bandage is made to simulate the action of the lumbo-abdominal muscles.

Mr. WARN exhibited an Ovarian Cyst removed from a patient in whom Pregnancy had co-existed with the ovarian disease. The delivery of the patient was accomplished by version, but death subsequently took place by rupture of the cyst.—Dr. MURRAY, who had seen the case with Mr. Warn, gave some further particulars of the condition of the patient, and of the treatment adopted.—Dr. ROUTH advocated, in cases of pregnancy complicated with ovarian disease, the early induction of premature labour.—Dr. HICKS said that, as far as his own experience went, he had never seen any serious trouble occur. He could, at once, recollect six pregnancies which had done well. In one of these cases, he had tapped at the seventh month; the patient going on to the full term; the baby being born healthy.—Dr. TYLER SMITH referred to three cases which had come under his notice, and recommended tapping if the cyst became so large as to produce great inconvenience.—Dr. BARNES had seen many cases of ovarian disease complicated with pregnancy; although he thought it was generally right to bring on premature labour, there might be occasions in which tapping the cyst, or doing nothing, would be the better course. Nature could not tolerate the double burden of a growing uterus and a growing ovarian tumour; the rapidly increasing pressure must, at some time, cause such distress that relief must be obtained. In most of the cases which he had seen, there was spontaneous premature labour. He thought this indication should be accepted as a guide in practice. In one case, he had seen death follow from rupture of the cyst at the seventh month. In another case, at seven months, he proposed inducing labour, but was overruled. The patient, at last, had severe peritonitis, and died. The tumour had been rolled over on its axis by the uterus rising below it; the vessels of the tumour were strangled, and blood had burst into the abdomen. He saw a similar case last year. Rokitansky had related similar cases. To obviate these accidents, he believed it was best at once to eliminate the pregnancy.—Dr. GERVIS suggested that, when it was certain that rupture of the cyst had occurred, it would give the patient some slight chance if gastrotomy were performed, the ruptured cyst removed, the pedicle secured, and the peritoneal cavity cleansed.—Dr. WILTSHIRE remarked that no mention had as yet been made of ovariectomy in these cases. It appeared to him, that, besides the induction of premature labour, at least two other courses were open; either to perform ovariectomy in the earlier months of pregnancy (as had recently been done by Mr. Wells, with perfect success); or if, unhappily, the patient were at full term, and the tumour large, ovariectomy, and even Caesarean section, might, in very serious cases, be resorted to. In the few cases where it is possible to diagnose an unilocular tumour, tapping might advantageously be performed.—Dr. ROGERS thought that no uniform rule of practice could be laid down. He had been consulted in five cases of pregnancy complicated with ovarian disease. One was tapped before delivery: mother and child lived; another went to full period without operation: mother and child did well; in two, premature labour was brought on: the mothers did well, the children died; in the fifth, which was a case of triplets, labour was induced at the fifth month: the children, of course, were not viable, the mother is living, having been tapped since.—Dr. HICKS suggested that a committee might be formed to collect evidence on the whole subject.—Dr. HALL DAVIS gave particulars of a case of ovarian tumour complicating pregnancy. The tumour was not large, nor did it increase during gestation. The labour was tedious, and had to be completed with the long forceps. The child was born alive. The patient did well, and the tumour, during lactation, would probably not enlarge. It occupied the same position as before her pregnancy, although, during pregnancy, it had been displaced.—The PRESIDENT inferred that the feeling of the Society would be in favour of inducing premature labour whenever the size of the ovarian tumour made it likely that the labour would be seriously interfered with.

Mr. J. T. MITCHELL read a Paper on a case of Ruptured Uterus. The subject was a patient, aged forty-two, suffering from progressive mollities ossium. Mr. Mitchell had arranged to induce premature labour on the 26th of May last, which would have been at about seven and a half months of pregnancy; but, on the 19th of the month, she was greatly alarmed by a violent thunderstorm, and, instantly, felt a sudden pain in the pelvic region, and towards the left groin, followed by syncope. Peritonitis speedily set in, and, within thirty-six hours, labour pains came on. When the os was sufficiently dilated, Mr. Mitchell introduced his hand into the uterus, and discovered a rent in it about three inches above the os. Delivery by version was effected without difficulty. After her delivery, she suffered but little abdominal pain, but vomiting continued incessantly up to the time of her death, which took place in eight days and twelve hours from the time of the rupture. No *post mortem* examination was obtainable.—After some remarks by Dr. GERVIS, Dr.

H. C. ANDREWS, Mr. COLLINS, and Dr. WILTSHIRE, Dr. HALL DAVIS stated that, in his experience of cases happening independently of external violence, in the great majority, the labours were of short duration in women who had had several children, and in whom degeneration of the muscular fibres of the uterus had taken place before the organ had fulfilled its functions. But he recollected one case where a woman in good health, apparently, who had not been worn by repeated pregnancies, but whose pelvis was deformed by rickets, had sustained a rupture of the uterus, during the action of the ergot of rye given by an ignorant midwife. In this case, examination of the muscular fibre adjoining the laceration, discovered no degeneration of fibre.

Dr. MARTYN read a short Paper on a case of Triplets.

CLINICAL SOCIETY OF LONDON.

FRIDAY, OCTOBER 8TH, 1869.

JAMES PAGET, ESQ., F.R.S., President, in the Chair.

Dr. W. H. DAY read a paper on the Hypophosphates of Iron, Quinine, and Strychnia in cases of general debility and nervous exhaustion, illustrated by cases shewing their mode of action to be primarily through the nervous system, and, secondly, through the blood. He believed that results might be calculated on from these remedies when combined, which could not be obtained from them when separately administered.

Dr. CLAPTON read a paper on the Effects of Copper upon the System. Several cases were related which had been under his care as out-patients at St. Thomas's Hospital, and the results given of numerous inquiries which he had made personally at various copper works in London. Several note-worthy phenomena were described, as the presence of distinctly marked green stains on the teeth close to the gums, bluish-green perspiration, hair of a greenish hue in old workmen, and green discharge from old ulcers. These colourations were due to absorption, assimilation, and elimination of the copper, and not to a mere local deposit. The probable reasons were given why copper workmen (although an unhealthy-looking class, and subject to considerable muscular debility) do not suffer from any specific diseases, as do the workmen in most other metals. Investigations at each of the works elicited the remarkable fact that the men have always escaped cholera and even choleraic diarrhoea, although their neighbourhoods suffered severely during the great epidemics.—Dr. GREENHOW, during some investigations in Manchester, had found no cases of discolouration of the gums except in those who were employed in making soft metal taps. In Dr. Clapton's cases, the teeth were affected, but not the gums. He thought that the dust might be changed by the sweat of the secretion of the ulcer. With regard to their immunity from cholera, he had just been told by a French gentleman that the workers in France had always been exempt from that disease, which had, also, been the case amongst the men in Manchester. Dr. Greenhow suggested that a committee should be formed to investigate the subject.—Dr. SILVER had treated many patients from the manufactory alluded to by Dr. Clapton, at the Charing Cross Hospital. He had found them suffering from symptoms of slight gastro-enteritis, chiefly colic. The hair had been long known to be discoloured by copper.—Dr. LEESON, of Deptford, who had had considerable experience in the manufacture of verdigris, had not observed the green line in the men, although their hands were in the verdigris all day.—The PRESIDENT observed that when the art of printing in gold, in which copper is much used, was introduced, a troublesome form of eczema was common over the pubes, and often extending further. It was believed to be chiefly due to the copper. Nothing was mentioned of this by Dr. Clapton.—A committee, composed of Dr. Greenhow, Dr. Clapton, and Mr. Kesteven, was appointed to investigate the matter more fully.

MANCHESTER MEDICAL SOCIETY.

OCTOBER 6TH, 1869.

HENRY SIMPSON, M.D., President, in the chair.

Mr. WHITEHEAD shewed a Bivalve Speculum constructed to act also as a clamp for the treatment of hæmorrhoids, according to Mr. Smith's method. Internal piles can thus be treated *in situ*.

Mr. LUND exhibited "Dobell's Nursing Schedules". He also shewed a drop-bottle for measuring out definite quantities of chloroform.

Dr. WAHLTUCH shewed some Tubes with Vaccine Lymph, which he had received from Odessa. The tubes were dilated in the middle, and were sealed at the ends with wax. The lymph was obtained from a calf which had been inoculated with vaccine matter from a child. This system was said to be followed extensively and successfully in the South of Russia.

Mr. LUND shewed a piece of the Barrel of a Gun which had penetrated into the Forearm of a man after the bursting of the weapon.

Dr. FINLAYSON read a Paper on the Temperature of Children in Health and Disease. The observations which he had formerly submitted to the Society, shewed that the temperature underwent a conspicuous diminution in the evening in healthy children. He now briefly sketched the course of the temperature in some of the chief diseases of childhood, and supplemented his own cases by those of other English and German observers. He considered the thermometer seldom of much use in the diagnosis of doubtful cases of measles and scarlatina. In both diseases, there was often an undoubted attack while the temperature could scarcely be said to be abnormally high; while the sudden rise and the degree of elevation usually observed in scarlatina, might be simulated by febricula or tonsillitis. In the diagnosis of enteric fever in young subjects, much assistance and confirmation had frequently been obtained; also in the diagnosis of tubercular affections. Dr. Finlayson concluded by submitting the following propositions as to the value of the thermometer in the diagnosis of children's diseases. 1. With a strictly normal temperature observed morning and evening (*e.g.*, for two days), we may affirm the absence of fever (*pyrexia*). 2. The rise from the normal state to a temperature of 104 deg. or 105 deg. Fahr., in the course of a single day, precludes the idea of typhus or enteric fever. (It does not, however, exclude scarlatina.) 3. The thermometer is of much service in enteric fever.—*a.* A distinct elevation of temperature may assist or confirm our diagnosis of enteric fever in cases where the pulse and general symptoms seem but little in accordance with the idea of fever at all. *b.* The peculiar mode of increase of the temperature during the first four days of this fever—gradual from day to day, and yet with morning remissions—is reckoned, by Wunderlich, to be diagnostic of this disease. He warns us, however, that the rise of the temperature may be more rapid in the child than in the adult. *c.* A continued high temperature may convince us that a patient is still the victim of enteric fever, although he may profess to be, and seem to be, quite well. *d.* The peculiar oscillations of temperature in the recovery from enteric fever, may, in some cases, clinch the diagnosis where it has, all along, been more or less doubtful. 4. The thermometer gives little or no assistance in those doubtful cases of scarlatina and measles where the rash is uncertain, or before it appears. 5. In tubercular diseases, the indications of the thermometer are most valuable. The reversal of the normal relation of the morning and evening temperature is most striking. In one or two instances, I have been led to make a diagnosis—proved to be correct after death—mainly on the strength of the thermometrical observations. So as to be valuable, careful observations require to be made in the morning and evening, for some time. I cannot, however, subscribe to Dr. Ringer's statement, that the evening temperature is *always* above the normal; at least, if by normal we mean the figures usually quoted hitherto. 6. In pneumonia and many other diseases, the temperature is more a matter of clinical interest than of diagnostic value; sometimes it may confirm a diagnosis made on other grounds. In cases where the rise in temperature precedes other signs and symptoms, the indication is usually too vague to be of much use. Even such obscure indications may, of course, have some prognostic value.—Dr. WM. ROBERTS remarked, that he found he was using the thermometer more and more every day. He had, however, become aware of the existence of many pitfalls in the way of any one who relied on it apart from a careful consideration of other circumstances. He agreed with Dr. Finlayson, in regarding the temperature as especially valuable in tubercular disease and enteric fever.—Dr. THORBURN mentioned the case of a child who died in convulsions at the onset of scarlatina, half an hour after its temperature had been recorded at 99 deg. Fahr.—Dr. FINLAYSON pointed out the advantage of taking the temperature in the rectum in the case of children. In the axilla, twenty to thirty minutes were required to secure accurate results, and great precautions were necessary. In the rectum, the maximum was reached, with certainty, in a few minutes. He regarded five minutes as perfectly inadequate to yield trustworthy measurements in the axilla at any age.

MR. SANDS COX, the founder of the Queen's College and Queen's Hospital in Birmingham, has conveyed to trustees a site of ground in the parish of King's Norton, Worcestershire, for the erection of a church to the memory of his late father, Mr. Edward T. Cox.

HYDROPHOBIA.—The following statement is on the authority of the *Philadelphia North American*. "A little girl, twelve years of age, was bitten in the finger by a dog on the afternoon of July 12. Three days ago she was seized by the premonitions of hydrophobia. The most distinguished of the profession of medicine were called to her rescue. By their sanction, with that of friends, relatives, and all to whom the life of the child was dear, her sufferings were stayed by the merciful interposition of poison."

CORRESPONDENCE.

THE MEDICAL OFFICERS' SUPERANNUATION (IRELAND) ACT.

SIR,—This bill, such as it is, originated with the Medical Association of Ireland, but was adopted and amended by the Council of the Dublin College of Surgeons, who sedulously watched over its progress through both Houses, until it became law; and no doubt that body, and those who acted with them on that occasion, will be jubileed at the success of their efforts; the profession, too, will be warmly congratulated on the boon achieved. But I think before I conclude that I will be able to demonstrate that the present measure is a delusion—a shadow without a substance—"Vox et præterea nihil"; and, to sum up in the words of Dr. Motherwell, "the profession would be better off without any Bill than with the present one."

What are its provisions? In the first place, it is purely a permissive Bill, leaves the old and worn-out medical officer entirely to the discretion and at the mercy of Boards of Guardians, without even the right of appeal to the Poor-law Commissioners. Illiberal in the extreme from its very conception, it permits them (Boards of Guardians), if they think fit, to grant him a pension not to exceed two-thirds of his *then* salary, all other sources of emoluments, such as vaccination and registration fees, etc., being carefully excluded from the computation; but, before his case can be entertained at all, *he must resign his office*, after which a month's notice must be given to consider his claim.

Now, sir, think you that there are half-a-dozen Boards of Guardians in all Ireland who, under these circumstances, will carry out this measure for the benefit of those for whom it was passed, especially since it has been shorn of the only provision which would make it at all operative and acceptable to Boards of Guardians; viz., the payment of half the pensions out of the Consolidated Fund, as is the case at present with half the salaries of the medical officers? This query I answer in the negative; and the experience of the profession for the last twenty years amply confirms the correctness of the answer. If we are to judge from the treatment which Boards of Guardians (with a few honourable exceptions, such as the Clifden Board, whose treatment of their tried and worn-out medical officer, when obliged to resign from ill-health, was beyond all praise) consider their medical officers worthy of—frequently calling for the active interference of the Poor-law Commissioners to have justice done them—what are we to expect from them when administering an Act of Parliament, that gives no power of appeal from their decision to Poor-law Commissioners or any other tribunal? It is clear that such a state of things leaves but little hope that the general body of disabled and worn-out union medical officers will ever derive any real or substantial benefit from such a measure.

While the Guardians are permitted to grant any sum not exceeding two-thirds of the salary, how this will be carried out it is not difficult to foretell; but one fact is worth a thousand arguments.

Only a few months ago, in a well-to-do union, rates moderate and ratepayers in easy circumstances, a medical officer of over thirty years' active service was disabled by infirmity, and obliged to resign. His Board acknowledged his worth and the value of his services, considered his case a hard one, and expressed themselves anxious to grant this meritorious officer a pension. To what extent, you will ask. To the full extent of their powers? Two thirds of his salary, of course, after such long and faithful services? No such thing. This considerate and liberal Board voted to their long-tried and now worn-out and disabled officer the munificent sum of £20 a year for the future support of himself, wife, and family; and even this miserable pittance he was not able to secure, as the law at the time did not sanction it. And as the promoters of this Bill (now law), with an absence of that consideration which one would have expected to have actuated them, did not adopt measures to secure a retrospective clause in it, so as to include in its benefits and advantages those of their medical brethren who, like the gentleman I have alluded to, were constrained from ill-health to retire from the service previous to the passage of this Bill, they as well as he are now for ever debarred from enjoying even this paltry grant of £20 per annum. I could mention the name of this much-injured gentleman, but out of respect to his feelings I abstain. However, I mention his case, as a sample of what the provisions of this Bill permit; and that, while it is worthless to men circumstanced as he is, it is not likely to prove much more profitable to those who may hereafter claim compensation (for their long services and loss of health) under it.

But the promoters and friends of this measure may say, "True, we have not as yet got all we could desire, but 'a half loaf is better than no bread.'" I deny the applicability of that aphorism in this case. Of

what use, may I ask, "is a half loaf" if it cannot be secured? Just like Tantalus and the waters: you have no doubt put it before us, but in such a way as that it cannot be reached; and I feel confident that the body of the profession never desired a Bill at any price as this would seem to have been obtained.

I am, etc.,

W. H. SUFFIELD, M.D.

POISONING BY PHOSPHORUS.

SIR,—Considering the unusual character of the symptoms, the following case may not prove unworthy of record.

About 6 P.M., on the 7th of June last, I was called to a girl, aged 20, who, a little over an hour previously, had taken a penny bottleful of James's phosphor paste. I found her dressed, on her back in bed, seemingly unconscious, and perfectly quiet, except when, at intervals of from two to three minutes, tetanic spasms, with opisthotonos, occurred. She seemed a strong, hearty girl. The pulse was 70, feeble; the tongue red and swollen. She had not vomited; her breath was smelling very alliaceous. She could not swallow, and I at once sent for the stomach-pump; and, on its arrival, injected a pint of milk, which returned, mixed with a dark, viscous matter, smelling strongly of phosphorus. Vomiting now began, and her struggles became very violent, so that, after injecting some more milk, I withdrew the tube. She was now conscious, and complained of severe burning pain along the course of the œsophagus, and about the stomach, vomiting very freely. I prescribed two drachms of carbonate of magnesia every two hours, and mucilaginous drinks. At 8 and 11 P.M. I saw her again, with Mr. Walter Morgan. She lay in a semi-unconscious state, but would speak when roused. Vomiting of dark matter continued.

June 8th, 10 A.M. She was conscious, vomiting at intervals. There was much burning pain; she was listless, with great disinclination to speak.—9 P.M. She was better; the bowels had not acted. An ounce of castor-oil was given.

June 10th. She was up to-day. There was still pain about the stomach. She was thirsty; had no appetite; urine was scanty; the oil operated once.

She rapidly improved, and on the 11th went to Ferndale to identify the body of her sweetheart, who had fallen a victim to the explosion the day previous. She has remained well since. My impression at the time was that the paste contained phosphorus and strychnine, but the former is the only poison present, as I have since discovered. Opisthotonos is reported to have occurred in two cases of phosphor-poisoning (*Lancet*, page 23, vol. ii, 1866).

I am, etc.,

Pontypridd, Sept. 1869.

FREDERICK WATERHOUSE.

DOES PHTHISIS EXIST IN ICELAND?

SIR,—If it were possible, I should like to make this letter as brief as the famous chapter on snakes in Iceland alluded to by Dr. Mac Cormac, and, by the way, attributed to the wrong author. It was Horrebow, in his *History of Iceland*, who headed one of his chapters "Concerning Snakes in Iceland", and makes the chapter itself to consist of the simple negative assertion.

Dr. Mac Cormac now says that "it is beside the question whether phthisis be more or less prevalent in Iceland than in Denmark." Here I must beg to contradict him, and to refer to my previous letters, in which he will see that the relative frequency of the disease in the two countries has been dwelt upon strongly, because of its bearing on the prebreathed-air theory. What is really beside the question at issue is, whether exceptional cases of phthisis do or do not occur in Iceland. Once more let me put the matter before Dr. Mac Cormac.

According to his theory, phthisis ought to be more prevalent in Iceland than in Denmark. But, according to Schleisner—an authority whom Dr. Mac Cormac supports against all comers—phthisis is much less frequent in Iceland than in Denmark. According to the authorities upon whom I rely, phthisis is not even indigenous to Iceland. It matters not which of the two authorities Dr. Mac Cormac accepts—and he has not yet stated that he rejects Schleisner: both are opposed to his theory.

Dr. Mac Cormac lays great stress on his being able to refer directly to Schleisner's work. Now, he will find that, at page 13, the author takes care to guard his readers against error as follows. "I call the attention of Icelandic medical men to this, because I am convinced that no disease in that country can be more easily confounded with phthisis than this very one (the hydatid disease). . . . I am likewise convinced that most of those which in the obituary lists of the clergy figure as dead from consumption and decline, are to be comprised under this class."

There are other matters in relation to Dr. Mac Cormac's interpreta-

tions of Schleisner's work which call for criticism, but I am unwilling to trespass upon your space.

I am sorry that Dr. Mac Cormac has allowed himself to say, "I make no special comment on Dr. Skaptason's averment, further than that it is alike incoherent and incredible with that of Dr. Hjaltelin. No statement could well be more affirmative; and none, I believe, more calculated to mislead and deceive." It is almost unnecessary to say on behalf of these gentlemen, that their statements are perfectly clear and to the point, and not likely, in the mind of any impartial reader, to be brought into question by the generalisations of Dr. Mac Cormac. I am afraid that Dr. Mac Cormac, having persuaded himself that he has discovered an immutable law of Nature, is unreasonably impatient of anything which seems to interfere with it. Nevertheless, I must continue to believe that I have succeeded in pointing out a very glaring exception to his theory; and I shall also be content to leave the matter as it now stands before your readers.

I am, etc.,

October 1869.

ARTHUR LEARED.

THE TREATMENT OF INSANITY.

SIR,—Allow me to make a few remarks on a subject of great public importance. In the number of the *Lancet* of September 8th, 1869, a letter was published by Dr. Lockhart Robertson, on "The Treatment of the Insane of the Upper Classes in Private Dwellings." Admitting the utility of private care in some chronic cases of insanity, we must not lose sight of the greatly superior advantages which an asylum offers as a curative measure—the main object to be kept in view—in the majority of cases, whether chronic, or acute. The commissioners in lunacy have invariably advocated this view. Griesinger, one of the highest authorities, observes that a patient in an asylum finds it a place "where his eccentric behaviour is concealed from over-officious eyes, where the necessary surveillance is unobtrusively accorded him, and where he has usually a far greater amount of freedom than he could possibly have under any other circumstances. Having been for many years the resident physician to a private asylum, I had ample opportunities of becoming acquainted with the feelings of its inmates, and I agree with Dr. Robertson that there are instances in which patients may be benefited by residence in private families, and even whom it would be cruel to detain—and this applies to the poor as well as to the rich—when they are fretting for a change. I have been induced to make these observations from a fear lest Dr. Robertson's remarks, and the comments of the *Lancet* on his letter, which appear in the number of that journal for this day, should tend to revive the popular prejudice against asylums, which, we hope, is beginning to pass away.

I am, etc.,

J. M. WINN, M.D.

31 Harley Street, October 16th, 1869.

THE CONTAGIOUS DISEASES ACT

SIR,—In your abstract (*JOURNAL*, Oct. 9th) of the proceedings of the Public Health Department of the Social Science Congress at Bristol, you very correctly reported that a resolution was carried against the extension of the Act to the civil population. The resolution strongly condemned the Act altogether. You did not, however, report, and no doubt were not informed, that those who voted for this resolution were not the habitual attenders of the department; and, if the decision had been left, as I submit it ought to have been, to those who can be justly considered to constitute the department, the conclusion must have been exactly the reverse. Instead, however, of a question of the public health being left to the decision of those who by their habitual attendance at the Public Health Department prove themselves to be most interested in, and who are known to be most conversant with, such subjects, the adverse majority consisted chiefly of clergymen—very good men, I dare say, but certainly very bad reasoners, who showed themselves to be profoundly ignorant of the Act which they were denouncing. The chief points urged against the Act were (what almost all Englishmen allow to be both wrong and inexpedient) that prostitutes should be licensed to pursue their shameful trade, or certified as being safe not to communicate disease; neither of which the Act does, while the last is positively prohibited to be done under its authority.

The resolution of the meeting will be entirely disregarded by all who know that circulars were sent requesting those opposed to the extension of the Act to attend and vote against it themselves, and to bring others to do so. And this request was so well obeyed, that not only did very many who had never before attended the department attend on that occasion, but, as is believed, some voted who were not even members of the Association. At any rate, I know that many went in without showing their tickets. I did myself for one, and five other members whom I asked did so likewise. The curious thing is, that any one should ex-

pect any good to follow from such a trick. Good, however, will follow; for, when sensible men learn that those opposed to the Act are compelled to resort to such tricks, and to rely upon such misrepresentations, they must conclude that the Act is too good a one to be successfully opposed by fair argument and honest opposition.

October 1869.

I am, etc.,

H. H. P.

MEDICAL NEWS.

THE ENTRIES OF MEDICAL STUDENTS.

THE registration at the College of Surgeons of the gentlemen pursuing their professional studies at our eleven recognised metropolitan medical schools for the present session commenced on the 1st instant, and was brought to a close on Monday. It appears that the total number has exceeded that of 1860, when it amounted to 1,228, including 483 first year's men.

The following numbers, which include those students pursuing their studies also for the certificate of Dental Surgery, are the accurate figures of those who have registered at the College. We may, however, state that there are a few University and other men of different years at several of the schools who have not registered at the College, and do not intend to do so. Guy's, Charing Cross, Middlesex, St. Bartholomew's, St. George's, St. Thomas's, University College, and the Westminster, may be congratulated on an increase in the number of new entries.

Guy's Hospital.....	285,	including	96	new entries.
St. Bartholomew's Hospital.	237	„	80	„
University College	194	„	71	„
King's College.....	116	„	33	„
London Hospital.....	78	„	23	„
St. George's Hospital	72	„	28	„
St. Thomas's Hospital	64	„	28	„
Charing Cross Hospital	60	„	18	„
St. Mary's Hospital.....	56	„	16	„
Middlesex Hospital.....	42	„	15	„
Westminster Hospital.....	27	„	7	„

Total..... 1231 415 „

The total number registered in 1868 amounted to 1,194, from which it will be seen that there is an increase of 37 over the number of last year. The number of fresh entries last year was 410, showing an increase of 5 this year.

The following return of the number of metropolitan and provincial students will, no doubt, be read with some interest by teachers:

Years.	Metropolitan Schools.	Provincial Schools.	Total.
1860.....	1228	333	1561
1861.....	1116	258	1374
1862.....	1045	248	1293
1863.....	1020	214	1234
1864.....	925	247	1242
1865.....	1013	249	1262
1866.....	1027	258	1285
1867.....	1125	257	1382
1868.....	1194	284	1478

The returns from the provincial schools have not yet been received. We are informed that one of these schools has been closed.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—At an extraordinary meeting, held on Monday last, the following gentlemen were elected Fellows of the College.

Broadbent, William Henry, M.D., Seymour Street
Wilkinson, Matthew Alexander Eason, M.D., Manchester

The following gentlemen, having conformed to the bye-laws and regulations and passed the required examinations, had Licenses granted them to practise Physic, including Medicine, Surgery, and Midwifery.

Anningson, Joseph William, Burnley
Cuffe, Alfred G., University College Hospital
Elphick, Edward, Guy's Hospital
Moor, Alfred, Blackheath
McNiece, H., Carshalton
Peror, Alfred, Botley, Southampton
Powell, Llewellyn, Clouesley Street
Wall, Alfred John, Bessborough Street
Whitmore, William B., King's College Hospital

The following candidate, having passed in Medicine and Midwifery, will receive the College License on obtaining a qualification in Surgery recognised by the College.

Smart, David, St. Bartholomew's Hospital

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, October 14th, 1869.

Fox, Hugh Courtenay, Stoke Newington
Plaxton, Joseph William, Hull
Price, William, Bonvilstone, near Cardiff
Thorpe, George Elisha Knight, Sheffield

The following gentleman also on the same day passed his first professional examination.

Holroyd, William Stephen, St. George's Hospital

As an Assistant in compounding and dispensing medicines.

Gillet, Daniel, Liverpool

MEDICAL VACANCIES.

THE following vacancies are declared:—

ANDERSON'S UNIVERSITY, Glasgow—Lecturer on Surgery: 26th.
ARGYLL DISTRICT LUNATIC ASYLUM, Lochgilphead—Assistant Medical Officer: applications, 24th.
BARNSELY UNION, Yorkshire—Medical Officer for the Darton District.
BROMPTON HOSPITAL FOR CONSUMPTION—Assistant-Physician.
CHAPEL-EN-LE-FRITH UNION, Derbyshire—Medical Officer for the Castleton District.
CHIPPENHAM UNION, Wilts—Medical Officers and Public Vaccinators for the Workhouse and Second Division of District No. 1, and for District No. 2: election, 25th.
COLERAINE UNION, co. Londonderry—Medical Officer for the Articlave Dispensary District: applications, 1st Nov.
CORK DISTRICT LUNATIC ASYLUM—Visiting Surgeon.
EDINBURGH ROYAL INFIRMARY—Assistant-Surgeon.
FREEBRIDGE LYNN UNION, Norfolk—Medical Officer for the First South-Eastern District.
HARPENDEN HALL LUNATIC ASYLUM, St. Albans—Medical Visitor.
HOLSWORTHY UNION, Devon—Medical Officer for District No. 4.
MIDDLESEX HOSPITAL MEDICAL COLLEGE—Lecturer on Materia Medica and Therapeutics.
NORTH WITCHFORD UNION, Cambridgeshire—Medical Officer for District No. 3.
OLDCASTLE UNION, co. Meath—Medical Officer and Public Vaccinator for the Ballyjamesduff Dispensary District: applications, 1st Nov.; election, 2nd Nov.
ROYAL COLLEGE OF SURGEONS, Edinburgh—Conservator of the Museum.
ROYAL KENT DISPENSARY, Greenwich—Resident Medical Officer: applications, 6th Nov.; election, 19th Nov.
ST. ALBANS GAOL—Surgeon.
ST. PATRICK'S COLLEGE, Maynooth—Resident Medical Attendant.
SHEFFIELD GENERAL INFIRMARY—Assistant House-Surgeon: applications, 26th; election, 29th.
SHERBORNE UNION, Dorset—Medical Officer for the Sherborne District.
SURGEONS' HALL, Edinburgh—Lecturer on Physiology, and Lecturer on Clinical Medicine.
SUSSEX COUNTY HOSPITAL, Brighton—House-Surgeon: applications, 3rd November; election, 24th November.
SWANSEA INFIRMARY—House-Surgeon: applications, 24th Nov.; election, 1st Dec.
TEIGNMOUTH, DAWLISH, and NEWTON INFIRMARY—House-Surgeon: applications, 29th.
TOWER HAMLETS DISPENSARY—Medical Resident: applications, 1st Nov.; election, 16th Nov.
WESTMINSTER GENERAL DISPENSARY, Gerrard Street, Soho—Surgeon.
WORCESTER INFIRMARY—House-Surgeon.

BIRTHS.

ARMITAGE.—On October 8th, the wife of S. H. Armitage, M.D., of a son.
COLEMAN.—On October 9th, at Woolwich, the wife of W. Coleman, Esq., Surgeon, of a daughter.
MOULD.—On October 13th, at Southport, the wife of *G. W. Mould, Esq., Cheshire, of a son.
NAUGHTIN.—On October 13th, at Baker Street, the wife of William Naughtin, Esq., Surgeon, of a son.
RALFS.—On October 10th, at Turnham Green, the wife of S. Ralfs, L.R.C.P. Ed., of a daughter.

MARRIAGES.

*BUSZARD, Frank, M.D., of Northampton, to Mary Sarah, eldest daughter of the late Edward SALE, Esq., of Clifton, near Rugby, on October 13th.
CRUICKSHANK, John, M.D., Acting Inspector-General of Prisons, Bombay Presidency, to Mary E. I., eldest daughter of Lieutenant-Colonel Charles R. BAUGH, 9th Regiment Bombay N.I., at Poona, on September 10th.
FOWLER, Trevor, L.K.Q.C.P., to Annie Stuart, eldest surviving daughter of Duncan R. M'NAB, Esq., Surgeon, of Epping, on October 14th.
GRAIN, Augustus, Esq., of Petersfield, to Jane Elizabeth, widow of George H. BEAMAN, Esq., Surgeon, of Covent Garden, on October 12th.
*DAVYS, F. J., M.D., Coroner for West Dublin, to Rosc, daughter of Alderman REYNOLDS, J.P., in Dublin, on October 20th.
VEITCH, John T., M.D., Colonial Surgeon of Penang, to Celia Gertrude, youngest daughter of the late Joseph CLEWER, Esq., of Worcester, on September 9th.
WALKER, William R., Esq., St. Louis, Missouri, to Marjory, eldest surviving daughter of the late John GALEN, M.D., of Aberdeen, at New York, on September 30th.

DEATHS.

RENDLE.—On October 7th, at Plymouth, aged 19, Arthur Sandford, youngest son of Edmund Rendle, M.D.
WILLIAMS, Thomas, M.D., Staff-Surgeon-Major, at Ebury Street, Pimlico, aged 66, on October 12th.

OPERATION DAYS AT THE HOSPITALS.

MONDAY Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
 TUESDAY..... Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.
 WEDNESDAY.. St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.
 THURSDAY.... St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
 FRIDAY..... Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
 SATURDAY.... St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Mr. Peter Marshall, "On a Case of Hydatiform Mole (with Specimen)"; Mr. Hayntes Walton, "On a Case of Dislocation of the Humerus with Fracture"; Dr. B. W. Richardson, "Thermometrical Readings on Animal Heat."
 WEDNESDAY.—Hunterian Society, 8 P.M. Dr. Beigel, "On Chorea."

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

M.A.—We are informed that there are a great number of gentlemen now pursuing their studies at our metropolitan hospitals, who write "M.A.Oxon," Cantab., or Lond., after their names.

DINNER OF THE MEDICAL CLUB.

SIR,—Will you allow me to inform your readers, to prevent disappointment, that the next house-dinner at the Medical Club, to be presided over by Sir William Ferguson, will take place on Wednesday, November 3rd, instead of on Thursday, November 4th, as previously announced. I am, etc.,

LORV MARSH, Hon. Sec.

DYSPEPSIA.—A delightful "wheaten digestive biscuit" is made by Goldsworthy, of Bathurst Street, Hyde Park, to assist the digestion of other food. It appears to be made of white meal finely dressed, and evidently prepared with great care. The biscuits are made both sweetened and unsweetened. They are likely to prove of much service to dyspeptics.

DR. TRESIZE.—The Dr. John Smith of Polruan, Cornwall, of whom a biographical notice appeared in a contemporary last week, had no qualification whatever. His return to the *Medical Register* was "in practice prior to 1815," when, as we are informed by an old correspondent, he could only have been a few years old.

MR. JESSOP'S CASE OF GENERAL EMPHYSEMA.

SIR,—The report of this case, which appears in the JOURNAL of September 25th, strikes me as being deserving of careful study, and is, I presume, open to fair and honest criticism.

On December 10th, the patient had "acute synovitis" of the ankle-joint. "There was a high condition of inflammatory fever, and the stomach rejected everything he swallowed." In this highly inflammatory state the diet was "oft-repeated sips of brandy and milk." What the strength of the beverage was we are not told, but on the day but one afterwards "the patient was exceedingly fretful, and complained of almost constant pain in the right abdomen and in the head," also "in the left chest." (We are not informed whether or not the brandy and milk was still continued, but must infer that it was.) Early on the morning of the 22nd, however, he began to scream most violently and without ceasing. He absolutely refused to be comforted for a moment even, or to give us any clue as to the site of his pain." Are we to conclude that the alcohol was still persevered with? I fear we must, for even when the respiratory agony was intensified, as it must have been by the extensive emphysema which followed, the panacea was still "brandy."

The emphysema was here apparently the cause of death, and the screaming obviously produced it; but what produced the screaming? What was this "screaming without intermission" due to?

Mr. Jessop has an undisputed right to manage his cases in accordance with his own views, and I have no desire whatever to impugn the motives which prompted his treatment in this instance; but as his case is put forward—as all published cases are—ostensibly for the instruction of his fellow-workers, I make no apology for wishing to know upon what physiological grounds he gave alcohol in this "acute" and "highly inflammatory" attack, occurring in a child of tender years.

I am, etc.,
 Coventry, October 13th, 1869.

D. McVEAGH.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

THE LONDON AND PROVINCIAL MEDICAL DIRECTORIES.—We would point out to the General Council of Medical Education and Registration of the United Kingdom, a mode in which, it appears, mistakes enter the *Register*. In our former notice of the *Directories*, it was stated that any person practising the profession had only to fill up and forward the usual return to the publishers, of any qualification which he possessed, when it was at once published: and that, apparently without any further inquiry, the Medical Council (of course by payment of the usual fees) republished the qualification or qualifications. As illustrations, the following are subjoined; and here let it be distinctly understood that, if the qualification be possessed by the persons named, the blame will rest with the compilers of the *Calendar of the College of Surgeons of England*, as we have searched that work in vain, and in some instances have made official application for information on the subject. In the *London Directory*, p. 130, *Marsden*, Alexander, of Lincoln's Inn Fields, is described as "F.R.C.S.Eng. 1868," a qualification which he does not possess. This is repeated in the *Medical Register*. In the *Provincial Directory*, (p. 367) *Dawson*, John, of Whitby, is entered as M.R.C.S.Eng. The name cannot be found in the *Calendar*. *Izod*, Charles W., Esq., (p. 439) "surgeon to H.M. the Queen at Claremont," cannot be found in the authorised list of the Royal Household. *Walker*, James, Knaresborough, appears (p. 591) as M.R.C.S. Eng. 1828. No person of this name was admitted a member in the year named, although the title is entered in the *Medical Register*. This occurs also in the case of *Whymper*, George H., (p. 603) "M.R.C.S.Eng. 1838." This name cannot be found in the *Calendar*. In the *Scotch Directory*, *Airston*, Wm. Baird, Abbotford, Crescent, St. Andrew's, M.R.C.S., Eng., 1835, cannot be found in the *Calendar*, but, as in the previous cases, appears in the *Register* as holding the qualification. In the *Irish Directory*, *Adrien*, William E., Oldtown, co. Dublin, appears (p. 819) as "M.R.C.S.Eng., 1830." This name does not appear in the *Calendar* of the College; in fact no person of the name was admitted in the year indicated, and yet he appears in the *Medical Register* as holding only this qualification. As illustrations of carelessness, we give the following, all of which might have been avoided by reference to authorised lists. *Luke*, Henry, (p. 126) must have held all the appointments there mentioned, without any medical qualifications. In the *Provincial Directory* is *Eyre*, Stratford A., "Member of the United Service." What can this mean? *Jollye*, Edward W., according to the *Lancet*, died March 15th, 1851. The *Medical Register* appears to depend very much on the *Directory*. *Smith*, Robert Maidstone, of Bathampton (p. 556) appears as B.A., M.A., M.B., and M.D. Oxon; we can only find that he is a B.A. Oxon, 1833. These *errata* are sufficient in number to show the need of increased care. The *Medical Directories* are irresponsible; but from the compilers of the *Register* we have a right to expect accuracy. To copy from the *Directories*, with all their errors, is but very haphazard "registration".

M. B. M. ASSOCN.—The *Calendar* of the College of Surgeons will be forwarded to you by the Secretary on your sending him sixteen stamps.

ON THE TREATMENT OF HYDROPHOBIA AND SNAKE-BITE BY AMMONIA.

SIR,—In the present state of our knowledge, so little can be done to alleviate the sufferings of those afflicted with that frightful malady, hydrophobia, and the treatment of snake-bite is so frequently without avail, that I think any suggestion, offering a chance of success in combating these dread affections, is worthy of the consideration of our profession. In a work recently published, entitled *Dottings on the Roadside in Panama*, there is a note describing the great repute in which ammonia is held as a remedial agent in these maladies in India. Is it after the poison has become absorbed and circulated? The experience of the administration of this drug in Bombay would seem to favour this notion. Be this as it may, it is held in the highest estimation in India by those who have frequent opportunities of testing its efficacy; and this fact alone is, I think, sufficient to strongly recommend its trial in our own country. Fortunately, in England cases of snake-bite do not often come under the notice of the medical man, but those of hydrophobia are of not infrequent occurrence. I venture to suggest that the details of any cases treated on the above plan would be of much interest to the profession generally. In the Bombay Presidency, it has been ordered to be kept ready at every police station. Cases of hydrophobia in its worst forms are reported to have recovered under the treatment. The liquor ammoniæ fortior is the preparation used. It is given in water in the following doses:—For an adult, 30 to 40 drops; for persons 12 to 15 years old, 15 to 20 drops, and children from 4 to 8 years old, 10 to 15 drops, and so on. Most surgeons are acquainted with the beneficial results which usually follow the local application of a solution of ammonia in cases of wasp-stings, etc. It is supposed to act by neutralising the acid poison, and thus rendering it inert. May not ammonia used internally act in the same manner?

I am, etc. W. DRAPER, M.R.C.S.

Cork, October 1869. Late Resident Obstetric Officer Middlesex Hospital.

R. F. H.—The person whose name appears in the *Register* and *Medical Directory*, as a Fellow of the London College of Surgeons, does not possess the qualification.

TEMPERATURE OF THE HUMAN BODY.—Mr. Alfred H. Garrod has communicated to the Royal Society a series of observations on this subject, chiefly with relation to modifications owing to alterations in the amount of blood exposed, at the surface of the body, to the influence of external absorption and to conducting media.

Cold contracts the small arteries of the skin, and raises the arterial tension; heat dilates them and lowers the tension; thus the amount of blood in the cutaneous capillaries is constantly varying. Any modifications in the supply of blood to the surface of the body must alter the amount of heat diffused to surrounding objects. Hence we should expect that, by increasing arterial tension, and lessening the supply of blood to the skin, the blood would become hotter, owing to the conduction from the surface being less. Thus the temperature and the tension rise together on stripping off the clothes in cold air; whilst the temperature and tension fall by covering any part of the body when stripped. Simply heating the feet lowers the temperature of the body.

Dr. Ogle and Drs. Ringer and Stewart have shown that the temperature is lowest at from 12 to 1 A.M., and rises after that time, owing to the fact that heat is given up to the bed-clothes on first getting into bed.

The effect of sitting with one side of the body close to the fire is to make the other side feel colder than if there were no fire at all, because the fire lowers the tension all over the body, and supplies heat to the full cutaneous vessels on one side; whilst on the other, equally supplied with blood, there is no heat received, but much distributed to clothes, air, etc.

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

ASSERTED DETERIORATION OF HUMAN VACCINE.

SIR,—Dr. Blanc, after showing that the percentage of post-vaccinal cases amongst small-pox patients is steadily increasing, argues therefrom, that the human vaccine lymph employed in England is losing its anti-variolic power. We cannot, however, accept his conclusions from the data which he sets before us. He should have shown us the relative numbers of the vaccinated and unvaccinated sections of the population who contribute the patients received into the small-pox hospital. For some years after Jenner's discovery, the percentage of the population vaccinated must have been very small, and, therefore, the unvaccinated must have furnished, by reason of their mere majority, the greater number of victims to small-pox. At the present time nearly the whole of the population is vaccinated, and consequently a large proportion of the cases of variola must be post-vaccinal, or let us say, varioloid.

Dr. Blanc should also take into account the fact that a very large proportion of cases of post-vaccinal small-pox is the result of imperfect, *i.e.* careless, vaccination. Were "animal vaccination" in general use, the operation might be carelessly performed too, and therefore, as in the case of ordinary vaccination, there would be numerous failures.

In comparing the merits of the two forms of vaccination, great care should be taken in employing the statistics which show the results of each system. When good human vaccine lymph is employed and the operation is carefully performed, I have no doubt that the subject of it is rendered all but absolutely insusceptible of small-pox. Dr. Seaton and Dr. Buchanan assert from their observation of 50,000 children in 1862, that one kind of vaccination is thirty times more protective than another; but they also assert that the worst form of vaccination is forty-seven times better than none at all. These observers found that, of every 1000 children without any mark of vaccination, 360 had small-pox scars, whilst of every 1000 children who had evidence of some kind of vaccination, only 1.78 had traces of small-pox. The children who exhibited the least evidence of vaccination were those who made up the great proportion of the post-vaccinal cases. It is impossible to reconcile the theory of the decay of human vaccine lymph with the facts adduced by Drs. Seaton and Buchanan. In Ireland too, where small-pox has ceased to exist (though until lately a most extensively spread and fatal malady) human vaccine lymph is alone employed. I am, etc. CHARLES A. CAMERON, Professor of Hygiene in the Royal College of Surgeons in Ireland.

A STUDENT.—You will find similar preparations to those on which candidates are examined at the College, and which were prepared by Dr. Pettigrew, in the Museum of St. Bartholomew's Hospital.

A CONSERVATIVE.—As examiners in *Surgery*, perhaps no better men could be selected; the question is, whether there might not be younger examiners in *Anatomy and Physiology*. Dr. Beale is not far out in his statement, as, on adding 22, the age at which the diplomas were obtained, we find that the collective ages of the gentlemen amount to 636, giving an average of 63 years and 7 months to each. The eldest member of the Court appears to be Mr. Skey (still in his prime), the youngest Mr. Busk.

T. L. CRAISTER, (Bramley).—We heartily wish you success in your very reasonable application. Should you not obtain it, we shall be glad to hear again.

CLUB REMUNERATION.

SIR,—I am a medical officer in a small country district in Hampshire. The payment which I receive varies from 4s. to 6s. *per annum*; and I have endeavoured in all fresh arrangements to keep the payment up to the maximum; and the clubs have all worked satisfactorily till lately. I now find that I am the subject of censure with one club, because a gentleman in a neighbouring town chuses to take the members at 4s., and to admit all comers, whatever their position in life; whereas, I arranged to be paid 6s., and not to undertake to attend the more flourishing tradesmen of the place as club-patients for that sum. I am told that all members should be attended for the small club payment; and, indeed, that the very object of some of the better tradesmen joining the society, or, rather, "Ancient Order", is to have the doctor. This, in my opinion, is an abuse of the club system, which we ought, as a body, to resist. I believe it was never the intention of medical men to relieve those who are in a position to pay their just claims for their services, but simply to cooperate with the benefit societies in supplying that relief in sickness which the majority of the members would be unable to provide for themselves individually. This is what I take to be the sense of the meeting at Liverpool, and it entirely coincides with my views. I think, as a rule, we are lax in our arrangements with clubs, and are not sufficiently alive to what we may be called upon to undertake—for instance, attendance on accidents. Now, I think that every club ought to have an accident fund; and that the payments for attendance on accidents and operations should be made from it, in accordance with the standard of the Poor-Law.

Perhaps many of your readers are not aware of the ticket system of medical attendance which is used in this, and other localities near, to a small extent. It is at present in its infancy, and it remains to be seen how it will work. For instance, the members of a club agree to pay 4s. annually to the doctor. For each visit at the patient's house, he gives the doctor a red ticket, value 2s.; if over three miles, an extra 6d. for each additional mile; for each visit at the surgery, a blue ticket, value 1s. 6d.; and for each supply of medicine when sent for without being seen, a white ticket, value 9d.; in this latter case, the medicine is to be for two days. There is also a payment for accidents and operations, very nearly allied to that of the Poor-Law. I fear that we shall never get the profession to think alike on these matters, as there is almost always somebody to be found who would take a club at less than his neighbour, or perhaps would give the members advice gratis. Indeed, in my own case, I am told that some one, six miles and a half away, is only too anxious to take the club.

The Association has done many valuable services to the profession, and I think it might do much in this matter. Why not form a committee, who should endeavour to arrive at the different modes of payment of the medical officers of clubs; and, having done so, draw up some scheme for the better regulation of them, and for more adequate payment from those who have taken advantage of these societies to the detriment of our profession, whose members are always ready to extend the helping hand in time of need to those who are not able to help themselves.

October 1869.

I am, etc.,

H. H.

P. S.—It ought to be remembered that the practitioner in a scattered neighbourhood is put to more expense, from wear and tear and turnpikes, than one who is able to attend many members in the same town without the need of a horse.

OXALATE OF CERIUM.—Dr. J. Waring Curran recommends the use of oxalate of cerium in the vomiting of pregnancy. He believes that it sometimes succeeds in checking this disagreeable accompaniment of the parturient condition, when other remedies fail. Dr. Curran administers two grains of oxalate of cerium with the same quantity of extract of hop, three times a day; but at the same time he gives ten grain doses of bromide of potassium with bark and ammonia. Is not the value of Dr. Curran's conclusion somewhat invalidated by the complexity of his treatment?

EXPERIMENTS ON THE FORMATION OF ROULEAUX BY BLOOD-DISCS.—Dr. Norris of Birmingham finds that pieces of cork, shaped like the blood-corpuscles form rouleaux when floating in water unless they are quite submerged. He then wetted them and placed them in a fluid which would not mix with the water. They then formed rouleaux even when submerged.

There must be cohesive attraction between interacting bodies—air and water for they float—water and a viscid substance (paraffin) if submerged.

In the case of the blood-corpuscles, there is antagonism between their viscous substance and the plasma in which they are submerged.

"M.D."—According to Dod's work, Doctors of Medicine take precedence "on the ground of ancient usage", after "Doctors of Laws", and before "Bachelors in Divinity". The following are the Universities of the United Kingdom, with the dates of their foundations:—Oxford, 886; Cambridge, 1110; St. Andrew's, 1413; Glasgow, 1450; Aberdeen, 1494; Edinburgh, 1582; Dublin, 1593; London, 1836; Durham, 1837; and the Queen's University in Ireland, 1850.

PYROGALLIC ACID.—M. Personne states that pyrogalllic acid acts like phosphorus, and will produce fatty changes in the heart and liver of a dog in fifty hours, sufficient to cause death.

SOLUTION OF CALCULUS IN THE BLADDER.—The Rev. W. V. Harcourt has published the results of experiments made on himself for the purpose of testing the solvent power of carbonate of potash on uric acid calculi. He suffered from a large calculus of this description, and for twelve months he took varying doses of citrate of potash, analysing the whole of his urine daily. Many difficulties were encountered in the accurate quantitative determination of uric acid, and a good deal of the paper is occupied with chemical details of no interest to the general reader. The amount of uric acid found by analysis did not indicate any solvent action, but it was noticed that there was a small and constant deposit of uric acid like the detritus left by the incomplete action of carbonate of potash on uric acid calculi. The author suggests that the alkaline salt may have diminished the formation of uric acid in the body, while it dissolved away some of the calculus, and thus the total amount of the acid excreted was not diminished. Mr. Harcourt found that three hundred grains of citrate of potash might be taken daily without injury to his health.

We are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Oct. 13th; The New York Medical Gazette, Oct. 2nd; The Parochial Critic, Oct. 13th; The New York Medical Record, Oct. 2nd; The Boston Medical and Surgical Journal, Sept. 30th; The Madras Mail, August 11th; The Indian Medical Gazette, Sept. 6th; The Stockport Advertiser, Oct. 8th; The Devizes and Wiltshire Gazette, Oct. 14th; The Gloucester Journal, Oct. 16th; The Harrogate Advertiser, Oct. 16th; The Aberdeen Herald, Oct. 16th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. D. Campbell Black, Glasgow; Mr. H. Sargeant, London; Dr. H. Blanc, Southampton; Mr. E. C. Garland, Yeovil; Mr. W. S. Wilson, Clay Cross; A Member of the British Medical Association; Mr. M. Woodward, Pershore; Mr. T. G. Hewlett, Staines; Mr. J. Dickie, London; L.R.C.P., Birmingham; Dr. Grantham, Scarborough; The Secretary of St. George's Hospital; Mr. Davies, Oswestry; Mr. W. R. Lane, Rickmansworth; Mr. Spencer Smith, London; and Dr. J. D. Moore, Bristol.

LETTERS, ETC. (with enclosures) from:—

Dr. J. Matthews Duncan, Edinburgh; Dr. A. T. H. Waters, Liverpool; Dr. A. Marshall, Preston; A. D. O., Walsall; Mr. J. B. Bradbury, Cambridge; Mr. J. Laird, Liverpool; Dr. George Johnson, London; Husband, Leeds; Mr. G. D. McReddie, Hurdai, Oudh, India; Dr. Jukes Styrap, Shrewsbury; Mr. Vincent Jackson, Wolverhampton; M.D. Lond.; Mr. J. Sampson Gamgee, Birmingham; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Lomas, London; Dr. Treutler, Kew; The Registrar of the Medical Society of London; Dr. Little, Dublin; Dr. Burns Thomson, Edinburgh; Dr. Gamgee, Edinburgh; Mr. W. B. Hemingway, London; Dr. R. Gooding, Greenwich; Dr. E. Mapother, Dublin; Dr. Phillips, London; Mr. C. H. Moore, London; Dr. Robert Liveing, London; The Secretary of the London Fever Hospital; Dr. Winn, London; Mr. Peter Marshall, London; Dr. Lory Marsh, Nottingham; The Secretary of the Royal College of Surgeons of Edinburgh; and Mr. John Merriman, London.

BOOKS, ETC., RECEIVED.

Suggestions for Legislation, with a view to the Suppression of Drunkenness and the Better Regulation of the Liquor Traffic. Glasgow: 1869.
The Medical Council and its Critics: A Vindication. By Andrew Wood, M.D. F.R.S.E., etc. London: 1869.
St. Bartholomew's Hospital Reports. Vol. v. London: 1869.
The Natural History of the Three Kingdoms: being a Series of Plates coloured from Nature. London and New York: 1869.
On the Physical Characteristics of the Jewish Race. By J. Beddoe, B.A., M.D. Second Edition. Bristol: 1869.
The Shipwrecked Mariner. No. LXIV. London: 1869.
Natural Philosophy, popularly explained. By the Rev. S. Haughton, M.D., F.R.S. With numerous Illustrations. London and New York: 1869.
The Climate of the South of France as suited to Invalids. By Charles Theodore Williams, M.A., M.D. Oxon. Second Edition. London: 1869.
The Statistical Report of the Health of the Navy for the year 1867.

Results of Meteorological Observations, for the week ending Saturday, October 16th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.							Mean amount of Clouds (0-10). Mean amount of Ozone (0-10).		WIND.										RAIN.		
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.			Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell.	Amount in inches.
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm, etc.				
BATH	29.968	0.961	56.9	52.9	49.3	76	73.8	44.3	29.5	64.0	52.7	117.8	..	6.5	5	0.3	0.7	..	0.6	0.7	0.7	2.6	0.4	1	3.4*	5	0.33	
Dr. Barter, F.M.S.																												
BOURNEMOUTH	30.041	0.850	55.4	53.2	51.1	86	66.0	39.2	26.8	60.8	52.5	116.0	36.0	4.1	3.2	..	..	..	0.3	0.7	1.3	2	1.7	1	2.4	3	0.24
Dr. Compton, F.M.S.																												
DOVER	29.979	0.950	55.5	53.3	51.2	86	65.8	33.9	31.9	61.4	42.9	..	..	5.6	..	..	..	..	1.3	0.3	2	2	1.3	..	3.8	2	0.10
Dr. Parsons.																												
DUBLIN	29.921	1.122	54.5	51.7	49.0	82	69.4	43.5	25.9	59.1	52.0	..	39.3	5.7	..	0.3	..	..	0.5	0.7	1.4	2.6	1.5	..	3.6	4	0.22
Dr. J. W. Moore.																												
KEW	30.006	0.952	55.0	52.7	50.5	85	71.7	41.3	30.4	62.8	49.4	119.2	36.4	2.9	2.3	..	..	..	0.3	..	2.7	1.3	1.3	1.3	2.6	4	0.40
Dr. Treutler, F.L.S., etc.																												
LLANDUDNO	29.894	0.930	55.5	52.5	49.6	81	73.2	46.0	27.2	61.8	51.9	..	..	7	1?	0.3	0.3	0.7	..	..	0.3	3.7	1.7	..	2.7	3	0.68
Drs. Nicol and Dalton.																												
MALVERN	29.975	0.940	55.2	52.1	49.1	81	72.2	39.8	32.4	63.0	50.6	121.0	32.3	5.9	5.1	..	..	..	0.7	1	0.3	3	1.3	0.7	5.8*	3	0.27
Messrs. W. and J. Burrow.																												
SCARBOROUGH	29.838	1.027	52.4	50.4	48.4	86	72.5	39.7	32.8	58.7	49.2	121.5	35.3	7.3	6.8	0.7	..	..	..	0.3	2.7	1.3	1.3	0.7	4.1	3	0.52
Dr. Fox, M.R.C.P.																												
SIDMOUTH	30.001	0.902	54.8	52.9	51.1	87	67.0	37.0	30.0	61.5	48.9	..	..	4.7	6	..	..	..	..	3	..	2	2	..	1.1	4	0.15
Dr. Mackenzie, F.M.S.																												
WORTHING	30.022	0.888	56.7	54.7	52.9	87	67.6	38.4	29.2	62.1	52.6	110.2	29.3	5.2	3.5	..	..	0.7	0.7	..	1	2	1.3	1.3	1.7	2	0.73
W. I. Harris, Esq., M.R.C.S.E.																												

* Mean hourly velocity in miles.

REMARKS.—There has been a general decrease in the amount of atmospheric pressure during the week, while the range has been double what it was in the previous week. Pressure has, however, been very uniformly distributed, the greatest difference,—between Bournemouth and Scarborough,—amounting to little more than 0.1 inch. The same may be said of the mean temperature, in which the greatest difference,—between Bath and Scarborough,—amounts to 4.5 degs.;—it has been on the whole from 2 to 3 degs. lower than last week, while the range has been as much, or more, above that of the previous week, amounting to nearly 33 degs. in the case of Scarborough. Winds have been rather variable, but their prevalent direction has been between S.W. and N.W.; they have been of generally moderate force. Rain fell at all stations;—the heaviest fall,—0.73 inch,—occurring at Worthing in two days. The general amount of clouds has been considerably greater than in the week before. During the first half of the week the weather was generally fine and mild,—marked by comparatively high maximum temperatures recorded at most stations; and winds were generally light; mists and fogs, however, were of frequent occurrence, especially in the morning,—and dew was abundantly deposited. The change which followed appears to have been first felt on the morning of the 12th at Worthing,—where the wind shifted suddenly about 9.30 a.m. from the E. to N.W., producing a considerable fall in the temperature, and causing a dense fog which prevailed throughout that day—fog was also observed the same day at Dover and Sidmouth. On the 13th the change had become more general, and the wind veered to the N.W. at all stations at various hours during the day—3 p.m. at Kew—increasing at the same time in force and producing a marked decrease in the temperature;—the maximum at Dublin being 51.1 degs. The barometer, which had been slowly falling all the week,—at Kew at least,—now underwent a rapid and considerable depression, and on the 14th and 15th winds generally backed to S.W., accompanied by frequent rain and squalls. On the 16th S.W. winds were general and of variable force, amounting to fresh gale at Worthing. In the afternoon, the wind suddenly veered to N.W. and increased in force, while the barometer began to rise rapidly—temperature at the same time undergoing a further decrease, the minimum of the night at Kew being 37 degs., which was 20 degs. below the maximum temperature of the day. On the same night a slight fall of snow occurred at Malvern. Thus the week closed with the termination of what appears to have been a cyclonic movement of the atmosphere, a subject which has recently had so much light thrown upon it by the researches of Capt. H. Toynbee, whose papers we would earnestly recommend to the study of all meteorologists. On the 11th, at Llandudno, “a beautiful meteor was seen at 5.40 p.m. in good daylight; it was of a greenish-orange colour, its direction was slanting from the zenith to the horizon from E. to N., it disappeared behind some clouds.” The general health is good.

Kew, W., October 20th, 1869.

W. J. TREUTLER.

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Produces with boiling water *instantaneously* a most wholesome and delicious beverage. *No Milk required.*

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“While the great majority of them consists of MIXTURES of Cocoa, Starch &c., VAN HOUTEN'S is not only composed solely of the Cocoa Bean, but this of the finest quality.

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Registered, Guaranteed a genuine preparation of the Cocoa Nib.

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For Invalids { 1s. and 2s. per packet.
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To be had of all respectable Grocers and Chemists.

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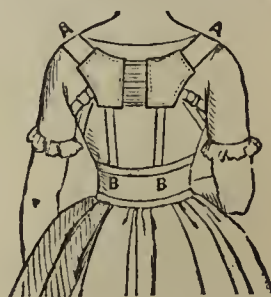
tice recommended by the Faculty, free from Cantharidine. — A. COOPER begs to inform the Medical Profession that they can now be supplied with his SINAPINE TISSUE in packets at 3s. 6d. and 6s. 6d. (equal to six and twelve rs. packets) free by post on receipt of stamps. A sheet of Medical Testimonials to accompany each packet. Sole Inventor, and Manufacturer,

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CHEST EXPANDING BRACE,

For both Sexes of all Ages.

66, Berners Street, Oxford Street, W.

CLINICAL LECTURE ON GANGRENE OF THE LUNG.

DELIVERED AT THE
LIVERPOOL NORTHERN HOSPITAL.

By A. T. H. WATERS, M.D., F.R.C.P.,
Physician to the Hospital.

GENTLEMEN,—We have in the wards a man who has suffered from the symptoms of gangrene of the lung. He is now convalescent, and will be soon discharged. Although his recovery prevents us from verifying the opinion which I have expressed of his case, I have no hesitation in speaking of it as one of pulmonary gangrene. I will read to you the notes.

Wm. B., a sailor, fifty-five years of age, was admitted into the hospital, under my care, on the 28th May last. He told us that he had suffered slightly from cough for some time, but that he considered himself quite well up to about a fortnight before his admission. At that time, his cough became worse, and he began to expectorate. He had a dull heavy appearance, and a somewhat dusky countenance. The pulse was quiet; the urine 1,030, and free from albumen. On examining the chest, we found the physical signs of slight general emphysema, especially of the left lung. He was ordered etherial tincture of the acetate of iron, with a pill of squill and henbane at bedtime. He improved somewhat under treatment. The sputa were slight, and simply bronchitic. On the 8th of June, however, he spat up some dark-coloured fetid matters mixed with blood. The pulse was only 80; he complained of no pain, and there was no constitutional disturbance. From the character of the expectoration, I suspected that we had a case of gangrene of the lung to deal with; and, in order to meet the depression which I knew would come on if my diagnosis were right, I ordered a table-spoonful of brandy every two hours, and as much beef tea and milk as could be taken. I also gave some sulphuric acid. On the following day, the pulse had risen to 112, and the patient was heavy and listless. On examining the chest, I found some dulness under the right clavicle, extending down to the nipple, with diminished movement and increased vocal fremitus. Moreover, there was crepitation over the same region and over the upper part of the lung behind. The left lung was free. He had brought up a quantity of prune-juice coloured and very fetid expectoration. He had taken the brandy and food regularly. On the 10th, the pulse was 90; he said he felt better. The expectoration was still of a dark colour and extremely fetid. It had exactly the odour of carious teeth. He had slept, and there had been no delirium. The tongue was moist and tolerably clean. He was ordered creasote inhalations, and some quinine, the brandy being continued. On the 11th, the general symptoms were about the same; the pulse was only 100, but the man seemed very low. He had slept badly. The sputa were somewhat less fetid. I ordered him a grain and a half of opium at bedtime, and five grains of carbonate of ammonia, with fifteen minims of chloric ether every four hours. He took his food and stimulants very well. On the 12th, the pulse was 88, and the sputa were free from fetor. On the 14th, I found him with a pulse of 80; the sputa were purulent, but no longer fetid: they had quite lost their dark colour. He steadily improved from this date; but, on the 21st of June, after getting up and moving about, he had a return of the dark-coloured fetid expectoration, and, although the dark colour soon disappeared, the fetor remained for about ten days. He continued to take stimulants and to inhale the creasote vapour. On the 3rd July, I ordered chlorate of potash, with bark, and he is taking this now (July 10th). He appears quite well. There is scarcely any dulness over the upper part of the right lung, and there are no moist sounds. I propose to send him to the Convalescent Hospital, at Southport, on Thursday next.

Now let me say a few words about the diagnosis of this case. You may have fetid expectoration where there is nothing more than bronchitis, and, also, where a tubercular cavity becomes gangrenous, as well as in true gangrene of the lung. What, then, has been the nature of this case? My belief is, that there has been a low form of pneumonia, with circumscribed gangrene. The character of the sputa was not that of bronchitis. There was no evidence of the existence of a tubercular cavity. It is true that the pulse never became very rapid, and that the depression was never very great, not so great as in other cases which I will relate to you; but, still, for a few days, the man was in a very precarious condition. How far the stimulating treatment which was adopted early, may have contributed to check the progress of the malady and to

limit the disease, I am unable to say, but I will give you the history of some other cases in which a similar mode of treatment has appeared to be of as much value as in the one I have just referred to.

Some of you, perhaps, recollect the case of John R., twenty-seven years of age, a labourer, a tall, strongly built man, who was admitted into the hospital on the 2nd of March, 1866. Three days before he came to us, he had coughed up some blood, and it was for this that he applied to the hospital. I saw him first on the 3rd March. His pulse was then a little over 100. He had expectorated some dark grumous bloody matter, but I perceived no fetid odour. The front of both lungs was resonant on percussion, and the breath sounds were good; the back of the chest was not examined. I prescribed morphia and sulphuric acid, and, subsequently, gallic acid, but the patient got daily worse. On the 8th, the pulse was 120, with symptoms of exhaustion coming on. On the 10th, I found him exceedingly weak, with an anxious expression, sunken cheeks, and a feeble pulse of upwards of 120. Moreover, he had brought up a large quantity of dark, bloody, fetid expectoration. I had now no doubt as to the nature of the case. I found, on examining the chest, deficient movement of the left side, crepitation in the left axilla, with dulness, bronchial breathing, and bronchophony at the left base. This examination convinced me that we had to deal with a very serious form of pneumonia, accompanied with gangrene. I, at once, stopped the sulphuric acid and morphia, and ordered stimulants, with as much nourishment as could be taken. I put the man on a table-spoonful of brandy every two hours, with carbonate of ammonia and chloric ether every four hours. After three days of this treatment, viz., on the 13th, the pulse was 96. A large quantity of chocolate-coloured, tenacious, fetid matters had been expectorated. The patient said he felt rather stronger, and had rested better. The brandy was increased to eight ounces daily, and the ammonia mixture was continued. On the 15th, he expectorated about two pints of dark-coloured fluid, and on the 16th, about a pint and a half; but the expectorated matters were lighter in colour and less fetid than before. On the 17th, there was further improvement in the sputa. On the 18th, the pulse was 92. A steady improvement followed from day to day. On the 24th, the brandy was reduced to six ounces, and a pint of porter was ordered. On the 26th, the pulse was 80; the sputa were scanty, purulent, and nearly free from fetor. On the 28th, quinine was substituted for the ammonia mixture. The brandy was continued till the 7th of April, when eight ounces of port wine were given. He took his food well, and was allowed a liberal diet. Under this treatment, together with quinine and iron, he made steady progress to recovery. On the 28th, the breath sounds were normal over the base of the left lung. The man remained in the hospital till the 17th of May, when we sent him to Southport. On his return, he came here and appeared in excellent health.

The next case I wish to call your attention to, is that of Patrick F., who was admitted into the hospital on the 4th of March, 1867. He was thirty years of age, a porter, and of very intemperate habits. He complained of cough and dyspnoea, and we found the physical signs of deposit at the upper part of the right lung, with bronchitic *râles*. He was ordered cod-liver oil and iron. The pulse, on admission, was 96, but it fell after he had been in the hospital for a few days, and on the 20th March, it was 88. About the end of the month, the patient began to expectorate very freely. The sputa were of a greenish colour, somewhat frothy and offensive; the breath was also offensive. I pointed out, at the time, the peculiar odour of the breath and sputa. It resembled very much the odour of carious teeth. On the 30th of March, I ordered six ounces of brandy daily, and on the 9th of April I gave, in addition, some carbonate of ammonia. The man was allowed a liberal diet. The symptoms continued without much change for about three weeks; the sputa were copious and fetid, and the breath, at times, very offensive. Further, the pulse became very rapid; there were profuse perspirations, and great prostration of the patient's strength. The area of dulness at the upper part of the right lung increased, and coarse, moist *râles* were heard over a large part of the front of the lung.

Although the patient was taking a fair amount of stimulants, brandy and ammonia, I thought he was getting scarcely enough, and, accordingly, on the 23rd April, I increased the quantity of brandy to ten ounces a day, continuing the ammonia and good diet. An improvement almost immediately set in; the expectoration diminished in quantity, became less fetid, and, later, free from unpleasant odour. The pulse fell, the perspirations ceased, and the *râles* almost entirely disappeared, although dulness and deficient movement remained; the patient gained in strength and spirits, and I was much surprised at the condition of his chest when I examined him on the 2nd May. Here are the notes.

Dulness still persists at the right apex. There is more expansion of the lung, but the movement is still deficient. The breath sounds are

improved, and are nearly free from moist *râles*. On the 9th of May, we sent him to the Convalescent Hospital at Southport.

In speaking of this man's case when it occurred, I said that, although I believed it to be one of gangrene of the lung, connected with a low form of pneumonia, yet the symptoms might possibly be connected with tubercular deposit. As you will now learn, we subsequently had an opportunity of seeing the condition of the lung.

The man was readmitted into the hospital on the 2nd January, 1868. He told us that, after his discharge in May, 1867, he remained tolerably well, and *quite free from fetid expectoration* for about four months, when the fetor returned, and continued, more or less, up to his readmission. We found dulness over the right lung, with coarse *râles*, and gurgling at the apex. There were, also, coarse *râles* and bronchial breathing at the back. The expectoration was copious and very fetid, and the breath was fetid. He was ordered carbonate of ammonia and bark, a chlorine gargle, and eight ounces of brandy daily, with beef-tea and milk.

He did not improve under the treatment. His pulse was quick, 120 to 130; he had profuse perspirations; he slept badly; but the fetor became somewhat less, although it did not disappear. The ammonia was continued till the 10th, when quinine was ordered, but, on the 13th, the ammonia was resumed. The brandy was continued, and opium was given at bedtime, almost every night. He died on the 14th, and the body was examined on the following day. The left lung was emphysematous throughout. The right lung had a large gangrenous cavity at the upper part, the walls of which were soft and easily broke down. A small part of the anterior edge of the lung was emphysematous. The remainder of the lung was the seat of chronic grey hepatisation, and, on section, there was a copious flow of purulent matter. The areolar tissue between the lobules was much thickened. There were no tubercles.

These cases will tend to shew you the kind of pneumonia with which gangrene is usually associated. It is a very unfrequent sequence of the acute form, and it probably rarely occurs except in connection with some cachectic state of the system.

The diagnosis of gangrene of the lung turns on the peculiar fetor of the breath and expectoration. Neither the general symptoms nor the physical signs present any pathognomonic features. The prostration is usually very great, and quite out of proportion to the physical signs. The pulse generally becomes very rapid and feeble, the face sunken, and the aspect anxious.

In the treatment of the disease, you must be guided by the general condition of your patient, and you must give stimulants, tonics, and nourishment in proportion to the depression which exists. The medicines to be most relied on are carbonate of ammonia, quinine, chlorate of potash, and the mineral acids. In the cases I have referred to, especially in those of R. and F., I gave a considerable quantity of brandy; and from the success of the treatment in R.'s attack, and the first attack of F., you may be encouraged to hope for a favourable issue even in the most unfavourable-looking cases.

Chlorine has been recommended in the disease, but I have no experience of it except when used as a gargle, and it has not seemed to me to have much influence in removing the fetor of the breath and expectoration. I see no objection to its use internally, provided that, at the same time, you give stimulants and tonics; but if it interfere, in anywise, with the functions of the stomach, you must not persevere with it. It is of the first importance to get your patients to take plenty of nourishment, and you must, therefore, try to keep the digestive organs in good condition.

The inhalation of the vapour of creasote is, I think, very useful, and should always be tried.

FARADAY ON TITLES GIVEN TO MEN OF SCIENCE.—I cannot say that I have not valued such distinctions; on the contrary, I esteem them very highly, but I do not think I have ever worked for or sought them. Even were such to be now created here, the time is passed when these would possess any attraction for me, and you will see, therefore, how unfit I am, upon the strength of any personal motive or feeling, to judge of what might be influential upon the minds of others. Nevertheless, I will make one or two remarks which have often occurred to my mind. . . . A Government should, *for its own sake*, honour the men who do honour and service to the country. The aristocracy of the class should have distinctions which should be unattainable except to that of science. . . . But, besides, the Government should, in the very many cases which come before it having a relation to scientific knowledge, employ men who pursue science, provided they are also men of business. This is, perhaps, now done to some extent, but to nothing like the degree which is practicable with advantage to all parties. The right means cannot have occurred to a Government which has not yet learned to approach and distinguish the class as a whole.

ON CERTAIN CAUSES OF MAMMARY CANCER.*

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IN a paper formerly read to the Association at Leamington, I endeavoured to distinguish the antecedents of cancer, according as they might reside in a general cause, or in one belonging to the site of the primary tumour. There appeared to me reason to give greater prominence to those causes which act upon or within the misgrowing part itself, than to those which might belong to the whole body in common. The search for the causes of cancer became, therefore, more likely to be successful if prosecuted in the organ first diseased, than in peculiarities which, being indefinable, are designated constitutional. Causes, indeed, are peculiarly difficult to demonstrate in respect to any new growth. Their obscurity arises mainly from the fact, that they influence the faulty textures gradually and imperceptibly. Like the forces evoking the development of organs, they are seen in their results, but they act, however energetically, without themselves attracting observation. Moreover, there is no one cause for all new growths. On the contrary, similar tumours appear to me to proceed from different causes, while the same cause, operating at one time, may issue in an innocent growth, at another, in a growth which is malignant.

In the instance of the female breast, which is, on various accounts, the organ most convenient for the study of tumours, there appear to be liabilities to new growths of all kinds from causes which cannot be included amongst those hitherto in question, whether they be local causes or causes innate. There is apparently a third source by which tumours arise out of a relationship of even distant organs to one another—a relationship which, as it normally associates the functions of those organs, is capable, also, of perverting them.

It is to illustrate this subject, that the following brief paper is designed; and, especially, not so much to call attention to the frequency with which uterine or ovarian ailment precedes the development of mammary disease, a fact already familiar, as to suggest that some, even of the cancers of the breast, may be induced by such previous distal irritation.

Practitioners who have to observe the great prevalence of uterine diseases, may possibly not deem it reasonable to attribute any of the tumours occurring in the breast to an irritation reflected from the generative organs in the pelvis, since the large majority of the cases which pass under their notice, make complaint only of the uterus, and are not attentive to the less irksome ailment, when there is any, in the breast. Yet, as a matter of fact, mammary disease does so often arise with a relation to previous disturbance of the womb or ovary, as to impress a surgeon with the conviction that they are connected. The very track by which the mischief passes may even be indicated by an observation in Mr. Birkett's Treatise on the Breast, which shows that, in a patient having uterine disturbance, pressure on the nerves issuing from intercostal spaces on their way to a spot of chronic induration of the breast, is sometimes as painful as the swollen spot itself.

It is by no means uncommon to find dysmenorrhœa and leucorrhœa attended by tumefaction of the breasts. In young women having difficult menstruation, the induced disease may be a chronic mammary glandular tumour; at a later age, many of the acini of the gland may enlarge and become dense from the same cause, the breasts feeling beset, more or less generally throughout, with grains or nodules, some of which are as large as cherry-stones. When uterine symptoms are much protracted, irregular indurations of larger size appear, which are not confined to the acini, are unevenly dispersed in one or both breasts, and, if more prone to occur in one part than another, are rather frequent in the depth of the organ beneath the areola. Even these masses may subside upon the removal of the uterine ailment; but it may also happen (and this is the chief point to which I invite attention) that, though most of such apparently similar tumours disappear, yet one of them eventually becomes hard, enlarges, infects the axillary glands, gives rise to the growth of similar tumours outside the mamma itself, and, in fact, runs the course of unmistakeable cancer.

Besides these, there are other cases of prolonged uterine or ovarian disease, during which there arises, unobserved, in one of the breasts, a tumour, which is cancerous from the first. Without disregard to other causes of the same disease, this sequence is yet traceable often and markedly enough to suggest a connection between the genital and the mammary disease—a connection of cause and effect which, if recognised in the instance of chronic induration of the breast, may be allowed, also, in that of cancer. It is true that, on account of the

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opinion usually entertained respecting the nature of these two diseases, we hesitate to refer them to a common origin, the chronic induration being limited, transient, and rather inflammatory, the cancer being permanent and aggressive. Yet, as the study of new growths advances, even such differences more and more lose importance, not, indeed, as to the probable issue of the dissimilar diseases, but certainly, as it seems to me, in respect to their cause.

I proceed to give brief and selected evidence of the opinions thus advanced.

Several years ago, my attention was first attracted to the subject by observing the large proportion of cases of mammary cancer in which fibrous tumours existed in the uterus; especially tumours small, pendulous, lying at the fundus, and liable to constant movement amongst the coils of the intestines. Further observations amongst the living have supplied such evidence as the following of the origin of mammary disease in uterine irritation.

Disordered Menstruation, Glandular Tumour, and Chronic Induration of the Mammæ.—Dr. Peregrine did me the favour to send to me an unmarried lady on account of the state of her breasts. She began to menstruate at twelve years of age, and the discharge, which continued on every occasion for twelve days at a time, recurred regularly every three weeks. During her early womanhood, she was greatly exhausted by this sometimes copious depletion; but after some years, she recovered strength, and became ordinarily stout. The catamenial discharge, however, continuing in excess, she had, at twenty-nine years of age, three tumours in the right breast; one of these was a soft moveable glandular tumour, and superficial; the other two were deeply seated, indistinct, not hard, and as large as half walnuts. They appeared to be inflammatory indurations of the breast tissue. In the left breast, many of the lobules were enlarged into dense, small, nodular swellings. Obviously, the whole disease was innocent, and, though taking three forms, was dependent on the state of the pelvic generative organs.

Enlargement and Induration of Lobules of the Left Mamma disappearing on the relief of Uterine Disease.—A lady of about forty, but apparently younger, was sent to me by Mr. Whipple, of Plymouth. She had several dense nodular swellings of the acini in the left mamma, and one, firm, smooth, quoit-shaped, and mixed with the breast tissues behind the areola. In the axilla, on the same side, were four separate, firm, enlarged glands. The combination of axillary with the mammary tumours appeared to indicate that both were cancerous; but the history was very distinct, that those in the breast were recent, while the axillary glands had been enlarged for seven years. There was considerable uterine discomfort and painful menstruation.

In the course of three months, during which a lotion of lead was worn on the breast, and the uterine symptoms were much relieved under the treatment of Dr. Barnes, the mammary swellings, and even the firm broad tumour behind the areola, disappeared. The axillary glands, however, enlarged a little in size and increased in number.

Large Uterine and Mammary Tumours; the former preceding.—An unmarried lady, aged thirty-four, consulted me for a very large fibroplastic tumour in the left breast, there being, also, uterine tumours of much longer date than it, and so large as to deform the abdomen.

Obscure Ovarian Irritation: Chronic Induration and doubtful Cancer of Mammæ; the former subsiding. Removal of one Breast.—Dr. Rowe, of Margate, sent a lady, aged forty-six, to me in November, 1867. She had tumours in the substance of both breasts—firm, flattened, moveable only with the breast tissue. Two of them were symmetrical, being behind the areola, but the nipples were not drawn in. There was no axillary disease on either side. The catamenia, usually moderate and punctual, were three weeks overdue; and, during this time, there had been a feeling of heat about the breasts, and uneasiness extending down the body to the region (which she pretty accurately described) of both ovaries. Though the tumours appeared to be cancerous, there was an evident connection between them and some reflected ovarian irritation.

Under treatment, all these swellings diminished, but, at the same time, the axillary glands on both sides became a little swelled. In June, 1869, Dr. Rowe found the left breast and both axillæ healthy; but, there being still a hard tumour on the right side, as a matter of precaution, he removed that breast. The tumour proved to be a dense, not scirrhus, mass of mixed fibrous tissue, with nuclei.

I have since seen this lady, and satisfied myself that the entire disease in the remaining breast has disappeared.

Uterine Ailment, with Chronic Induration and Cancer in the Left Mamma.—Mr. Swindell, of Whetstone, brought to me an unmarried lady, aged thirty-four, having some moderately firm and apparently inflammatory indurations of parts of the right breast, with œdema. She had leucorrhœa, and scanty and painful menstruation, and she was highly hysterical and over sensitive. The engorgement of the breasts appeared to be

due to the state of the pelvic organs, and it lessened under treatment. Fifteen months afterwards, though the hysterical and the uterine symptoms were relieved, and the general health had improved, one of the swellings became larger and hard, and the lymphatics were swollen. The breast being removed by my advice, but by another surgeon in one of the hospitals, the disease constituting the principal tumour proved to be scirrhus; and, at the present time, two and a half years later, there are cancerous nodules near the scar.

Cancer of the Breast, following long and severe Uterine Disease.—A middle-aged, somewhat hysterical lady, who had long had uterine disease, and undergone division of the cervix uteri on account of it, was brought to me with an elongated, hard tumour in the left breast. When first observed, but three months before, it was no larger than a walnut; it was now five inches by four inches in its principal diameter, and nearly two inches thick. The tumour, on the removal of the breast, was found to be an ordinary scirrhus, and there were similar separate nodules in the adjoining healthy parts of the breast. In this case, Dr. Routh distinguished uterine disease by the characters of the mammary tumour.

Protracted and severe Uterine Disease. Cancer of the Breast.—In a somewhat similar case, kindly referred to me by Mr. De Morgan, swelling and ulceration of the os uteri, with pain, began three months after marriage, and continued for fifteen years. During that time, the lady was necessarily separated from her husband; and she underwent much treatment, having the cervix uteri slit, and the os wholly destroyed. At the end of that time, there were swellings in both breasts, that in the left being an indistinct and apparently inflammatory thickening, while those in the right were scirrhus cancer, adherent both to the pectoral muscle and to the skin.

Several patients, who had previously been under the care of Dr. Protheroe Smith for uterine disease, were kindly referred to me by him, on the supposition of tumours in the mammæ; and in all of them, except those in whom operation was not advised, the diagnosis of cancer in the breast was confirmed. In one of these cases, a lady, aged fifty-six, there were tumours in both breasts, of which, that on the left side only was cancer. The mammary tumour first attracted attention, and I took occasion to refer to Dr. Protheroe Smith the question of their originating in uterine disease. That gentleman ascertained, on examination, that there had long been discomfort and irksome frequent micturition, and that the uterus was in a state of rather extreme and permanent flexion.

There appears to be reason to conclude that, however various other causes may be, whether of innocent or malignant tumours in the breast, yet, uterine or ovarian ailment precedes, with an observable frequency, the development of some mammary disease; that this disease may occupy either breast, or both; that, in its nature, it may be a transient, though chronic, induration of a segment of the breast, which may not be a strictly anatomical segment; that it may be a dense nodular enlargement of many of the lobules; that it may be an innocent glandular tumour; that mammary tumours, differing in construction, though alike in cause, may thus co-exist in the same person; that of concurrent tumours, not at first distinguishable from one another, some may subside on the abatement of the uterine symptoms, and one take the course of cancer; that mammary disease, following prolonged uterine ailment, may be cancer from the first.

ON SOME OF THE ADVANTAGES OF TAPPING IN THE TREATMENT OF OVARIAN TUMOURS.*

By GEORGE SOUTHAM, F.R.C.S. Eng.,
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IN recording the improvements in surgery during the nineteenth century, the future historian will no doubt ascribe to the present generation the merit of having established ovariectomy as a legitimate operation. As one of its earliest advocates ("Cases of Ovariectomy": *London Medical Gazette*, 1843; *Provincial Medical Journal*, 1845; *Provincial Transactions*, 1847), I naturally feel a deep interest in its success; but when I consider the high rate of mortality still attending it—admitted by the most experienced operators to be nearly one in three cases, and that the disease which it is intended to eradicate rarely destroys life for several years—I must confess that a grave responsibility attaches to the surgeon who recommends its adoption, as long as more simple means will keep the growth of the tumour in check and the patient's general health unimpaired.

* Read in the Surgical Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

Amongst these means, tapping appears to be the chief remedy; and believing that by its aid life may frequently be prolonged, and the success of ovariectomy not only not interfered with, but actually promoted, I beg to offer a few remarks on the advantages of this simple operation, which I trust may not be unacceptable to my professional brethren.

Medical literature supplies us with a few instances where tapping has sometimes arrested the disease for so long a time, that it has almost been regarded in the light of a cure. Three examples at least of this kind have come under my own notice; and my experience leads me to think that in cases judiciously selected the operation, if carefully performed, may be more frequently successful than is generally supposed.

In 1843, Mrs. G. of Salford consulted me respecting the propriety of the extirpation of a tumour, from which she had been suffering about three years. She was then thirty-three years of age, married, and had four children, the youngest two years old. In company with the late Mr. Thomas Slack, her surgeon, I made a careful examination. We found the abdomen much distended, the swelling caused apparently by fluid. As the patient was in a feeble state of health, we decided upon tapping, and drew off twenty quarts of a clear fluid of low specific gravity. The operation was followed by some constitutional disturbance, but in three weeks she seemed to have completely recovered. About twelve months afterwards, the abdominal swelling returned, and, at the end of two years from the former operation, the distension was so large that we had again recourse to the tapping, and removed twenty-two quarts of fluid. Her recovery was most favourable. At the end of a fortnight, she was able to resume her domestic duties, and remained in a satisfactory state of health until 1864, a period of nineteen years. Since that time, however, the swelling has gradually returned, but so slowly as to occasion little or no inconvenience, until the last few months; and, though the abdomen is considerably enlarged, she feels at present no necessity for operative interference. She is now in her sixtieth year, and to all appearance in better health than when she first consulted me twenty-six years ago.

In 1843, I was requested by Dr. G. C. Watson of Chester to visit with him Miss S., aged 25, residing in Liverpool, who was suffering from an ovarian tumour, the removal of which two gentlemen, who had made this disease a speciality, had recommended. A careful examination convinced us that the tumour was a unilocular cyst; and, as the patient appeared in good health, we advised tapping. The operation was performed by Dr. Watson with a medium-sized trochar, and between five and six quarts of a semi-transparent viscid fluid removed. The patient's recovery was rapid and complete; and, at the end of five years, when I last heard of her, there had been no return of the disease; and Dr. Watson informs me that from that time he has had no reason to suppose that she has not remained perfectly well.

In July 1867, Miss M., aged 25, asked my advice respecting an ovarian tumour that had been developing itself about three years, and which she had been urged to have removed. It appeared to consist mainly of fluid contained in a single cyst, and her health was not in the least impaired. I therefore recommended her to be tapped. Six quarts of clear viscid fluid were removed. She speedily recovered, and, on a careful examination made only a short time ago, I could detect no return of the swelling.

Such favourable results as the above are only to be expected when the disease consists of one or perhaps two cysts; but, as a fair proportion of ovarian tumours assume this character, the possibility of recovery after tapping ought not to be overlooked in their treatment. It must, however, be admitted that the beneficial effects of the operation are frequently only temporary, and therefore it ought not to be undertaken if likely to hinder the successful performance of ovariectomy.

Fortunately, this evil result is not often to be apprehended: on the contrary, one or two tapplings, especially when the cyst has obtained a considerable size, are usually succeeded by a marked improvement in the patient's health, and by a reduction of the original tumour, so that only a moderate incision through the abdominal parietes will be necessary for its extraction; both of which conditions are favourable to the success of the major operation.

Amongst the cases of ovariectomy that have come under my notice, several have been those of patients in comparatively good health, where the tumours were of recent formation, of moderate size, and free from adhesions, and the operation itself, therefore, of the simplest description; but the results have not been so satisfactory as in cases of longer standing, and of a more complicated character—acute peritonitis being usually the cause of death in the former, shock and its consequences in the latter. The tendency of the peritoneum, therefore, to inflammatory action seems to diminish with the duration of the disease, probably on account of the continued friction of this membrane against the surface of the cyst diminishing its sensitiveness.

Accordingly, in the earlier stages of the disease, whether the tumour consisted of single or of multilocular cysts, it has for some time been my custom to advise a postponement of ovariectomy; tapping the tumour once or twice, when it has become inconveniently large. Since adopting this plan, I have removed seven diseased ovaries, and in only one case was the operation fatal. Five of the patients had been tapped once, one twice, and one three times, the fatal case being among the first five. The recovery of those tapped only once was the most rapid, although in three of them the tumours were multilocular cysts. The two tapped more than once made favourable progress; but their complete restoration was not accomplished for several weeks, owing probably to the fluid in the cysts having become purulent after the second operation in one, and after the third in the other. Suppuration of the cyst I have not unfrequently found to be the consequence of repeated tapplings; and, therefore, it is a matter of doubt whether the operation should be undertaken more than once or twice, as its repetition may diminish the chance of successful ovariectomy. The experience of Mr. Spencer Wells is also favourable to a preliminary tapping; for he found that, whilst the average mortality in 135 cases, where the patients had never been tapped, was 27.40 per cent., where the patients had been tapped once, the mortality was only 25.64 per cent. (*Proceedings of the Royal Medical and Chirurgical Society*, 1869).

It is scarcely necessary to dwell on the advantages of tapping in clearing up any doubtful points in the diagnosis of abdominal tumours; for no one, I think, would resort to extirpation in such cases until he had first ascertained the nature and connections of the disease, for which purpose tapping has not unfrequently been found most useful.

In offering these remarks on the tapping of ovarian cysts, I must not omit to notice the mode of performing the operation, especially as, when ovariectomy was in its infancy, I first called attention to the dangers which attended its performance (*London Medical Gazette*, 1843).

It was then the custom to use a full sized trochar; the patient was seated on a chair, and, to ensure the complete expulsion of the contents of the cyst, the abdomen was compressed with towels by the operator's assistants. Additional force was also often applied by pressing the abdomen with the hands, whereby considerable violence was sometimes inflicted on the peritoneum and the contents of the abdomen, which, with the frequent entrance of air through the trochar into the cyst, often led either to inflammation of its walls or of the peritoneum.

The present mode of operation is comparatively free from these dangers. The patient is allowed to recline in bed or on a couch. A small sized trochar with a stop-cock is employed, to which is attached a long piece of elastic tubing for conveying the fluid to an utensil placed near the patient; which tubing, when used on the principle of the syphon, as recommended by my colleague, Dr. Roberts, excludes all air from the cyst. The fluid, by this means, is removed very slowly, and thus faintness is prevented, whilst the gradual contraction of the cyst and abdominal parietes renders it unnecessary either to press the abdomen with bandages or with the hands, and the risk of peritoneal inflammation is lessened. By attending to these precautions, tapping, which was formerly often accompanied with considerable danger, has become one of the simplest and safest operations in surgery.

HOSPITAL VERSUS HOME PRACTICE.

By J. MATTHEWS DUNCAN, M.D., Edinburgh.

[Continued from page 435 of last number.]

As in my former paper, devoted to a consideration of the value of the data adduced by the enemies of hospitals, I have not expressed my own opinion about the merits and demerits of these institutions; so, in this paper, I shall consider the reasoning (against hospitals) into which the abovementioned data are introduced, without entering on their good and bad qualities.

I must, preliminarily, express my disapproval of attaching to them the designations of "palaces" and "palatial structures." This is either a monstrous error of description, or it is a miserable specimen of grim and thoughtless irony.

A statistical argument is entirely, or almost entirely, based on figures. In the natural course, then, its conclusion demands and obtains unanimous assent, if there be no flaw in the reasoning. It is nearly like a mathematical demonstration. When, therefore, we find the conclusions of a statistical argument, such as that against hospitals, meeting with incredulity and opposition, we have to go back to the arguments in order to consider the data and the reasoning. The former I have already discussed; I now turn to the latter.

Before doing so, I may remark that students often find the conclu-

sion of an argument so outrageous, that they do not stop to scrutinise the data and the reasoning. They simply laugh at the conclusion and reject it. This process may very justly be adopted with Le Fort and Simpson's conclusion that, in the home practice of maternities, only 1 in 212 dies. An obstetrician, knowing that such favourable results are nowhere obtained, naturally says he cannot believe that they are now discovered among the poorest of large towns. When he turns to the details of the statistics, and finds such mortalities of childbed as 1 in 591, his rejection of the conclusion becomes derision of it. A like process of rejection of some of Sir James Simpson's surgical statistics is adopted by Mr. Holmes, who regards some of the successes recorded as being, in the eyes of a London surgeon, scarcely explainable, except by supposing a miracle. I shall give another example from Sir James Simpson, of an obstetrical conclusion adopted by himself (*Obstetric Works*, vol. ii, p. 544), in which he says the statistics "offer a kind of evidence, which is not less remarkable for its intelligibility and simplicity, than for its precision and certainty." I am sure that, had he only thought of it, he would have taken the vaunted statistics as a mere sample of incredible nonsense, masked by a solemn numerical statement. The statistics referred to are said to prove that, from 1660 to 1820, the mortality of childbed diminished from 1 in 44 to 1 in 107. It is needless to say that the statistics adduced are so imperfect in their nature as to prove nothing whatever; and that the statistical result in question gives such a magnificent view of the progress of the practice of midwifery, that it is at once rejected as beyond belief, without inquiry into the errors of the supposed proof. Would to God it were true; we might then hope soon to see childbed despoiled of all its dangers. We cannot even now tell what is the mortality of childbed in London. How Merriman and Simpson find out what it was in 1680 and onwards, when there was no registration of births, is an inquiry that might be amusing, certainly not instructive.

I shall give another example of a conclusion similarly deduced and to be rejected without scrutiny of data and reasoning. Sir James Simpson statistically demonstrates that firstappings of ovarian cysts are very dangerous—that 1 in 5 dies (*Obstetric Works*, vol. i, p. 266,) from the operation. Who that has any matured experience can believe this? Now, when it is known that Wells and Keith can perform ovariectomy with the same mortality, or less, who will think it worth while to inquire into the nature of the statistical data and reasoning which are vainly imagined to establish the paradox? (See *Lancet*, Feb. 28, 1857.)

The argument against hospitals is conducted as follows. The mortality of amputations and confinements is greater in hospitals than in home practice. The patients differ from one another in no important respect except the point of hospital or home residence; therefore, hospitals are murderous, and should be revolutionised or closed. If the argument here is all right, then the conclusion is fair. If the two first steps are valid, then the result is true. We do not doubt that the first step is valid, that the mortality in hospitals is greater than in home practice. This has long ago been often pointed out. But we refer to our former paper (*BRITISH MEDICAL JOURNAL*, October 23rd, 1869), for our reasons for rejecting Le Fort's and Simpson's evidence on this point.

The second step is, "The patients differ from one another in no important respect except the point of hospital or home residence." If this is not true, if this is not admitted or proved, then the conclusion against hospitals is not fair. The argument fails. Now this second step is neither proved nor admitted. So far is this from being the case, that the triumphant declaration of the conclusion against hospitals must be regarded as a burlesque upon reasoning.

Many differences between hospital and home patients have been pointed out. It is notorious that the health of towns is much worse than the health of country districts, in which are the homes of the patients now under discussion. It is notorious that many of the worst or most hopeless cases are sent from the country to the town hospitals. It is notorious that hospital surgeons are bolder in trying to rescue by operation than home practitioners. It is notorious that the most poor, wretched, unhealthy, patients find their way to hospitals in extraordinary numbers. These are a few differences between home and hospital practice. They are enough to invalidate the argument against hospitals. Even if they be not admitted, the difficult task of proving that they are not true remains for the enemies of hospitals as a preliminary to the acceptance of their argument against these institutions. It is incumbent on them to prove that residence is the only important difference between home and hospital patients. This they have not done, and, so far as I see, cannot do.

It is easy, and it may be instructive, to illustrate by example, the viciousness of the reasoning which is employed in the argument of Le Fort and Simpson. The mortality of childbed in Edinburgh, as got from the Registrar-General's returns, is about 1 in 160. In the rural districts

of Scotland, it is about 1 in 200. The patients are in both regions in the same conditions, except that in Edinburgh there is a great aggregation of experienced and learned obstetricians; in the rural districts, practitioners are much segregated. The obstetricians of Edinburgh are, therefore, more dangerous to their patients than those of the country. They should be separated from one another, and deprived of their learning and experience. Now the error in this argument lies in the arbitrary assumption that the two sets of cases considered differ only in regard to the medical attendance. In like manner the error in the argument against hospitals lies in the arbitrary assumption that hospital cases differ from home cases only as regards residence, in the hospital or at home.

There is another error in reasoning on the subject under discussion, into which Le Fort and Simpson have fallen. They take the data of all hospitals—good, bad, and indifferent—and use the results of the combined data to damage the character of every hospital. For example, they say that maternity hospitals have a mortality of 1 in 29. To this I reply, that no good maternity hospital has so high a mortality, and that such should be spared the disgrace of being placed in connection with hospitals which have. To judge fairly of an hospital, it is only necessary that it should show a large enough and long enough trial to justify a judgment. The Dublin Hospital has been in existence more than one hundred years. There have been more than 190,000 deliveries in it, and the mortality has been 1 in 72. (*Dublin Quarterly Journal of Med. Science*, vol. xlvii, 1869, p. 293). Is it proper, generous, or fair, to couple the fair name of this institution with a disgraceful mortality of 1 in 29? to malign maternity hospitals as a whole, because some are abominable? No doubt 1 in 29 is the mortality of maternity hospitals as a whole. But what has that to do with the question, whether a maternity hospital, if well conducted, is a valuable institution or not; whether it yields better or worse results than home practice? As a help in settling these important questions, it is grossly misleading. The statement of a mortality of 1 in 29 as the mortality of maternity hospitals is a slander on such hospitals as that of Dublin. The Dublin Hospital can show, for a period of seven years, and above 16,000 cases, a mortality of less than 1 in 100—a mortality probably nearly as small as that of the best contemporaneous practitioners in Dublin, and perhaps still more remarkably small if the character of the cases in the hospital be kept in mind. These last appear to me to be indisputably the kind of data fitted to be the basis of a judgment regarding the value of maternity hospitals.

What would be thought of a surgeon, wishing to estimate the value of ovariectomy, who took as his data the mortality of all the cases of ovariectomy he could find, done by any surgeon, or by any method? He would not be listened to. In his data would be found the experience of many men who never succeeded at all, everyone of whose cases proved fatal. Such a collection would tell the actual mortality of ovariectomy, how many it had slain, how many it had saved. But it would tell nothing, nor help to tell, as to the value of ovariectomy. Such statistics might, if Le Fort and Simpson's reasoning were imitated, lead to an argument against ovariectomy, as too dangerous to be ever justifiable. The proper data for judging of the value of ovariectomy are those from the large and long experiences of Wells and Keith. Judged by the Le Fort and Simpson argument, it might be condemned as murderous; judged justly, it is commended as a triumph of modern surgery.

It has long been well known that the mortality in hospitals, from all sources, is greater than in home practice. Farr in this country, and several distinguished foreign authors, have strongly insisted on this. It has been generally regarded as in a considerable degree depending on hospital arrangements being imperfect. While there can be, in my opinion, no doubt as to the injurious influence of bad hospital arrangements, or even those in common use, there is equally no doubt that they are only one of several causes of high mortality in hospitals. To how great an extent this injurious influence operates, no one knows; and certainly the evidence of Le Fort and Simpson is so little trustworthy and so ill argued as to contribute nothing towards the solution of the difficulty.

Some hospitals are extremely bad. It is related, for example, that Dupuytren lost every patient on whom he performed amputation in the Hotel Dieu, during an occupation of Paris. The Clinical Maternity Hospital of St. Petersburg is said to have a mortality of 1 in 11. Of such institutions there can be no hesitancy in condemnation. They should be revolutionised or abolished.

Some hospitals are extremely bad at certain times. This is generally the result of overcrowding. Pyæmia, erysipelas, hospital gangrene, flourish. Such hospitals should be shut for a time, and the overcrowding or other discovered cause of the evil days be absolutely prevented in future.

Some hospitals cannot be shown to be in a marked way prejudicial to the health or recovery of their inmates. For example, the great hos-

pital for lying-in women in Dublin has frequently and for series of years had a mortality probably nearly as small as that of the practice of the best practitioners in Dublin. Such hospitals should be imitated and admired. The causes of their diminished healthiness at certain times should be investigated, and, if discovered, removed in future. It must be remembered that private practitioners, as well as hospitals, have probably bad times in their practices.

All hospitals which I have seen are very imperfect. They should be improved. Medical men should combine to discover the causes of their imperfection, and the requisite remedies. To adopt notions as to the necessary insalubrity of hospitals, and the salubrity and advantages of cottages, would, in my opinion, be the adoption of mere whims, leading to a reckless and injurious mode of proceeding. It would lead to the destruction of invaluable institutions without securing compensating advantages of any kind. If cottages are shown to have, on the whole, advantages over hospitals, then I am sure the profession will adopt them, and energetically set about to overcome the great and easily seen disadvantages which the cottage system would necessarily entail.

I lately visited the magnificent Hospital of Leeds. The wards seemed to me overcrowded. Whether this be so or not, the managers can, if they find the hospital unhealthy, improve it to almost any extent, by thinning out beds from the various wards. Till all this is done, and a great deal more, they need not think of pulling down the house and building cottages.

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

ACTION OF BROMIDE OF POTASSIUM.

By J. LOCKHART CLARKE, M.D., F.R.S.

IN the JOURNAL of October 16th is published an account of some peculiar feelings experienced by a patient from the effects of considerable doses of bromide of potassium. I have recently witnessed somewhat similar but still more remarkable effects from only two half-drachm doses of this medicine. The patient called on me the morning after he had taken them, and surprised me by the peculiar expression of his countenance. He was perfectly rational, but declared that he was wholly unfit for any kind of occupation. At my request, he wrote me the following account of the feelings which he experienced. I have known him several years, and have reason to rely on the accuracy of his statements. He was not epileptic.

"I took one dose at 11 A.M., and the other at 5.30 P.M. the same day. I had tea at about 6.30, and went to Bayswater to spend the evening with some friends. I took nothing to eat or drink after tea, with the exception of half a pint of beer when I left my friends' house at about 11 o'clock.

"Before I left my friends, I told them that I had *dreamt* everything they said to me the night before. They noticed that I looked *queer*, and would have given me credit for being slightly '*screwed*', if I had not spent the evening with them; and they made me promise to send them a line by post to say I had arrived at home safely.

"On waking up the next morning, I could not remember anything that had happened to me the night before, and asked my brother what day it was, the month of the year, etc. I began to feel alarmed, as I could not collect my ideas in the slightest; so thought I would look in my pocket, and see if my letters would help me. I was astonished to find that I had written a letter the night before to my friends in Bayswater, saying I had arrived at home safely, in spite of my dream coming so true. I next found some notes of my sensations written on the back of a letter, and then a fair copy of the same, written on another piece of paper. I have destroyed both of these; but, to the best of my recollection, they were as follows.

"*'12 o'clock, Midnight.* Doses at 11 and 5.30. Ate nothing since tea at 6.30.'

"*'Sensations.* I feel as if everything that I feel, see, or think, had been experienced before, as in a dream. This delusion is so strong, that I could swear I dreamt it all.'

"I came down and saw you directly after breakfast, and then walked

to my office in Westminster; but found I was in such a confused state I could not get on with my work, so walked up to Regent Street, and had my head shampooed. After that, I called at my married sister's house, and she at once noticed that I was looking queer; and, as if frightened, said, 'Well, you do look a wretch. What on earth have you been doing with yourself?' I began to tell her, but had only got half way in my account when I cried. After a *good cry* and two glasses of sherry, I felt better. My sister and her husband, thinking the fresh air and a little mild excitement would do me good, took me down to the Crystal Palace. About five o'clock in the afternoon, I suddenly remembered having come home on an omnibus the night before, and gradually recollected many things that had happened, but cannot even now distinctly remember how I got from Victoria Station home, or what I did on my arrival. I may mention that I now remember thinking that I must be under the influence of Mesmerism, and saying to myself, 'Well, anybody who does not believe in Mesmerism after this must be a fool.'

"I ate a good dinner after my return from the Palace, and felt I was quite myself again before going to bed."

DANGEROUS ATTACK OF ERYSIPELAS, OCCASIONED BY A GLASS EYE.

By J. M. WINN, M.D., etc., Senior Physician to St. George's and St. James's Dispensary; late Resident Physician to Sussex House Lunatic Asylum; etc.

ON the 26th of July last, I was requested to see, in consultation, Miss —, aged 25, who had been suffering since the 22nd from what was supposed to be a severe attack of idiopathic erysipelas of the face. I found her in an extremely low condition. The forehead and upper part of the face were much swollen, and of a palish red hue, indicating inflammation of an asthenic character. The pulse was feeble and fast; the tongue red and rather dry; the bowels inclined to be relaxed. On closely questioning the friends of the patient, I ascertained that she had been wearing, for a month past, an ill-fitting glass eye, which had given her considerable uneasiness; and that she had herself frequently, but ineffectually, attempted to remove it. Suspecting that this might be the cause of the malady, I suggested its removal. As soon as this was effected—and it was extracted without any difficulty—an ounce and a half of pus escaped from the orbit, clearly showing the source of the mischief. She was ordered to take quinine, beef-tea, and wine, every four hours.

July 27th. She had rallied slightly; but the bowels were much relaxed, and she complained of pain in her head. She was ordered to continue the quinine, and to take chalk mixture for the diarrhoea.

July 28th. The diarrhoea was unabated. She was apparently sinking; but the pulse was tolerably firm. She was ordered to omit the quinine, and take two drachms of liquor ammoniæ acetatis, with ten minims of tincture of opium, in an ounce of water, every four hours; and to substitute brandy for the wine.

July 29th. She had again rallied, and the bowels were less relaxed. The erysipelas had left the forehead and upper part of the face, and had extended to the lips, throat, and chest. The catamenia, which had been irregular of late, appeared to-day, but very scantily. The quinine was omitted; and tincture of sesquichloride of iron was ordered, in ten-minim doses, every four hours.

July 30th. She was much exhausted by a return of the diarrhoea. The throat was swollen to such an extent that she could only swallow the smallest quantity of liquid, and that with extreme difficulty. She was ordered to omit the iron mixture, and take ten minims of dilute nitric acid and fifteen minims of tincture of opium, in water, every four hours.

July 31st. The erysipelatous inflammation had subsided on the chest; but the redness and tension of the skin around the throat were so great, that deglutition was almost impossible. In spite of these unfavourable symptoms, the pulse was stronger, and the diarrhoea had ceased. A linseed-meal poultice was applied to the throat. She was ordered to continue the nitric acid mixture; and, if totally unable to swallow, to have an enema of beef-tea, with brandy and laudanum, every four hours.

August 1st. After the application of the poultice, she was able to swallow better; and the enemata were not required. She was ordered to continue the nitric acid mixture.

August 4th. An abscess had formed beneath the chin. On puncturing it with a lancet, a considerable quantity of pus escaped.

August 5th. She was able to sit up. She had a good appetite, and was going on satisfactorily in every respect.

This case speaks for itself, and shows the great care that is required in adjusting such an apparently simple appliance as a glass eye.

NOTE ON AMPUTATION-STATISTICS IN TOWN AND COUNTRY.

By G. W. CALLENDER, F.R.C.S.,
Assistant-Surgeon, St. Bartholomew's Hospital.

IN a notice of a paper of mine, which is contained in the JOURNAL for October 16th, it is said "it must be clear that the cases likely to be sent up to St. Bartholomew's Hospital from distant parts are a class to themselves; few or none of them will probably be primary amputations, and almost all will be for chronic disease, and on patients in health good enough to travel. Some of the most dangerous cases are manifestly excluded; and the mortality of such a group cannot fairly be contrasted with that of country hospitals or country practice."

I am sincerely desirous of getting at the truth respecting the comparative death-rates after amputations in hospitals and in private practice (although I beg distinctly to be understood as wishing to avoid the position of an advocate); and, as the point referred to is one of interest, I trust I may not be thought obtrusive in asking attention to the following table, which gives the nature of the diseases of the country patients operated upon in our Hospital, and the cause of death in the fatal cases.

This table ought, perhaps, to have been given in my paper in our Hospital Reports; but it is very difficult, considering the many ways in which figures may be handled, to avoid some errors of omission.

Table showing the injury or disease for which Amputation was performed on country patients in St. Bartholomew's Hospital, and, when fatal, the cause of death.

RECOVERED.	DIED.
1. Primary amputation of leg, secondary of thigh.	1. Secondary amputation of thigh for gunshot wound; pyæmia.
2. Primary amputation of leg.	2. Amputation of thigh for disease of knee-joint; embolism, hemiplegia.
3. Primary amputation of leg.	3. Amputation of thigh for disease of knee-joint; chloroform sickness, choleraic diarrhœa.
4. Primary amputation of arm.	4. Amputation of thigh for disease of knee-joint; pyæmia.
5. Primary amputation of arm.	5. Amputation of leg for disease of the foot; exhaustion.
6. Amputation of thigh for ulcerated leg; diseased arteries.	
7. Amputation of thigh for disease of the femur; ligature of common femoral for secondary hæmorrhage.	
8. Amputation of thigh for recurrent malignant tumour.	Proportion of primary to other amputations, 1 in 7.2.
9. Amputation of thigh for epithelial cancer.	Proportion of primary to other amputations in the total, 97; town and country cases in the Wards Kinton, Darker, and Sitwell, 1 in 7.4.
10 to 16. Amputations of thigh for disease of knee-joint.	
17 to 19. Amputations of leg for disease of leg or foot.	
20 to 24. Amputations of arm or forearm for disease.	

It will be observed that all cases primary, secondary, and for disease, are counted together; and the group may, I venture to think, be used for purposes of comparison with the practice of country hospitals. I may be wrong, but such is my opinion.

All the cases were sent up to us from the country (for instance, a very severely crushed elbow from Essex, for which I performed primary amputation after the man, aged 46, had travelled a cart-journey of thirteen miles), with the exception of two primary amputations, which resulted from street-injuries.

A great many country people are constantly passing through London, and, unfortunately, are as liable to street and other accidents as are the permanent dwellers in towns.

I am aware of the high death-rate after primary amputations; it is briefly alluded to in my paper; but it did not enter into my scheme to compare the death-rates of separate hospitals, although

such comparisons, coming out from the figures I have reckoned, are doubtless instructive, and are most properly and carefully referred to in this JOURNAL.

From the table of amputations performed at St. Bartholomew's Hospital, it will be seen that the death-rate after primary amputations at the thigh, is 1 in 3.2, whilst after amputations (secondary or for disease), it is 1 in 2.8. I have often expressed my surprise that our experience of these amputations should be so much more favourable than appears to be the case elsewhere. Of the primary amputations performed in the wards Kinton, Darker, and Sitwell, during eight years, only 1 in 13 died.* I should myself look upon it as an untoward mischance if I lost a patient after an ordinary primary amputation.

I entirely agree with the statement in this JOURNAL "that the death-rate of amputations will rise in proportion as the number of primary—or, as I would rather say, of severe, such as thigh—amputations increases. In other words, the difference is not in the hospital, but in the patient.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

KING'S COLLEGE HOSPITAL.

OPERATION DAY, SATURDAY, OCTOBER 16TH.

A MAN, about fifty years old, was operated on by Sir William Fergusson for abscess in the shoulder. The patient had suffered from the disease for fifteen months. An abscess had formed in front, and more recently one behind. The amount of pain was in favour of the joint being affected. After making an incision down to the acromion process in front and also an incision behind, and continuing it as far as the probe went, no sinus could be found leading to the joint. Sir William thought the inflammation had very possibly originated in the bursa at the upper part of the humerus, where it sometimes leads under the acromion process. The object in treatment was now to heal the wound from the bottom.

Mr. Smith showed a patient aged 28, on whom he had operated more than two years before for disease of the knee-joint. The patient could now walk admirably. There was little shortening, and perfect ankylosis. The calf was, nevertheless, well developed, as is often observed in these cases.

Mr. Wood next operated on a young child for deficiency in the upper wall of the urethra. The case expressed a lesser degree of epispadias than those where the anterior wall of the bladder is gone. The entrance to the bladder was absent, and the urethra opened on the dorsum of the penis. Transplantation of the neighbouring skin had been found to relieve greatly these cases; but here there was merely a covering required to enable the urine to pass off and an instrument to be fixed. The boy had considerable power of retention. Mr. Wood had lately operated on the child. He had raised the front of the scrotum, dissecting off the tunica vaginalis; and then turned it up to cover the urethra. There was always, however, he remarked, a difficulty in getting union at the root of the penis; so he had brought a piece of skin down from above. The scrotal flap, however, became separated into two portions; and a slough had taken place at the root of the penis. He had scraped the edges of the scrotal flap, and put in sutures, which was followed by success; but there still remained an opening for the urine to pass where the slough had taken place. Mr. Wood now proceeded to peel off the phosphate of lime which gathers in these cases on the edges and makes them raw, and put in a few sutures. He hoped that, as the boy possessed power over the sphincter of the bladder, he would yet be able to pass water normally.

Mr. Smith next operated on a patient for perineal section. He remarked on the old operation for perineal section as being one of the most difficult in surgery. The patient had fallen across a gate sixteen years ago, and was severely injured. Traumatic stricture followed,

* Table II, p. 249, *St. Bartholomew's Hospital Reports*, vol. v. In the one fatal case, the patient was over 70 years of age, and sank within a few hours after I had amputated for compound fracture of the leg, extending into the ankle-joint.

and since that time he had been getting worse. Sinuses and abscesses had formed, and now no catheter could be passed. The back part of the urethra was one hard cord; and, besides, the parts around were much thickened. Mr. Smith in the first place attempted to introduce a grooved catheter into the orifice of the stricture, and again a smaller one, but without success. He then passed a No. 8 staff to the orifice; and, after considerable difficulty, cut down in the middle line of the scrotum through about two inches of cicatricial tissue upon the end of the staff. After failing with a blunt-pointed instrument, he was enabled, by keeping along the side of the staff as it was pushed on, to cut into the bladder by means of a sharp-pointed instrument. A No. 8 silver catheter was then passed, to allow the urine to come away. The operation was one in which surgeons often failed. He now trusted that the cicatricial substance would be absorbed; and that the man, who was free from renal disease, would make a good recovery.

CENTRAL LONDON OPHTHALMIC HOSPITAL.

PARTIAL STAPHYLOMA OF THE CORNEA: IRIDECTOMY AND SUBSEQUENT REMOVAL OF AN ELLIPTICAL PIECE FROM THE STAPHYLOMA, WITH A GOOD RESULT.

(Under the care of Mr. SPENCER WATSON.)

J. B., a little girl, aged 6, was brought to the Hospital in April 1868, with a staphyloma, of the size of a split pea, at the lower and inner part of the left cornea; the result, as it appeared from the history, of a perforating or sloughing ulcer during an attack of purulent ophthalmia in early infancy. This protrusion was increasing in size, and the pupil was almost hidden by the displacement of the iris downward. A convergent strabismus was associated with these defects.

Iridectomy was performed after the operation for strabismus on April 23rd. Two months afterwards, the staphyloma was still very prominent and unsightly. On June 25th, therefore, chloroform was given, and a small elliptical portion of the opaque staphyloma removed. The edges of the wound thus made were brought together by exceedingly fine silk sutures. In passing these sutures, great care was taken to avoid penetrating beyond the deep surface of the opaque cicatricial tissue of the staphyloma. Had the needle and thread been passed into the pigmentary membrane, which was exposed after removal of the elliptical piece excised, the thread, when tied, would have been in contact with the anterior capsule of the lens, and perhaps with the ciliary processes at one point. On this account the two sutures were made to pass through the thickness of the cornea almost parallel with its surfaces.

June 29th. One suture, which seemed to be causing some irritation, was removed, but the other was left in.

July 6th. The second suture was removed. There was now no irritation of the eye, and the cicatrix was level with the surrounding cornea, its position being marked by a dark and somewhat depressed line or groove.

Nov. 24th, 1868. The eye had remained free from irritation, and there was improvement in vision. The little girl could now see well enough to be able to count fingers held at about eight inches distance.

March 23rd, 1869. The eye remained in the same state as at the last date.

Remarks.—Iridectomy in this case, though it may have checked the progress of the staphyloma, still left something to be desired, as an unsightly protrusion was not removed. The partial abscission was therefore necessary, and the improvement is perhaps as great as could have been hoped for. The amount of vision obtained is not so great as may possibly be hereafter afforded by a correction of the irregular curvatures of the cornea by a cylindrical glass. At present, however, the patient is too young to allow of such measures being adopted. The chief benefits of the treatment pursued are (1) the improvement in the appearance (2), the extension of the field of vision laterally, and (3) the prevention of an increase of the staphyloma, and possibly of the total loss of the eye.

GENERAL INFIRMARY, NORTHAMPTON.

STRANGULATED INGUINAL HERNIA: OPERATION, FOLLOWED BY ERYSIPELAS: RECOVERY.

(Under the care of Mr. ASHDOWN.)

WE have to thank Dr. James Gurney Carruthers, House-Surgeon, for the following notes.

George H., aged 47, a small farmer, was brought to the Infirmary on May 27th, at 3 A.M., having, in the right inguinal region, a hernial protrusion of the size of a hen's egg, and exceedingly tender. On manipulation, it was very elastic, giving the idea of intestine only. There was a slight impulse on coughing. He had been liable to a her-

nial protrusion every day for two years; but it always subsided of itself during the night, so that he did not consider it necessary to wear a truss or consult a medical man.

On May 26th, at 10 A.M., he was lifting a cow-crib into a cart, when the horse gave a sudden start, thus giving the man a jerk; and he immediately felt a dragging pain at the pit of the stomach. He went home directly, and was sick within half an hour. His attention was not specially directed to the inguinal region until the vomiting occurred, although he felt some pain there at the time of the accident. He remained at home all day, and was sick at intervals of half an hour. He took tea once or twice, but it was returned immediately. In the evening, he was seen by a practitioner in the neighbourhood, who applied the taxis, but ineffectually, the patient being unwilling to submit to manipulation. He was, after some hours, brought to the Infirmary.

After manipulating the hernia carefully for about ten minutes without chloroform, the swelling was completely reduced. He expressed himself greatly relieved; and the vomiting, which had continued during the day, at once ceased. A compress of lint with a spica bandage was applied, and he was ordered a grain of opium every four hours. He was not allowed any solid food. On May 29th, there was a little vomiting after food, apparently sympathetic, which was checked by liquor calcis and milk; but on May 30th there was copious stercoraceous vomiting. There was, however, no swelling or pain in the inguinal region. As the stercoraceous vomiting did not persist, although ordinary vomiting did, he was ordered a grain of calomel and half a grain of powdered opium, which alleviated the vomiting for a time. A consultation was held in the evening; and he was ordered sherry and water, as he appeared to be sinking, having a pale shrunk countenance and a small quick pulse. A turpentine stupe was also applied to the abdomen, and an enema of gruel and castor-oil was administered; as, in the absence of any swelling or pain in the inguinal region, it was considered probable that the obstruction, which was evidently mechanical, depended upon some hard scybala. The patient was of a very costive habit, and could not remember whether he had passed an evacuation on any of the previous three mornings. The enema was used. About half a pint of it remained in the bowel; but no motion appeared. On the morning of the 31st, an enema *rutæ* was given. In the evening, a distinct fulness appeared in the inguinal canal on the right side. All doubt as to the cause of obstruction was now removed; and at a consultation it was decided to open the canal. In the absence of his colleague, Mr. Mash performed the operation by making an incision in the usual direction; but, upon proceeding further with the operation, the hernia was found to be encysted, and the testicle was exposed. Upon opening the sac, some small intestine was found in a state of congestion, but not at all gangrenous. The stricture, which was situated at the internal ring, was divided; and the intestine returned. The wound was closed with wire sutures, and a compress of lint applied over it. Vomiting had ceased; but hicough did not subside for some two or three hours. He was ordered a mixture containing half a drachm of solution of nitrate of morphia and an ounce of camphor water every four hours, if the pain were severe; and to take ice, milk, jelly, and beef-tea. He passed a restless night, but had no vomiting; and in the morning the pain in the epigastric region had quite ceased. He was ordered to continue the same plan of treatment. On June 2nd, the wound looked healthy. He passed a comfortable night. The pulse was still high, but soft and compressible. He passed flatus at intervals. In the evening, there was an acceleration of the pulse, a good deal of smarting in the neighbourhood of the wound, and an erysipelatous blush extending up the flank. The band and compress were removed; and one suture was taken out, allowing some pent-up pus to escape. Nitrate of silver solution was painted on the inflamed skin, and water-dressing applied over it. He was ordered to continue the morphia as usual during the night. On June 3rd, his aspect was greatly improved; pulse better; tongue still white, but cleaner at the tip and edges. He took food with great relish. There was neither nausea nor sickness. He passed flatus several times, experiencing great relief therefrom. The erysipelas was subsiding. He never had any rigor or sickness, thus indicating its purely local origin. He was ordered to take an effervescing draught occasionally, to relieve thirst. On June 7th he passed a dark coloured evacuation. An abscess now formed in the scrotum. There was also great œdema of the penis. The abscess was opened; this was followed by great relief and subsidence of the œdema. He was ordered to take meat and porter. As the bowels had been confined for three days, half an ounce of castor-oil was administered. An hour after its administration, he complained of pain in the abdomen, soon after which he passed a copious evacuation, preceded by some scybala. Great relief was obtained. From this time he gradually progressed; and he was discharged cured on July 1st, the wound having healed, and a bellows-truss having been applied.

COMPARATIVE PATHOLOGY.

VARIETY OF THE WALL EYE IN HORSES.

THE description which we gave a month ago of the wall-eye does not apply to all varieties. We had an opportunity the other day of examining a horse, which presented a different condition. It was a queer coloured pony, with black mane and tail, and a somewhat mottled grey body. Its eyelids and lashes were black. The iris in each eye was dark, but not absolutely black; whilst the sclerotic and conjunctiva were absolutely white. The peculiarity was thus very conspicuous. The term "wall" is more suggestive in such a condition than in that of a pale iris, as a broad belt of white surrounded the black. In the case of the white iris, the "wall" is around the pupil only. It is the abrupt contrast between the blackness of the eyelids and of the pupil, etc., which in the horse and dog renders "wall-eyes" such disfigurements. They are almost always coincident with other peculiarities in colour of the animal. A horse of the precise colour of the one just mentioned we never recollect to have seen before. It would have been a piebald grey, but that the patches were not abruptly margined.

MILK IN THE FOOT-AND-MOUTH EXANTHEM.

THERE is a great discrepancy amongst observers as to the physical and microscopic appearances of milk obtained from animals suffering from this disease: this is due, in a manner, to the presence or absence of mammitis. The cause of this complication is easily explained. When the vesicles are broken, a raw surface is left; and the hand of the dairymaid, in the act of milking, causes intense pain to the cow, thus disposing her to acquire the habit of retaining or keeping back her milk, which coagulates within the udder, giving rise to severe inflammation, which may terminate either in suppuration, consolidation, or gangrene, of the organ. In this disease, the milk is lessened in quantity—in some cases, to the extent of eight or ten quarts a day—and also deteriorated in quality. When complicated with mammitis, the milk may be either curdy or streaked with blood; and, in not a few instances, quantities of pus, or a dark-coloured fluid, having a very fetid odour, are discharged from the organ. The cream is also lessened in quantity: its supposed increase in this disease, as imagined by some, may be due to the presence of pus. Let us examine the specific gravity of each, as undernoted:

Specific gravity of cream, from.....	1.010 to 1.020.
„ of pus, „	1.015 to 1.030.
„ of skimmed milk.....	1.037 — —

It is evident from the above, that the specific gravity of cream and pus are so nearly alike, that, if pus be discharged from the udder in the act of milking, it must become incorporated with the cream, thus giving it a greater show and a richer appearance.

We cannot depend upon the microscopic appearances in all cases, to demonstrate whether the secretion is calculated to prove injurious to human beings or the reverse, as the characters are not constant, neither are they to be relied upon. The following are the general appearances of the milk in this disease, as seen in the field of the microscope. The fluid appears very transparent; there are a few epithelial cells, granular bodies, and numerous large corpuscles, not unlike the colostrum-globules seen in the milk of cows newly calved.

There is a ready method of testing the milk which is very much adopted by the continental veterinarians—that is, the easy coagulability of the milk on the application of the least heat, which separates into numerous little curds floating in the whey, the latter being of a pale blueish colour. I am not aware of the milk showing this peculiarity in any other disease.

JOHN ADAM MCBRIDE.

Royal Agricultural College, Cirencester.

RAINEY'S CORPUSCLES AND DISEASED MEAT.

IN Professor Brown's report on the foot-and-mouth exanthem in last week's *Lancet*, the author takes the trouble to give a figure of the so-called "Rainey's Corpuscles" or "worm-like bodies," in the flesh of oxen. Although Professor Brown expressly says that he does not consider these bodies to have any deleterious influence on the food-quality of the meat in which they occur, yet he mentions them as the same with those which were so much talked of in connection with the cattle-plague. We are not surprised, therefore, that the *Pall Mall Gazette* considers that Professor Brown is drawing "a very broad conclusion" from a slender premiss, when he asserts that the meat of animals affected

with foot-and-mouth exanthem is probably innocent although it contains these "worm-like bodies." It seems a pity that these bodies should ever have been referred to at all in connection with any known disease of cattle or other animals, and it is especially unwise to say anything unnecessarily which might produce doubt in the minds of lay readers. It was conclusively settled at the time of the cattle-plague (by Dr. Cobbold especially)—1, that these little bodies occur just as often in perfectly healthy meat as in that of diseased animals; 2, that they were not always present in the flesh of animals affected with cattle-plague; 3, that they occur very frequently in several animals which are not subject to cattle-plague or to foot-and-mouth exanthem. Dr. Cobbold has given an account of the whole question in the new supplement to his work on Entozoa. We hope never to hear these creatures mentioned again in relation to cattle-diseases, even though it is to say that they are harmless.

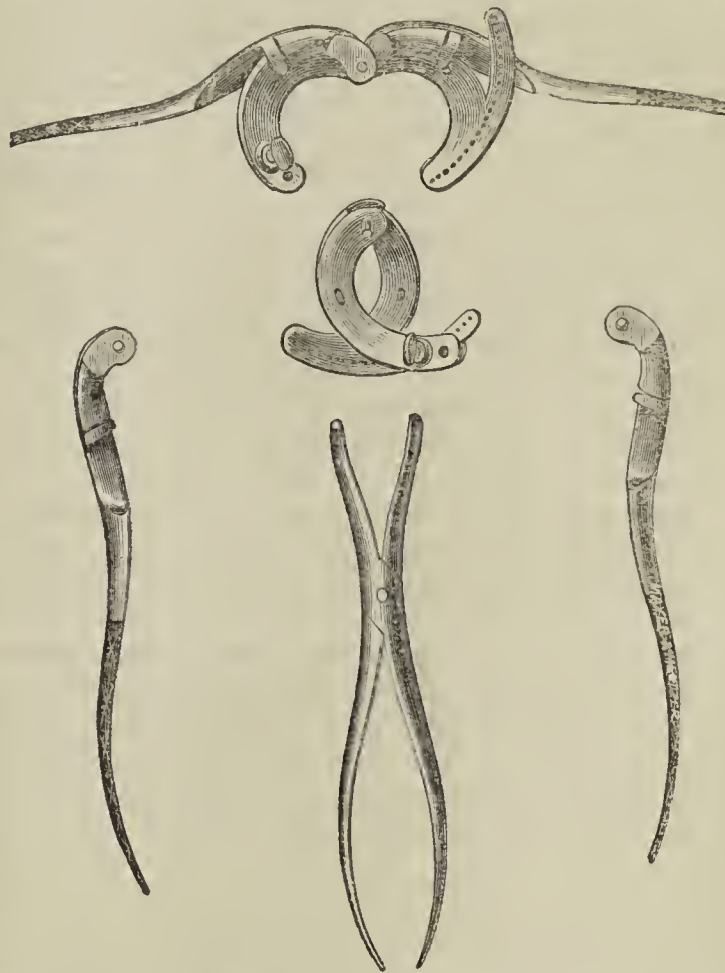
NEW INVENTIONS, &c.,

IN

MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

MR. SPENCER WELLS'S CIRCULAR CLAMP FOR OVARIOTOMY.

THIS instrument, made by Mayer and Meltzer, was shown by Mr. Wells at the last meeting of the Clinical Society, as the best form of clamp for ovariectomy. He explained how he had gradually arrived at this form of instrument, after using Hutchinson's clamp, his own first



parallel clamp, and different forms of wire and ecraseur clamps; and stated that this new circular clamp was both easily applied and removed, and, in addition, secured the pedicle quite safely, and by a circular construction, which enabled the operator to close the opening in the abdominal wall tightly around the pedicle.

HULL INFIRMARY.—The governors of this institution met on the 22nd instant, to elect a house-surgeon in the room of Mr. Richardson, deceased. A large number of the proxy votes were pronounced to be informal; and, after the voting was over, the meeting was adjourned to the next morning, when it was found that many of the proxy papers had not a properly defaced stamp affixed. A fresh election, of which notice has been given, must consequently take place.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, OCTOBER 30TH, 1869.

EXCISION OF THE KNEE *v.* AMPUTATION.

THOSE who are as sick as ourselves of cooked statistics—"statistics" made up of selected cases, or of cases supplied by memory—will, we think, not despise the subjoined fragment of really digestible food. We extract it from the last issue of the St. Bartholomew's Tables. Table III, edited with great ability by Mr. Willett, gives the mortality of the various operations during a six years' period, 1863 to 1868 inclusive.

	Cases treated.						Total of Cases.	No. of Deaths.	Percentage of Mortality.
Amputation through thigh for disease..	1863	1864	1865	1866	1867	1868	84	37	44.04
Excision of knee-joint	1	3	8	6	10	10	38	8	21.05

It will be seen that the number of amputations has steadily declined, (with some exceptions, as regards the last two years), and that the number of excisions has steadily increased. This change of practice has been attended by a diminished mortality. It is a very noteworthy fact, that the total of operations has not increased, but is in each year nearly the same, being in the last year exactly what it was in the first. Thus it is not probable that excision has been performed in cases which were deemed not desperate enough to warrant amputation. It appears probable on the face of it that, had the old practice of amputation for irrecoverable disease of the knee-joint been continued, thirty persons would have lost their limbs who have now saved them, and nine their lives also. If it be suggested as a fallacy that the ratio of mortality of amputations is probably too high, because during the last five years all the best cases were taken for excision, we may, in reply, refer to the fact, shown by Mr. Willett's table, that it was higher even than the average in 1863, when all, excepting one, underwent amputation.

We have not met with any other contrasted statements which told so definitely in justification of excision of the knee. In almost all others excisions are contrasted with amputations in gross—that is, including primary ones, which are much more fatal than those for disease; and nearly invariably the excisions are collected from *data* published in journals, and from which, in all probability, some unsuccessful ones are left out. Here, however, the facts are wholly beyond question, and are liable only to the correction which more extended *data* may give. We have a lingering suspicion that the contrast will not, in the long run, prove to be quite so much in advantage of excisions, and shall await, with much interest, the further accumulation of facts.

HOMO UNIUS ACADEMIÆ.

ON looking over the returns of students' entries from the different metropolitan schools, a question of some importance to medical education will probably have occurred to many: Is it the best plan for a student to affiliate himself permanently to any one hospital? We do not refer so much to the difficulties of choice, and the probability that in some instances a student, after his fees are paid, finds reason to regret his selection, as to the general merits of the question. To take our largest institutions as an example: Would a man who had dressed under Mr. Paget, and listened to Dr. Andrew and Dr. Gee, be any the worse for a temporary change of locality which should bring him near to Dr. Wilks and Mr. Hilton? We could, of course, put the question *vice*

versâ with precisely the same cogency. Without expressing any opinion that such a change would be desirable in all cases, it may, we think, be easily believed that in many it would give a student a fresh impulse, and would widen his views. It might be expected also to react with advantage upon teachers. Some schools are strong in one department, and some in others. In some, the teaching may be excellent, but the practice limited; whilst in others the attractions may be reversed. Some students select their school from motives wholly apart from its supposed merits, such as proximity, etc.; and may subsequently have those motives removed. In not a few instances, there is probably almost a degree of hardship in a system such as the present, which throws every possible difficulty in the way of change of school. Nor is it easy to allege any very prominent advantage which the plan in vogue possesses. That it cherishes a narrow "I am of Paul and I am of Apollos" sort of feeling, is undoubted. In Edinburgh, the student has some liberty of selection as regards his lecturers, and may "take out" a course first with one and then with another; and we believe the plan works very well. In Paris, the students are changed from hospital to hospital frequently. The subject is well worth the attention of our Teachers' Association. It would require combined action.

THE Legislature of the State of New Hampshire has prohibited the marriage of first cousins from and after the 24th December, 1869.

It is said that there are sixteen ladies studying medicine in the University of Zurich. The numbers have doubled themselves in each of the last four years.

THE CHOLERA IN INDIA.

By the latest accounts, cholera had abated, but was still raging in India at the base of the hills. The troops at Sabattroo, only twelve miles from Simla, had been moved into camp; and at Peshawur the daily mortality was about 100 to 120 amongst the natives.

THE ILLNESS OF MR. PEABODY.

OUR readers will regret to hear that Mr. Peabody, although relieved by his recent trip to America, is suffering from a severe aggravation of his symptoms; and we are sorry to say, from information of the most reliable character, now lies in a state sufficient to cause the greatest alarm to his friends.

LORD DERBY.

WE are informed, on the best authority, that Lord Derby's last illness began with an ordinary attack of gout. The acute symptoms subsided, and his lordship appeared to be on the eve of convalescence, when a subacute form of *muco-enterite* supervened. At first there was restlessness, which soon passed into a state of semi-coma, with inability to take food. In this state his lordship lay several days, and, without change, finally sank, exhausted. It has been remarked that no London physician of eminence was called in consultation. This is, however, not the case, as Dr. Gull saw Lord Derby in consultation with Mr. Gorst and Mr. Miller, the gentlemen who attended his lordship throughout his illness.

THE TREATMENT OF EPIDEMIC RELAPSING FEVER.

WE believe that the officers of health of the districts most affected by relapsing fever are taking special action towards meeting the increasing number of cases of this fever. We understand that the authorities of some such districts have received communications from the Medical Department of the Privy Council, and also from the Poor-law Board. The Fever Hospital has arranged its wards so as to give the greatest amount of accommodation to this fever, and has already admitted between one hundred and one hundred and seventy cases since the disease reappeared. It was, we are informed, the intention of the medical officers of health to meet on the evening of the 29th instant, to consider a communication which they have received from the medical officer of the Council.

PERFORATION OF THE UTERUS IN PROCURING ABORTION.

AT a recent meeting of the Pathological Society of New York, Dr. Finnell exhibited the uterus of a woman five months pregnant, on whom an abortion had been produced, with the effect of causing a large puncture of the fundus of the womb, through which a very thick catheter could be passed. The dying woman refused to divulge the name of the person who had operated upon her.

A CURIOUS POISONING CASE.

FIVE persons have been poisoned in the county of Meath. A parcel of grocery was found on the road-side by them as they were riding by. They took the parcel home, and partook of "potato-cake" made up of part of their "find." In a little while all of them were taken ill, and three of them died within a few hours. Dr. Taaffe and Dr. Jones, who examined the bodies, considered that death had occurred from some mineral poison mixed with the flour, but no analysis appears to have been made. Retching and purging were the symptoms. Whether the poisoned party simply mistook arsenic for flour, or whether the parcel had been intentionally left in their way, is not clear.

A CURIOUS TALE.

A PERSON, who gave the name of Charles Trevor, and said that he was a medical student, nephew of "Dr. Smith", was apprehended near Cambridge on Saturday week for highway robbery. He had, on the afternoon of that day, stopped a lady and a bricklayer in their journeys, and got a sovereign from the lady. His dress and mode of action were those of the old highwayman. When apprehended, there were found on him a pistol loaded with large shot, a case of lancets and other surgical instruments, a pocket-microscope, and a photograph of a lady. He has since been stated to have been an assistant to a well known and highly respected practitioner in London; and it appears that this is not the first occasion on which he has behaved in this—at least—absurd manner.

REDUCTION OF DISLOCATION OF THE FEMUR OF NINE MONTHS' DURATION.

THE *New Orleans Journal of Medicine* for the present month, referring to a case in which Dr. A. W. Smith, in the latter part of last year, performed reduction of the head of the femur after nine months' displacement, says that the result has been perfectly satisfactory, the patient having been for some time employed at his trade as a ship-carpenter. This is probably the only recorded instance of reduction of a dislocated femur after so long a period. Mr. Erichsen, in his work on *Surgery*, gives six months as the latest period in which reduction has been effected.

EXPERIMENTS WITH SNAKE-POISON AND ANTIDOTES.

DR. FAYRER of Calcutta gives a record of nineteen experiments on various animals with the poison of the cobra and of the snake called daboia, and the results of injecting various solutions into the veins. He concludes that—1. No good effects followed the injection of strong solutions of Condyl's fluid, of liquor ammoniac, or of quinine, either a few minutes before or after the animals were bitten. Death resulted with equal rapidity in all cases. 2. The application of a tight ligature to the limb, and of the actual cautery to the bite, almost simultaneously, produced no good result. 3. Injecting the cobra poison into a vein is certainly and rapidly fatal, and is in no way influenced by the injection of liquor ammoniac immediately afterwards, nor by the previous mixture of ammonia with the poison. 4. The cobra-poison produces no bad effect when introduced into its own blood, or into the blood of another cobra, or into that of a daboia. 5. The bite of a fresh and vigorous cobra is necessarily and rapidly fatal to man and animals, and nothing is known at present which can be of the least avail in delaying the mortal event. 6. When remedies appear to be of avail in cases of snake-poisoning, it is almost certain that the patient would have recovered, sooner or later, by his own efforts; because the poison, in his case, was weak or insufficient in quantity.

UNIVERSITY COLLEGE HOSPITAL.

WE learn, on good authority, that Dr. George Harley, F.R.S., has resigned the office of Physician to University College Hospital, in order to be able to devote himself, more entirely, to the increasing duties of private practice. The students will lose, in Dr. Harley, a teacher of great ability.

MEDICAL BENEVOLENT FUND.

THERE was a large attendance at the Committee Meeting held on Tuesday last, and a great many applications for relief, most of them being of the usual distressing character. The sum of £132 was disbursed, in grants, to seventeen cases, while others were held over for further inquiry. The death of one annuitant was reported, and an application made on behalf of the widow, for the half-yearly payment of £10, which was nearly due at the time of her husband's decease—this was directed to be paid to her.

THE BROMPTON HOSPITAL.

DR. SYMES THOMPSON and Dr. Stone are, we hear, intending candidates for the physicianship which will soon be vacant at this Hospital. Dr. Thompson is at present assistant-physician, while Dr. Stone has ceased to act in that capacity for some years.

THE DISPENSARY SYSTEM.

THE meeting of the Poor-law medical officers on Wednesday was an important one. It had for its subject of discussion one of the most valuable of the proposed measures of reform, and one also of those most easily practicable. Dr. Rogers's paper was an able account of a personal investigation into the working of the dispensary system in Ireland. The verdict, as might have been expected, was favourable, without reserve. The system is already extending in England, and we hope soon to see it general and compulsory.

LIGATURE OF THE EXTERNAL ILIAC ARTERY.

AT University College Hospital, on Wednesday, Mr. Erichsen tied the external iliac artery for a rapidly developing aneurism in the right groin. The patient, a cabman, thirty-five years old, had first noticed the tumour—a small hard lump—some weeks previously, while carrying a trunk. The aneurism sprang from the common femoral and lower part of the external iliac arteries, reaching from two inches below to about an inch and a half above Poupart's ligament. In consequence of its extension upwards, Mr. Erichsen was obliged to make the incision higher than usual, so as to be prepared to tie the common iliac if the artery were found unhealthy lower down. The external iliac was tied about an inch below its origin, the operation being completed in a very few minutes. The patient, up to Thursday morning, was doing well. Mr. Erichsen three weeks ago removed the entire tongue for cancerous disease, by Regnoli's method of incision between the chin and the os hyoides. It is, we believe, the first time this operation has been performed in this country. The case, so far as the operation was concerned, proved successful; but the patient unfortunately died nine days afterwards, of pleuropneumonia. We shall give, in an early number, details of this case in our hospital reports. We may here state that there is under the same surgeon's care at the hospital an interesting case of popliteal aneurism in a young man only twenty-three years of age. He does not bear flexion of the limb, or digital or instrumental compression, well; the aneurism has consolidated a little, but, if there be not soon a marked improvement, Mr. Erichsen intends to tie the femoral artery.

PROPOSED MEDICAL MISSION FOR LONDON.

AT a meeting held a few days since, in the Theological College of the English Presbyterian Church, to hear an address by Dr. Burns Thompson on medical missions, it was proposed and agreed to, that steps should be taken to establish a medical mission in London. A committee was appointed to make the necessary arrangements.

A CITY MORTUARY.

THE Commission of Sewers of the City of London has, in pursuance of recommendations by the Sewers Committee, ordered the erection of a chamber in Golden Lane, for the reception of at first twelve, and afterwards twenty-four, dead bodies; for holding hearse, and carriages for removal of persons suffering from infectious diseases; and for the disinfection of clothing. The total cost is estimated to be about £13,000.

DEATH FROM SLIGHT INJURY TO THE EAR.

AN inquest has been held on the body of a boy aged nine years, who died six days after the passage of a crochet-needle through the auditory meatus. Another child of the same age was playing with a needle in her hand; and, it is said, the boy, in turning his head sharply, caused the needle to enter through the right ear with considerable violence. When it was withdrawn, a quantity of blood and serum exuded. The boy became giddy, and then remained somewhat unwell for three days, when a surgeon was called in; after that, he gradually sank. Mr. Whiskin said that, on examination, he found extensive inflammation of the brain and membranes, especially near the right ear, where there was a collection of pus in the subarachnoid space. There was no perceptible injury to the skull. Probably the needle perforated the thin roof of the tympanum, making only a small perforation of the dura mater. This occurrence adds another case to the list of injuries (slight) to the petrous bone followed by inflammation, chiefly limited to the subarachnoid space. The admission of air is the chief source of danger.

DEATH OF JOSEPH JACKSON LISTER, F.R.S.

JOSEPH JACKSON LISTER, F.R.S., died, at an advanced age, on Sunday last. Thirty years ago, his name was amongst the foremost as a scientific investigator, and especially as an improver of the microscope; but, of late, he had almost retired from public life. He was a very energetic man, and, to the last, took an active interest in many philanthropic undertakings. He was a member of the Society of Friends; was of hardy habits of life, and enjoyed good health until his last illness, which was a very short one. Numerous papers from his pen are to be found in the Royal Society's *Transactions* and other publications. He had enjoyed the pleasure, accorded to but few, of seeing one of his sons earn a reputation which even eclipsed his own, and become, during his lifetime, a fellow, with himself, of the Royal Society. We allude, of course, to the Edinburgh professor of Clinical Surgery.

THE ANATOMICAL MUSEUM AT CAMBRIDGE.

DURING the summer, a very important addition has been made to the Museum of Human Anatomy by Dr. Robert Lee, F.R.S., of Savile Row, London, who has placed in it the whole of his valuable anatomical and pathological collection. The collection, which represents much of the labour of a long and industrious life, contains numerous specimens illustrative of the diseases of the veins, the uterus, ovaries, and other parts which have been the subject of communications to the Royal and other societies, and which have, therefore, peculiar interest in addition to their intrinsic value; and it contains a series of remarkably elaborate dissections of the nerves and ganglia of the heart and uterus. By these dissections, carried on with great patience and skill through many years, Dr. Lee was the first to display the rich nerve-supply to the organs mentioned, and so pave the way to a correct knowledge of their mode of action. The specimens have been the subject of much discussion and some controversy among anatomists; they have been represented in various works by Dr. Lee, and in papers in the *Transactions* of the Royal Society, and are, therefore, of considerable historic, as well as of anatomical and physiological interest. They are placed in our museum with the confidence that they will be valued and treasured here, and yet will be accessible to the investigation of those who may desire to examine them, as well as be of service in the teaching of our students. This mark of good feeling to the University must be, in fact, attributed to the fact that Dr. Lee had lately a son at Caius

College, who graduated in medicine, who follows in his father's steps, and has been occupied in investigating the distribution of the nerves to the eye, and who has just presented to the Museum an evidence of his skill in an exquisite dissection of the nerves of the iris.

CHLOROFORM AS AN ANÆSTHETIC.

It was stated by Sir James Simpson, on Tuesday, when receiving the freedom of the city of Edinburgh, that, amongst the manufactories of chloroform in Great Britain, a single one of these located in Edinburgh makes as many as 8,000 doses a day, or between 2,000,000 and 3,000,000 of doses every year.

DISCIPLINE VERSUS HUMANITY.

SURGEON GREEN, of the United States Navy, has been tried by court-martial and condemned to two years' suspension, for disobedience. A sailor, it is reported, had received on the head a cutlass-wound three inches long, reaching to the bone. Surgeon Green, very rightly, placed the man on the sick list. The commander of the ship ordered the man's name to be removed. Surgeon Green remonstrated; refusing to take the responsibility of sending a man to duty in a tropical sun with such a wound in his head. The surgeon was thereon tried and punished, as we have noted. Judging from the account given in the *New York Medical Gazette*, we have no hesitation in saying that Surgeon Green acted in a manner becoming a surgeon and a humane man. His remonstrance, it appears, was made with proper respect; and if he had failed to make it, he would not have done his duty. For what he did, he deserves approval; for the disgrace—if it be such—brought on him, he deserves sympathy. The medical profession in the American navy is said to be in a very unsatisfactory position. We may at some time return to this topic; in the meantime, Surgeon Green's case tends to prove the necessity of a reform which shall at least protect medical officers from punishment for presuming to know better than their commanders whether a wounded man is or is not fit for duty.

HEREFORDSHIRE ON MEDICAL REFORM.

IN the report of the Herefordshire Medical Association read at its recent annual meeting, after some strong but very judicious remarks on the necessity for remodelling our Medical Council and the creation of a single Examining Board, the following paragraph occurs.

"The time and the opportunity for effecting this great reform seem to have arrived; and, if the medical profession of Great Britain is to increase in influence, and to maintain its place in the first rank of science, some such sweeping changes must be made; and it is not expecting too much for a body, whose every unit is educated and scientific, to ask that the whole profession should have a voice in effecting it; and, if the opportunity be lost, it will be solely due to the selfish interests of the Colleges in striving against each other."

We sincerely trust that the profession will very promptly take efficient means for making its voice heard.

HUMAN SKULLS FOR THE MILL.

A GRIM spectacle was some little time ago reported in the *Aberdeen Free Press*. While a cargo of bones was being taken from a Danish ship, which had just arrived from a Danish port, to the neighbouring stores of an agricultural company, a quantity of human skulls were cast up among the horse and other bones. Grinning in a row on the shelves of the shed, where the bones were tumbled into the buckets to be ground, were a number of skulls, entire or in pieces, which had been picked out of the heap. The shipments of these remains are sometimes so large, or they accumulate on the shelves, to such an extent, that they have to be disposed of by re-burial in the sea-bents—a most fitting place for Danish remains in this very Scandinavian district of Aberdeenshire; for along almost its entire coast are still to be found the remains and strongholds of the hardy Norse race. We know not whether the Danes are aware that speculators in their country are doing what they can once more to enrich the soil of Aberdeenshire but it is gratifying for us to see the respect paid to the remains of their countrymen in our own country.

INFLUENCE OF CITIES ON THE ATMOSPHERE.

DR. ANGUS SMITH, the Inspector under the Alkali Act, has, in his fifth official report, furnished some interesting information as to the effects of large cities, and especially of manufactories, in contaminating the atmosphere. The following extracts express some of his principal conclusions.

"The rain from the sea (Western Islands) contains chiefly common salt, which crystallises clearly.

"The sulphates increase inland before large towns are reached.

"The sulphates rise very high in large towns, because of the amount of sulphur in the coal used, as well as decomposition.

"When the air has so much acid that two or three grains are found in a gallon of the rain-water, or forty parts in a million, there is no hope for vegetation in a climate such as we have in the northern parts of the country.

"Free acids are not found with certainty where combustion or manufactures are not the cause.

"Experiments in the direction indicated above may enable us to study and express in distinct language the character of a climate, and certainly of the influences of cities on the atmosphere."

In Manchester, in 1867, the maximum acidity of the rain was 7.39 grains per gallon, and the minimum 0.31 per gallon.

ACIDITY OF RAIN.

IN the report from which we have just quoted, Dr. Angus Smith also supplies the following statement as to the relative proportion of acid in rain-water from different localities. We extract it from a review in the *Chemical News*.

"The total acid in rain collected from various sources bears the following relationship.

Row, Dumbartonshire.....	100.00 =	1
Whiston, ten miles from Liverpool	470.67 =	4 $\frac{3}{4}$
Birkenhead	528.29 =	5 $\frac{1}{4}$
Liverpool	938.21 =	9 $\frac{3}{5}$
Waterloo, on the shore	961.98 =	9 $\frac{1}{2}$
Newcastle-on-Tyne	1054.73 =	10 $\frac{1}{2}$
Manchester	1175.54 =	11 $\frac{3}{4}$
Near an alkali work	1539.27 =	15 $\frac{3}{5}$

"We can scarcely be surprised, after glancing at this table, at the rapid decay of stone in certain localities, compared with others, and the long endurance of buildings of antiquity which are far from large towns and in a pure and open air—such as the Parthenon and the Pyramids of Egypt."

Alkali works liberate free acid which is brought down in rain-solution, to the great injury of vegetable life. It was to prevent this that the Alkali Act was passed.

STATE MEDICINE IN AMERICA.

THE Governor and Council of Massachusetts have established a State Board of Health; Dr. H. J. Bowditch of Boston being chairman. This is probably the first Board of the kind instituted by any American State—at least, with such extensive objects as those given in charge to the Massachusetts Board. The duties of the Board are: 1. To take cognisance of every thing relating to public health—comprehending endeavours to eradicate the causes of public disease; 2. To diffuse among the people a general knowledge of the means of preserving health and preventing disease; 3. To investigate the effects of the use of alcohol on the industry, prosperity, happiness, health, and lives of the people. In his address at the meeting for organisation of the Board, Dr. Bowditch suggested means for diffusing knowledge regarding hygiene. The first method was the delivery of lectures by the secretary or other members of the Board. He suggested, also, that arrangements might be made with physicians and surgeons in various towns to deliver lectures on public health. The second method proposed was, the holding of meetings, by the secretary, in the various parts of the State for public discussions on matters relating to public health. The third plan was, the publication and wide circulation, in a compact form, of knowledge on public hygiene. Lastly, the annual reports to the legislature should be models of brevity and of compact learning—"not a word too much or a word for effect merely—and so thoroughly indexed that even the busiest man on 'change can, in three minutes, get at the essentials."

The institution of this Board is highly creditable to the State of Massachusetts; especially as, we understand, it was a spontaneous act of the Legislature. The example is one which, we hope, will be followed throughout the States.

INAUGURATION OF A STATUE OF DUPUYTREN.

A STATUE of the celebrated French surgeon Dupuytren was inaugurated on the 17th instant at Pierre-Buffière, near Limoges, in the department of the Haute Vienne, where he was born on October 5th, 1778. Professor Cruveilhier presided on the occasion; and the ceremony was attended by the prefect of the department, Count de Beaumont (son-in-law of Dupuytren), MM. Bardinet, Larrey, Brierre de Boismont, Deperet Muret (mayor of Pierre-Buffière), etc. Very few Parisian medical men were present. In recording the event, the *Gazette Médicale* remarks: "If we compare the ceremony with that which took place on the 17th of August of last year at Quimper, we find the first a rather cold affair in comparison with the second. This is because Dupuytren, whose genius is as undeniable as are the services which he rendered to surgery, represents that authoritative science which is not in fashion in our days; his glory is mainly personal, and shines mostly in the more or less limited circle of his pupils and surviving contemporaries. Lacnec, on the other hand, commends himself to posterity less by the authority of his name and the *éclat* of his teaching than by his immortal discovery. His glory is truly a national glory; and hence the eagerness of the whole medical body to honour the memory of the illustrious Breton."

SCOTLAND.

DR. JAMES AFFLECK has been appointed Assistant to the Professor of Medical Jurisprudence in the University of Edinburgh.

THE MORLEY CONVALESCENT HOSPITAL.

THIS hospital has just been opened for the reception of patients. Its immediate use, when formally opened in July last, was delayed in consequence of the ceiling in some part of the building giving way.

THE INTRODUCTORY ADDRESSES IN EDINBURGH.

THE session at the University of Edinburgh will be opened by an address by the Principal, Sir Alexander Grant, Bart., in the Music Hall, George Street, on Tuesday next, November 2nd, at two o'clock. At the Royal Colleges of Physicians and Surgeons, Edinburgh, the introductory address for the session will be delivered by Dr. Argyll Robertson the same day, at eleven o'clock.

UNIVERSITY OF ABERDEEN.

DR. INGLIS, the new Professor of Midwifery, gave his introductory lecture on Wednesday. He was enthusiastically received. Dr. Inglis has been appointed Physician-Accoucheur to the Dispensary, and will thus be enabled to procure a sufficient number of midwifery cases for the practical instruction of the students—a want which had long been felt.

APPOINTMENT OF A MEDICAL MAN FOR BALMORAL.

IT is, we believe, definitely settled that a medical man will be stationed at Balmoral for the benefit of the Crathie district. We are pleased to hear that Dr. Marshall, the much respected and talented practitioner at Braemar, is spoken of for the position.

THE VACANT APPOINTMENTS IN EDINBURGH.

SEVERAL candidates have come forward for the appointment of Pathologist to the Royal Infirmary, Dr. Wylie and Mr. Lawson Tait being both mentioned. It is also stated that Dr. Pettigrew has some intention of applying for the post; especially if he can secure, in addition, the Conservatorship of the College of Surgeons' Museum. For this latter appointment, Dr. Chiene and Dr. Alexander Miller are also candidates. The claims of Dr. Pettigrew for either appointment are of the highest order.

PRESENTATION OF THE FREEDOM OF THE CITY OF EDINBURGH
TO SIR JAMES SIMPSON.

ON Tuesday, the freedom of the City was presented to Sir James Simpson, by the Lord Provost, before a select audience, in the City Chambers. The minute was read by the city clerk, recording the resolution of the Council, electing as a burgess and guild brother of the city, Sir James Young Simpson, Bart., "whose numerous and varied contributions to medical science and literature, and particularly whose distinguished discoveries and appliances for the alleviation of human suffering, have served to maintain and extend the reputation of this city and its medical school, and entitle him to the respect and gratitude of his fellow-citizens." The Lord Provost (Mr. Chambers), in a graceful speech, presented Sir James with the burgess-ticket, which bore the above inscription. He stated that this was the only occasion on record of a similar compliment being paid to any citizen of Edinburgh, except in the case of Mr. Moncrieff, Lord-Advocate, for his great services in conducting the municipal extension. Sir James, in an eloquent reply, referred to his early struggles in Edinburgh, and his gratification in receiving so great an honour from his fellow-townsmen.

THE INTENDED TESTIMONIAL TO MR. SYME.

IT will be seen by our advertising columns that a public meeting will be held at St. James's Hall, London, on Wednesday, November 10th, at half-past four in the afternoon, for the purpose of initiating a testimonial to Mr. Syme, on the occasion of his resigning the chair of Clinical Surgery in the University of Edinburgh. It has been suggested that this testimonial shall have a two-fold object, viz.: 1. To place a marble bust of Mr. Syme in the hall of the new Royal Infirmary of Edinburgh, or in the University Library, as may be determined; and 2. To perpetuate Mr. Syme's name in connection with the Chair of Clinical Surgery, by founding a Fellowship in the Edinburgh University, to be called "The Syme Surgical Fellowship." For these objects a sum of not less than £2,500 will be required. Of this sum upwards of £200 have been already promised. The chair at the meeting will be taken by Dr. Lyon Playfair, C.B., Member of Parliament for the Universities of Edinburgh and St. Andrew's. The list of gentlemen who have expressed their wish to support the proposal comprises not only a large number of Mr. Syme's former pupils whose success in life has been in no small measure due to the precepts and example of their illustrious teacher, but also many of the most eminent members of the medical profession, and others distinguished in science, who, though they never have been pupils of Mr. Syme, desire to take this opportunity of recording their deep sense of his great eminence as a surgeon, and of testifying their appreciation of the lustre which his labours, through a long career, have shed upon British Surgery. It is requested that in the event of sympathisers being prevented by distance or by any other cause from attending the meeting, they will communicate with the Honorary Secretary, Dr. Murchison, 79, Wimpole Street. We wish every success to the object, and trust that all friends of Mr. Syme in London and its neighbourhood, will make a point of attending the meeting.

IRELAND.

INTRODUCTORIES AT DUBLIN MEDICAL SCHOOLS.

DR. QUINLAN will open the session at the Catholic University School on Tuesday, November 2nd. Dr. Cameron will deliver the Address in the Ledwich School on November 1st.

ROYAL COLLEGE OF SURGEONS OF IRELAND.

THE opening address for the session was delivered in the theatre of the Royal College of Surgeons by Professor Rawdon Macnamara, President of the College. Amongst those present were—The Right Hon. the Lord Mayor, Sir John Gray, M.P.; Rev. Dr. Haughton, Sir James Murray, and a large number of medical practitioners and students. After some

introductory observations, he dwelt on the prospects which the profession afforded for employment as follows.

"I might, peradventure, point out that in no other profession is there so great a certainty of early and progressive remunerative employment as there is in ours for the industrious, zealous, and intelligent student. I might feel myself called upon to show how services which heretofore have been held in disfavour have had their arrangements so improved as to merit the attention of our alumni; how the medical appointments under the Poor Laws and Medical Charities' Acts now claim at the hands of our neophytes more than a passing glance of contemptuous disregard in consideration of the ameliorations which have taken place in their administration; how steady has been the progressive upward tendency of the salaries; and how enhanced value has been conferred upon the tenure of such affairs by the recent Superannuation Act."

Having very eloquently urged that youth was no barrier to success, and having given many examples from other callings, he said:—

"Amongst the number of those who have distinguished themselves at an early age in our art, perhaps one of the most remarkable is Bichat. His labours and his writings absolutely revolutionised medicine, and yet he was dead at 31 years of age. Our own Jacob immortalised himself by the discovery of that structure in the human eye which, out of compliment to him, has been named after him, at so early a period of his life that when some years since he was introduced to a distinguished foreign nobleman, himself an oculist of no mean repute, as the illustrious discoverer of the 'membrana Jacobi,' the Prince exclaimed, 'Ah, no, that cannot be, he dead this hundred years.' Visitors to our valuable museum cannot fail to have their attention arrested by a beautiful bust representing in cold marble the classic features of its founder, to whom, with truth, may be applied the words formerly written of another great man—'Should you seek his monument, look around;' and yet what are these words inscribed on the pedestal? 'John Shekelton, by whose superior talent, ardent zeal, and unwearied industry, this museum was first established; obiit 28th May, 1824, ætat. 29.'"

After a most forcible defence of lectures as a means for instruction in scientific medicine, Professor Macnamara discussed the various proposals for amalgamating licensing bodies and for the establishment of a State Examination in each kingdom, and concluded as follows.

"My suggestions are briefly these. First: Let no pupil be permitted, unless under special circumstances, to seek his license in any other division of the empire than that in which he was educated. Should any special circumstances arise to render it desirable that he should resort elsewhere for his licence, let him state such circumstances to the Branch Medical Council for his division of the kingdom, and let them issue to such corporation, if they think fit, a *liccat ad examinandum*, without which it shall be illegal for them to do so, and for an infringement of which regulation the offending corporation shall be reported in the proper quarter, and the party who has thus wrongfully received its license shall not be entitled to have it placed upon the Register. Second: let all the corporations keep a list of such candidates as they have found it necessary to remit back to their studies, and let copies of such lists be forwarded, with the least possible delay, to all the other corporations. Third: every registered candidate should be made acquainted with the cause of his rejection; he should not be allowed to present himself anywhere for examination within a period of six months from his former rejection, nor without producing satisfactory evidence of having devoted his attention to that subject upon which he had previously failed. Fourth: to secure in a more efficient manner the carrying out of the third suggestion, the rejected candidate should not be permitted to have back his certificates from the college in which he had lodged them until his term of probation had expired. The advantages which would flow from such regulations as these are too obvious, even did time admit of it, to require comment. Be they adopted or be they not, the present arrangements are doomed. Some change must take place, whereby efficiency and equality in the examination of the several corporations will be secured. Of one thing, however, I can assure you, gentlemen, that no change will be tamely submitted to by the Council of this College which will involve the issuing of coin from its mint that has not the ring of the true metal in it. For too many years in the past has this College upheld the honour and dignity of Irish surgery for us now to permit its reputation to be tarnished in the future."

BIRMINGHAM ORTHOPÆDIC HOSPITAL.—The Bishop of Worcester has been appointed President of the Birmingham and Midland Counties Orthopædic Hospital, in the room of the Earl of Dartmouth, resigned.

THE ORIGIN OF LIFE.

VI.

IN citing experiments which have been made as to the genesis of the lowest forms of life in organic solutions—after these have been subjected to such conditions as are admitted by both sides to be destructive to all known organisms—we have studiously selected those which have seemed to meet the required conditions most fully, and yet in themselves have been of the simplest nature. It is true that the experiments related are those which have been made by the heterogenists; but, since they seem conclusive in themselves, and are of such a nature as apparently to defy objections being made to them on the score of their admitting conditions which ought not to be admitted, it appears useless to cite other experiments in which mere negative results have been arrived at by one experimenter, whilst others, repeating the same experiments, affirm that they obtain the very opposite results. Such additional matter could only introduce confusion into a question, for the solution of which it is above all things necessary that it should be reduced to its simplest issues. Now, the panspermatists do thoroughly agree with the heterogenists as to the rigorous and ultimate nature of the experimental proofs above described; only they (and M. Pasteur principally) affirm, either that similar experiments have afforded them no evidence of the existence of life, or else, if they do find organisms, they invariably endeavour to explain their existence on the ground of some imperfection in their experiments. Whilst, however, the heterogenists maintain that in their hands such experiments are almost invariably found to be productive of organisms of the lowest kind, we do not see how these mere negative statements of M. Pasteur can be considered to upset those of his opponents, even were all his means of research shown to be perfectly unassailable. But here we come to altogether the weakest part of M. Pasteur's evidence, since it may fairly be maintained, as Dr. Child has done (*Proceed. of Royal Soc., Ap., 1865*), that his microscopical evidence as to the presence or absence of the lowest organisms in his solutions is almost valueless for the settlement of such a question. Dr. Child made a number of most carefully conducted experiments on the development of organisms in closed vessels, after having boiled and then subjected his solutions only to the influence of previously calcined air. He afterwards examined these solutions in conjunction with so experienced a microscopist as Dr. Lionel Beale, employing one of Powell and Lealand's $\frac{1}{25}$ th object-glasses, which gave a magnifying power of 1,500 to 1,700 diameters. In no fewer than eight out of thirteen of these experiments the solutions were found by Dr. Beale and Dr. Child to contain organisms of the lowest and most minute description. The latter says: "I have observed all the precautions which M. Pasteur speaks of as 'exaggerated'; yet I have shown bacteriums to be produced exactly under the circumstances in which he asserts that they do not exist." Now, is it at all possible for us to account for these discrepancies? We think it is; and at all events we should feel much better satisfied with M. Pasteur's results if the source of doubt of which we are about to speak could be eliminated from his statements. In his memoir, he speaks of having made use of a magnifying power of 350 diameters; but Dr. Child says, with reference to the very minute organisms that were found in his solutions from closed vessels, "On one occasion I tried the effect of a power of 450 (not possessing one of 350), and found that all satisfactory investigation of such objects with such a power was impossible. Any person has only to examine the drawings which accompany this communication (in one particularly,* that marked Z₁) in order to satisfy himself that to come to any conclusion as to the presence or absence of such objects as are here represented with a magnifying power of little more than $\frac{1}{2}$ th of the linear measurement of that from which they are drawn, would be quite impossible." It seems well to state here that the size of a bacterium or of a monad is by no means a constant quantity—they differ very much indeed in this respect, not only in different solutions, but also in the same solutions at different times. Of this latter fact we have lately had most striking evidence. We prepared a solution of meat, filtered it, and placed it in a glass vessel under a bell-jar: at the expiration of the second day we found on the surface of the solution a scum composed for the most part of monads and bacteria, which were most uniform in size, the diameter of the former being about $\frac{1}{20000}$ " and the length of the latter (the double specimens, which are generally by far the commonest,) about $\frac{1}{3000}$ ". This primary pellicle was broken, and a por-

tion of it removed, and then at the expiration of three more days a portion of a second pellicle, which had replaced the first, was examined, and it was at once obvious that its constituent monads and bacteria were notably smaller than those of the first pellicle—in fact, on measurement, they were found to be less than half that of their former size. But the monads and bacteria that were found by Dr. Child in his solutions, after exposure to conditions so rigorous and unfavourable to the development of life, proved (as may be seen by the drawings of Dr. Beale) to be very much smaller still. Now, the monads and bacteria that were first formed in our solution, when it contained its largest amount of organic matter—and was therefore most putrescible—were notably larger than those produced at a later period, when its amount of organic matter in solution was less; and, taking this fact in conjunction with the consideration that, if the smallness of the forms in the second pellicle had resulted from the fissiparous division of the pre-existing larger forms, we should in all probability have still found some of the larger forms mixed up with the smaller, it seems not altogether unfair to assume that the size of the organism, whether evolved or grown, does depend most materially upon the fitness of the conditions by which it is influenced; and this conclusion seems all the more likely to be true if we consider the fact that, in Dr. Child's experiments—where the conditions of the experiments were so very unfavourable to the development of living organisms—these were actually found to be very minute, and much smaller than the similar forms which are met with under more favourable conditions. We may ask whether this consideration has ever suggested itself to M. Pasteur? We should think it has not, seeing that in his examinations he has employed a microscopic power so low as 350 diameters—one which would suffice, is it true, fully to establish the existence or non-existence of the largest kinds of bacteria, but which would be utterly inadequate, as it appears, to settle the question whether these exist in that pigmy and dwarfed condition under which alone both observation and reasoning would entitle us to consider that they are likely to exist in the experiments with boiled solutions, calcined air, and closed vessels. It really, moreover, seems to us that there is no real weight whatever in their argument, when the opponents of heterogeny say that the truth of their view as to the origin of the supposed new forms of life from germs is borne out by the fact that the number and variety of the forms of life met with in solutions diminishes in direct proportion to the severity of the precautions that are taken to prevent the accidental access of germs. The heterogenists may and do just as fairly say that such a result is only to be expected from their view of the case. If there be a new evolution of Life under certain conditions, then it would be only rational and fair to suppose that such evolution could take place *only* under the influence of favourable conditions, or at all events under the influence of such as did not seem absolutely to negative the very possibility of its occurrence. It could not be maintained for a moment by a person who knew anything concerning the doctrines of Evolution and the Correlation of Force, that the new organic speck was likely to be evolved by virtue only of "spontaneous" or self-initiated changes taking place in the organic matter of a solution.

The organic matter in the solution is only one component of the future organism, and this could never originate if such matter were not subjected to the influence of incident forces supplied by changing conditions, such as might be capable of altering its molecular composition, and so causing it to assume the form of life, together with the assimilative and reproductive properties of a living thing. And, what conditions can be conceived more meagre, and more adverse to the evolution of such changes in the dissolved organic matter, than those to which we have just been referring? In the first place, the organic solution is boiled; and, knowing the destructive tendencies of heat when acting upon organisms and organic matter, we can well imagine how the latter may have undergone the most serious change by the process. The higher organic compounds—those which are the most unstable, and which, therefore, would be, in all probability, the best fitted to undergo the changes leading to organisation—are those very compounds which, for the same reason, would be most likely to suffer from the effects of the high temperature to which they had been submitted. No one has admitted this more fully than M. Pasteur, as may be seen from the following passage, which we quote from Penetier's work (p. 204). The celebrated chemist wrote: "Si les partisans de l'hétérogénie avaient plus de sagacité, ils auraient vu que le point faible de mon travail consistait en ce que toutes mes expériences s'appliquaient à des matières cuites; ils auraient dû réclamer de mes efforts un dispositif d'épreuves permettant de soumettre à un air pur des substances naturelles, telle que la vie les élabore, et à cet état où l'on sait bien qu'elles ont des vertus de transformation que l'ébullition détruit." And then, in addition, this boiled organic matter, which has thus already been, in all probability, robbed of its most potent tendencies to change, is still further placed

* Made from the object by Dr. Beale, as seen by a magnifying power of 1700 diameters.

under disadvantageous conditions by being enclosed in a vessel hermetically sealed (and therefore in one in which the tension of the air may increase to a most deleterious extent by that liberation of gas which takes place as one of the earliest changes of putrefaction), and also by the fact that such air cannot be renewed. How much this latter circumstance interferes with the appearance of organisms in organic solutions, may be seen from two of the experiments which we have already quoted. In those of Schwann, in which the calcined air and the heated organic matter and water are allowed to remain in hermetically sealed vessels, the monads and bacteria which alone appear do not make their appearance till after a considerable time—often not for several months; whilst, in the experiments of Schultze—the air being more or less renewed daily, after its previous passage through Liebig's bulbs containing strong sulphuric acid—it is found the forms which are produced—monads and bacteria as before—are now met with very quickly—generally in the course of a few days. Yet in both cases the organic matter had been exposed to the boiling temperature; so that the different rate of production of organisms would seem, in all probability, due, either to the influence of too great a tension in the air of the hermetically sealed vessels, or to its non-renewal at intervals—perhaps to the combined influence of both.

But we get a decided illustration of the deleterious effects of the mere sealed vessel alone, by experimenting with unboiled solutions exposed to the influence of ordinary air. The heterogenists say that, if a maceration of hay be divided into two equal parts, one of which is placed in a flask whose neck is hermetically sealed, whilst the other is placed in a glass vessel under a bell-jar of the same capacity as the flask, so that both solutions may be exposed to the same amount of atmospheric air, no ciliated infusorium ever appears in the sealed flask, whilst the fluid under the bell-jar soon contains them in abundance. M. Pouchet has also conducted a somewhat similar experiment, only one in which the possible disturbing conditions are narrowed still more. He used a filtered solution of flax in the same way, dividing it equally, placing one portion in a flask which was then sealed, and another portion under a bell-jar of the same capacity as the flask. But in this case the bell-jar was made to dip into a stratum of mercury (which had been previously heated to 160 deg. C.); so that whilst change or renewal was prevented the two portions of fluid were exposed to exactly equal volumes of the same atmospheric air. Yet in this case also—where germs had an equal chance of gaining access to the two solutions—after eight days, monads, bacteria, and vibrios only were found in that of the sealed flask, whilst in that under the bell-jar there was also found myriads of ciliated infusoria. This latter experiment, if we may rely upon its accuracy, clearly points to the conclusion that, of the two possible specially detrimental conditions opposing the growth of organisms in sealed vessels, tension of the contained air, and its consequent pressure upon the solution, is more noxious than a simple want of renewal; for in this latter experiment, as we have seen, there was no renewal of air in either case, and yet ciliated infusoria were produced in the one specimen, and not in the other. But then, in the one vessel the contained air, with any additional gases that may have been evolved in the incipient stages of putrefaction, could not cause an increase of capacity by any augmentation of pressure upon its unyielding walls; whilst, in the other, the capacity could be practically increased by depression of the surface of the mercury within the bell-jar, and thus any extra and undue tension would be partly removed from the organic solution itself.

After these explanations, we think it will be clearly seen that the arguments of the panspermatists, as to the paucity of the forms of life in organic solutions being in direct proportion to the thoroughness of the precautions taken to exclude all possible germs, have really no force, when the heterogenists reply, as they have so frequently done,—“Nothing else is to be expected, if you subject your dissolved organic matter to such conditions as would more and more tend to diminish the possibility of change taking place in it, or of the incidence of any conditions which could bring about its metamorphosis.” They might say,—“We believe in the new evolution of life; but, for this to be possible, there must, of course, be in action conditions suitable for bringing about that redistribution of Matter and Force from which alone such evolution can result.”

What shall we say, then, in reply to the experimental evidence? If it be true that monads and bacteria may propagate themselves in the experimental organic solutions from certain preexisting forms by means of a process of fission, or else from germs unknown to us, but whose existence we postulate, then it would appear that only one of two conclusions seems possible: either (1) any of the supposed germs that may preexist, or the preexisting monads and bacteria must be capable of resisting the influence of a moist temperature of 212 deg. F., or (2) else such organisms must be capable of being newly evolved out of organic solutions.

REPORT

ON

THE PREVENTABLE DISEASES OF THE INDUSTRIAL CLASSES.

XI.—UNVARYING WORK.

Modern Subdivision of Labour.—Automatic Work.—The Development of Suicide.—Drunkennes.—Monotonous Mental Work and Unvarying Bodily Work.—The Prevention of Mental Disease.

LIFE, to be enjoyable, must be associated with occasional change of action and of scene; for it to be enduring, there must be occasional change of action, or, in other words, alteration of habit, that there may also be alteration of thought. It is certain that long-continued monotony, whether it be of mental or physical work, or domestic habit, will produce serious derangements both of mind and of body.

Mr. Simon, in noticing the influence of certain occupations upon health, attributes much of their danger to the extreme subdivision of labour connected with the several branches of trade, so that often only one portion of a business is effected by a “hand” employed. It is, he declares, the use of men and women as mere machines, instead of intelligent beings, who can be taught to do more than one monotonous act, that has led to much of the evil existent in this class of hurtful occupations. In a remarkable article, entitled “Machinery and the Passions”, in the *Cornhill Magazine*, the writer speculates as to the influence of automatic work in subjugating the passions. “If the substitution of calculated mechanical forces for the fitful impulses of the unaided muscles, quiets the emotions”, says the author, “the way in which machinery fixes the processes and favours the division of labour, destroys its intellectual character. . . . Labour is becoming more and more mechanical, even where it is yet partly manual, and the intellect as well as the passions are kept in abeyance in modern toil. And it is not only that the action of the reasoning faculties is not needed, but the infinitesimal division of the process makes the use of the imagination almost impossible.”

Dr. Brierre de Boismont, who studied the subject of suicide very deeply and for many years, found that suicides are most numerous in those departments in which industrial progress is greatest. This conclusion appears to be confirmed by Dr. Farr, who briefly tells us that “in some indoor employments, where the conditions of health are disregarded, the tendency to suicide is developed.” The classes of workmen yielding the greatest number of lunatics and drunkards are those whose occupations compel the least amount of change of thought; of these occupations, the worst enforce torpidity of body with torpidity of mind. The “drinking bouts” of workmen are often the natural results of the monotony which their occupations compel them to endure. The large amount of suicide among soldiers on the home station, which attracted so much attention several years ago, was but an instance of the effects of monotony on the minds of men.

Now, unless men who are engaged day after day in unvarying work, in performing the same duty, in making the same article, or in attending to the same machine, have some means, when work is over, of refreshing their minds and their bodies, morbid thoughts will be generated, and bodily disease will ultimately occur. The craving for stimulants is often but the desire for the excitement that the drink produces—craving which men following trades in which there is more scope for thought and more freedom for body never experience.

Many instances of the baneful effects of unvarying work have come under our notice. We recall the case of a young man whose occupation was that of making the backs of pianos. He excelled in this, said his wife; but so much did he dislike the work from its “sameness”, that not only did he leave his workshop, but he could not by any persuasion, or by the pressure of want to himself, to his wife, and to his children, be induced even to go into the street where the workshop stood. He would wander away from home, and he was generally found in an exhausted state in some country district. “His work”, he said, “drove him from home”: it made him mad.

A tailor, aged 43, came to us because “he was troubled in his mind.” He was always at the same kind of work, and working *alone*.

A shoemaker, aged 42, came to us soon afterwards, “fearing that he should go mad.” He was very languid and despondent. He, too, was accustomed to do the same kind of work constantly, and to work *alone*.

A French polisher, aged 27, came because he had “bad thoughts”, and felt as if something were “going to happen.” He always did the same kind of work, and he disliked it.

A man, always engaged in grinding colours, and accustomed to work alone, was brought for feebleness of mind, which monotony had produced.

These few instances are sufficient to tell how unvarying work, by enforcing unvarying thought, will produce mental feebleness. "Playing always on the same string will spoil the best instrument" is a household truism, which the dull lives of these workers illustrate.

As the monotony of work makes the workman desponding, and oftentimes a drunkard or a self-destroyer, so the monotony of home-life often unbalances the minds of women, and produces that maniacal state, resulting from changeless home-duties, which makes mothers, when overwrought, not only lose their maternal instinct to protect their offspring, but creates a passionate desire within them to destroy their children and themselves. Such poor creatures commit terrible deeds during the flashes of madness which come over them—deeds of whose magnitude they only become conscious of when rest has restored the balance of their minds.

Instances of the injurious effects of monotonous mental work are to be found among successful actors, whose minds become so wearied when a play has too long a "run", that their memories become weak. Ill-health from this cause has compelled many an actor and actress to cease work until the wearied brain could be refreshed by change of scene producing change of thought. "A farce after the fiftieth night becomes a tragedy for me", said a popular comedian, whose health suffered much from his great professional success. The old system of cultivating the memory of a schoolboy, instead of developing and training his reason—a system which has blighted many a young mind, and converted many an imaginative boy into a dullard—is now happily passing away; and a better system is now becoming general in our English schools; so that, by the aid of lectures, of demonstrations, and of periodical written examinations, the mind of the boy is allowed to expand, instead of being treated as if it were but a sponge to sop up a given quantity of words without pondering on their meaning, and to give out the same words, when questioned; as a sponge, when squeezed, would give out unchanged the fluid which it had imbibed.

Of the effect of monotonous physical work in producing bodily disease, the shoemaker affords us an example. The contracted and concave front of his chest is the result of his unchanging habit of sitting in a bent posture when at work; and the stomach-diseases, from which so many of his craft suffer, result from direct external pressure over that organ—diseases which would be prevented if the ingeniously contrived upright bench were generally used by the trade. The aortic aneurism of hammermen are instances of the effect of unvarying and long-continued violent and unnatural exertion of a peculiar character in producing a local disease.

We have said sufficient, we trust, to indicate how needful change of action and of habit are for the preservation of health. That work now so subdivided will yet have more subdivisions as mechanical science progresses, and as our national industry increases, there can be little doubt; but that it would be to the interest both of masters and of men to institute reforms in the present system of too minutely subdivided labour there can be no question. Were men able to take a turn now at one branch of their trade, now at another, they would be more independent and more healthy; in dull times they could turn their hands to some kind of work even when their special handicraft work was not demanded; when jaded by the sameness of their specialty, other work would often save them from the sick list, or from temporary and compulsory idleness.

Outside the workshop much can be done to preserve health. The compensating power existing between mind and body—the power which preserves health to the student who, after work-hours, leaves his study and rows, or rides, or takes cricket-bat in hand; the power which makes the mason or the builder and other outdoor workers refreshed with a lounge in a reading-room, needs to be turned to far better account.

After work-hours, workmen need to be amused; many, especially those who lead sedentary lives, want health-giving excitement. In all their "clubs" there should be gymnasia as well as libraries, and rooms wherein cosy little parties can be often given; rooms to which workmen can take their wives, their daughters, and their sweethearts, where plans can be formed for Saturday trips and summer holidays, as well as for "rainy days" and sickly times; happy, glee-giving clubs, where cramped weariness can be shaken off the limbs, and dull thoughts swept out of the mind; clubs which, being not so much unlike real homes, would make everybody feel so much at home that enjoyment would be full and hearty, where every visitor would be refreshed in mind and body, and would leave behind him the clouds of weariness which monotonous work had cast around him during the day.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

1. *Paracentesis of the Chest.*—2. *Parisian Clinical Teaching in 1869-70.*—3. *Asylums of St. Anne, Ville-Evrard, and Vacluse.*

Paris, Monday, October 25th.

1. PARACENTESIS OF THE CHEST is much more frequently resorted to in France than in England. Considering its extreme simplicity, its absolute harmlessness in all cases, and—so far as I have seen—its rapidly curative results in curable cases, this diversity of national practice is not easily explained. Probably it may cease when the splendid clinical lectures on this subject by the late Dr. Trousseau become better known in England; which will ere long be the case, as they must appear within a few months, according to the New Sydenham Society's advertised course of publication. I refer to Lectures XXXII and XXXIII. According to Trousseau, the indication to operate is paramount, whenever it is ascertained by auscultation and percussion that there is a very large quantity of fluid in the pleura. To wait for dyspnoea and other urgent symptoms is, he says, to lose precious time, and to imperil the patient. In cases in which there are some quarts of fluid in the chest, even when there is not much oppression of breathing, the patient is in jeopardy, for there is danger of fatal syncope suddenly occurring at any moment; and, moreover, at the very best, in all such cases, the cure is tedious, and frequently impossible, without recourse to paracentesis.

An apt illustration of this important practical point is afforded by a case which I have been observing with extreme interest in the clinical wards of Professor Peter at La Pitié. I subjoin a brief outline of the principal facts of this case.

On October 5th, the patient to whom I refer, a drayman, aged 47, was admitted to Dr. Peter's wards. He stated that, about two months previously, he had been thoroughly drenched by rain, and had in consequence a feverish attack, accompanied by rheumatic pains and some oppression of the breathing. The acute symptoms soon subsided; but some oppression and a feeling of great debility continued gradually to increase, and ultimately obliged him to enter the hospital. For a month past he had been unable to lie on his right side. It is noteworthy, that his shortness of breath and debility were so little urgent that he continued, up to admission, to perform the work of a drayman, and walked from his home to La Pitié, a distance of nearly two miles. When examined on admission, it was found that there was absolute dulness of the whole of the right side of the chest. The liver was pushed out of its place, its inferior margin being as low down as the umbilicus. Throughout the whole of the superior and posterior third of the right side of the chest, there was an intense blowing sound, and also ægophony. Next morning, Dr. Peter operated; when he withdrew four and a half *litres* (nearly five quarts) of a clear sero-fibrinous fluid. The man coughed a little as the fluid flowed, as usually happens in such cases, from the lung expanding, and air entering the long untraversed bronchial passages and vesicles. I auscultated this man's chest twenty-four hours after the operation, and found everywhere a return of the respiratory sounds. The dulness was gone, except in one isolated and limited situation, where there was considerable dulness and a feeble breath-sound. This condition was dependent, no doubt, on a certain quantity of fluid remaining shut up in a pouch formed by false membrane. It continued up to the 16th without much change, and then began to subside, absorption having been induced by counterirritation. The cure has been complete. Two days after the operation, I found the man hearty and chatty, exceedingly grateful for the comfort he had derived from the operation. This man was scarcely at all confined to bed; his pulse was never above 80; and, after being relieved from the fluid, his strength increased rapidly under liberal diet.

Since Dr. Peter took charge of the medical clinic at La Pitié, on the 1st of January of the current year, up to this date, he tells me that he has performed paracentesis of the chest in nine other hospital cases. From the official records I have derived (with permission) the following particulars. The last four cases on the list came under my own observation.

1. January. *Diagnosis:* Pleurisy of right side, consecutive to pulmonary apoplexy. Organic disease of the heart.—*Result:* Death.—The fatal result, retarded by the operation, followed a succession of morbid symptoms caused by the cardiac disease.

2. February. *Diagnosis*: Tubercular pleurisy of right side.—*Result*: Death.—Relief followed the operation; and death took place five months afterwards, from the progress of the pulmonary phthisis.

3. March. *Diagnosis*: Chronic pleurisy of the left side.—*Result*: Cure.

4. April. *Diagnosis*: Acute pleurisy of the left side.—*Result*: Cure.

5. May. *Diagnosis*: Acute pleurisy of the right side.—*Result*: Cure.

6. May. *Diagnosis*: Scarlatinous empyema of the left side. Pericarditis.—*Result*: Amelioration.—In this case, there was a fresh attack of pleurisy; and at the same time phenomena depending on pulmonary tuberculosis.

7. June. *Diagnosis*: Acute pleurisy of the left side.—*Result*: Cure.

8. July. *Diagnosis*: Acute pleurisy of the left side.—*Result*: Cure.

9. July. *Diagnosis*: Pleurisy of the right side in an individual in whose family phthisis is hereditary.—*Result*: Cure.

10. October. *Diagnosis*: Particulars given above.—*Result*: Cure.

It appears, then, that, taking into account all the hospital cases, ten in number, in which paracentesis of the chest has been performed by Dr. Peter since he took charge of the clinical wards of La Pitié in January last, the results have been most satisfactory—as satisfactory as those recorded by Trousseau. In fact, the results obtained were as good as it was possible to expect. The cure was complete in seven cases; in one case, complicated with scarlatina and tubercular disease, there was amelioration; and, in the two cases in which death occurred, the operation prolonged life, and afforded great relief; the fatal issue being ultimately caused by the primitive protopathic disease, of which the pleurisy was an epiphenomenon.

2. *Parisian Clinical Teaching in 1869-70*.—There are four Professors of *Clinical Medicine* in the Medical Faculty of Paris, two of whom, it appears by the official programme, are to teach by deputy during the ensuing session. The class of Professor Bouilland at La Charité will be taken by M. Proust, *agrégé*. Another class will be taught at La Charité, by Professor G. Sée. Professor Béhier will lecture at the Hôtel-Dieu; and at La Pitié, where the chair is vacant, Professor Peter, *agrégé*, will be replaced in temporary duty by Professor M. Ball, *agrégé*.—*Clinical Surgery* will be taught at the Hôtel-Dieu by Professor Langier; at La Charité, by Professor Gosselin; at La Pitié, by Professor Broca; and at the Hôpital des Cliniques, by Professor Richet.—Professor Depaul will teach *Clinical Midwifery* at the Hôpital des Cliniques.—The only *Cours Clinique Complémentaire* announced this session in the official programme is a course on the Diseases of Children at the Hôpital des Enfants Malades (rue des Sèvres), by Dr. Henri Roger. The clinical instruction in Medicine and Surgery will, as usual, be given every morning for about two hours by remarks and demonstrations at the bedside, and three days a week by a more formal lecture immediately after the visit. The lectures of Dr. Roger are to be given on Saturdays at half-past 8 A.M.

3. *Asylums of Sainte-Anne, Ville-Evrard, and Vacluse*.—In concluding a few remarks on the new lunacy system of the department of the Seine (JOURNAL, Oct. 9th, p. 405), I mentioned that there were some noteworthy points connected with the asylums of Saint-Anne, Ville-Evrard, and Vacluse, which remained to be stated. I would now say first of all in respect to these institutions, that they are very magnificent, very complete, and very much calculated to excite admiration, but that their enormous cost precludes them from being offered as models for adoption at home. Still, in plan, construction, and furniture, they are suggestive of attainable and needed improvements, and ought to be visited by all interested in the cure and care of the insane. Let all who go and admire, bear in mind, however, the pecuniary cost of what they see. Using round numbers, but keeping close to the totals derived from the figures in the budgets of the Seine, it may be stated that, in the three asylums and Bureau Central, accommodation has been provided for 1,850 patients, at a cost of £880,000, which is at the enormous rate of £475 per patient! Considering that all of these patients are lodged and kept at the public cost—considering, moreover, that the vast majority of them are victims of intemperance and vice—a large percentage worse than hopelessly useless to society, the very scum of Parisian badness—it seems odd to see them lodged in palaces, surrounded with solid comforts, and luxuries far beyond those enjoyed in the homes even of the well-to-do middle classes. Explain it how we may, it is a fact that, up to this time, there has been a lavish expenditure of money going on in the department of the Seine which no one has had the courage or the power to arrest. In respect of asylums, there is certainly now the appearance of a halt; for of the twelve contemplated, only three have been built, and it is said that one more is all that is now thought of. The new Hotel-Dieu is another example of reckless public expenditure in building and demolishing.

There are a few special arrangements in each of the asylums of which

I am now speaking; but, for general purposes of description, one account will pretty well apply to the three. They consist of detached blocks of building—pavilions, as they are called. The pavilions communicate with one another by roofed passages, open at the sides. On one side are five pavilions for the male, and on the other side five pavilions for the female, patients. Between the two ranges of pavilions—that is to say, in the axis of the group of constructions—are the buildings for general purposes—the water reservoir, the wash-houses, the dead-house, the church, the kitchen, the pharmaceutical department, the linen-room, the business offices, and the dwellings of the physicians and all other persons employed in the establishment. The principal entrance, and the staircase of each pavilion, are in its centre. Each pavilion consists of two storeys, and contains fifty beds. On one side, on the ground-floor, is the day-room, and adjoining it is the refectory; on the other side is a dormitory, with, at its extremity, a lavatory and a room for the attendants. Thus, three-fourths of each pavilion serve for sleeping accommodation, and one-fourth for day use. There are no passages nor corridors; the rooms extend from wall to wall; the beds are placed in couples between the windows. The ventilation is excellent, and very simply provided for. The fittings and furniture are of oak, and of the most beautiful workmanship. There are no benches; each patient has his or her chair. The dinner-tables are not covered with tablecloths, but are, in all other respects, set out with great comfort and completeness, for groups of eight or twelve. Earthenware plates, knives and forks, crystal decanters, tumblers, and salt-cellars, are there, and neatly arranged. At Sainte-Anne's, the tops of the dining-tables and wash-stands are of marble. The arrangements for ablution, irrespective of the baths, are perfect; bidets are provided for the women in private closets.

The great defect in these asylums is the very small number of separate rooms. The separation of the noisy from the other patients at night is thus rendered impossible. At Vacluse, there are only three single rooms for male, and the same number for female, patients; and these are intended not for the merely noisy and restless at night, but only for those whom it is absolutely necessary to seclude. The very nature of the accommodation in these asylums shows that the old system of restraint has been abandoned. As a set-off against the chance of sleep being lost from noisy neighbours, luxuriously comfortable beds, with springs of galvanised iron, are provided—beds to which I would particularly draw attention, as suitable to all who require the aid of a comfortable couch to insure a good night's repose. This is no light matter for physicians to attend to, inasmuch as sound sleep is an essential condition of recovery in many mixed disorders of mind and body. While some of the beds to which I refer are only specially applicable to asylums and certain classes of patients, there are others well suited for general hospitals and private families. The wholesale prices at the manufactory range from 85 francs to 105 francs. The maker is Sibillat, 7 bis, Boulevard Bonne Nouvelle; his manufactory is at 22, rue des Boulangers, Saint-Victor, Paris.

The laboratory appliances for clinical research are very complete. It will be long ere the physicians of our English asylums have such facilities for making elaborate pathological investigation as those which are afforded at Sainte-Anne's. As yet, however, neither the physicians of Saint-Anne's, nor of the other new asylums, have begun to give clinical instruction. The very valuable clinical lectures of Dr. Magnan, to which I formerly referred, are delivered at the *Bureau Central d'Examen*, which adjoins, but is a distinct institution from, Sainte-Anne's Asylum.

At Sainte-Anne's there is an out-patient department. Advice and medicine are given gratuitously at a stated morning hour, to such patients as do not require removal to an asylum. I am told that this new feature in Parisian lunacy arrangements is a great boon to many families who are willing, under medical advice, to take care of their insane relatives at home. The expense saved to the public by this plan will, I am told, ultimately prove considerable, as it will enable many lunatics to be treated and cared for at home who are now a burden to the tax-payers.

The three asylums have extensive gardens and airing-courts, both covered and open. The asylum at Vacluse has a fine farm attached to it, which affords useful occupation to the patients. I may add, that the situation of Vacluse is very beautiful; the views of the surrounding country, from the terraces and windows, are varied and magnificent. The charms of the landscape, the occupations, comforts, and elegancies of life, there presented to patients, combined with the kindness and skill so apparent in Dr. Billod, the physician and general director of the establishment, made me feel that to be confined by his keys could hardly be looked on as an afflicting dispensation by anybody, while to an invalid to whom unfettered liberty of action is not an object of desire, Vacluse must be, indeed, "an elysium on earth."

ASSOCIATION INTELLIGENCE.

SHROPSHIRE ETHICAL BRANCH: ANNUAL MEETING.

THE Annual Meeting of the Shropshire Ethical Branch was held at the Lion Hotel, Shrewsbury, on Wednesday, October 6th, at 2 P.M. Considerable regret having been expressed at the unavoidable absence (from severe indisposition) of their much esteemed retiring President, W. J. CLEMENT, Esq., M.P., who would otherwise have inducted the President-Elect, Dr. ROE took the chair, and delivered an able and interesting address.

The Meeting was attended by an unusually large number of country practitioners, to take part in the debate on the proposed 'resolutions on Sick Club remuneration,' and 'Recommendations to Club Surgeons'—a copy of which had been previously submitted by Dr. Styrap for the consideration of every legally qualified practitioner in the county. After an animated and prolonged discussion, the following resolutions were passed unanimously—with a hearty vote of thanks to Dr. Styrap for the time and labour he had so disinterestedly devoted, at much personal inconvenience, to the subject of Sick Club Remuneration.

Vote of Thanks.—"That the cordial thanks of the Meeting be given to the late President, Vice-Presidents, Council, and Honorary Secretaries for their valuable services during the past year."

Election of Officers.—"That Alfred Mathias, Esq., be elected President, and A. G. Brookes, Esq., Vice-President, and the following gentlemen Members of the Council for the ensuing year, in the place of those who retire by rotation or otherwise:—W. J. Clement, Esq., M.P., J. W. Roe, Esq., M.D., A. Mathias, Esq., Dr. Jukes Styrap, and Richard Wilding, Esq."

Representation of Branch in General Council.—"That, in accordance with the 8th General Law of the British Medical Association, J. W. Roe, Esq., M.D., Alfred Mathias, Esq., and A. G. Brookes, Esq., be the Representatives of the Branch in the General Council, for the ensuing year."

Resolutions on Sick Club Remuneration, and Recommendations to Club Surgeons.—"That, the following 'Resolutions' which have been submitted to (and cordially assented to by upwards of one hundred of) the legally qualified medical practitioners in the county of Salop, and the districts adjoining, be approved and adopted; and that Dr. Styrap be requested to transmit a copy of the same, with an explanatory Address, to the President or Secretary of every known club in the county and districts alluded to, unless otherwise specially desired by the respective medical officers."

"*Resolutions.*—1. The undersigned legally qualified Members of the Medical Profession practising in the county of Salop, and the districts adjoining, hereby declare their cordial assent to the principle laid down in the report unanimously approved by the Birmingham and Midland Counties Branch of the British Medical Association, in December, 1867:—viz., that 5s. (a fraction less than a penny farthing per week) per member per annum should be the minimum payment received by the Medical Officers of Sick Assurance Societies.

"2. They severally pledge themselves not to accept any new appointments as Surgeons to a Club for less than the aforementioned sum, except in the case of agricultural and other labourers earning not more than 12s. a week—for whom the minimum shall be 4s.; (a fraction less than a penny per week) and bind themselves, moreover, from the date hereof, not to become candidates for, or allow themselves to be elected to, the office of Surgeon to any Club or Society that may become vacant by the resignation or dismissal of the Medical Officer on the question of the remuneration at the above rate.

"N.B.—The preceding Resolution neither implies resignation of any Club at present held for a less sum than 5s. per member, nor necessitates an application for increased pay—but refers simply to future appointments.

"3. That a fee of (not exceeding) Half-a-crown shall be charged for examining every new member of a Club.

"*Recommendations to Club Surgeons.*—1. That Surgeons to Clubs do decline to admit, as members entitled to medical attendance, any one whose wages, salary, or income, exceed thirty-five shillings a week.

"2. That the several Clubs be urged to provide their respective Medical Officers with simple, printed forms of 'Sick Certificate,' &c.

"3. That the fee for each 'Certificate of Sickness' (excepting that to be given at the commencement and termination of the illness,) be Sixpence, if on a printed form—and One Shilling, if written.

"4. That professional attendance upon Members of Clubs (at the current annual pay,) be limited to a three-mile radius from the residence of the Medical Officer; and any excess of that distance be paid for at such rate of mileage as may be mutually agreed on between him and the Club.

"5. That the practice or system, which more or less prevails in various Clubs, of recouping from the Medical Officer a portion of his hard-earned Salary, under the name of a Donation or Subscription to the 'Sick Fund,' be resisted.

"N.B.—The customary Annual Subscription constituting an Honorary Member is not that to which the above Resolution refers."

Thanks to the President.—"That the best thanks of the Meeting be given to the President, J. W. Roe, Esq., M.D., for his interesting Address, and for the courteous ability with which he has conducted the important business of the Meeting."

An interesting case of Cancer of the Pharynx extending to the Epiglottis was communicated by Dr. Andrew, and illustrated by a preparation of the morbid growth.

Several new members joined the Branch.

In consequence of the prolonged discussion on the Resolutions, etc., relating to Sick Club Remuneration, the consideration of the question of Medical Charges was unavoidably postponed, to be resumed at a Special Meeting.

At 4 P.M., twenty-five gentlemen sat down to a most excellent dinner (from which several of the country members, present at the Meeting, were reluctantly compelled to absent themselves, in consequence of pressing professional duties) under the Presidency of Dr. Roe, the Vice-Chair being filled by A. G. Brookes, Esq. The party separated after spending a most enjoyable evening, the pleasures of which were materially enhanced by excellent selections of music, vocal and instrumental, under the leadership of Mr. Brannin. As was well remarked by an old Associate, a more agreeable and successful reunion could not well have been. In addition to the customary toasts, that of the health of Lord Berwick, with thanks for his present of a splendid haunch of venison—was received with every mark of respect.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT SOCIETY.

A MEETING of this Society was held on Thursday, October 7th, at the White Hart Hotel, Reigate. G. STILWELL, Esq., of Epsom, presided; and twelve gentlemen, members and visitors, were present.

Papers, etc.—1. Mr. T. HUNT read a paper on some Forms of Skin Diseases. Mr. Hunt gave his experience of the treatment of many of these diseases; and concluded by some remarks on ringworm, which raised considerable discussion as to the relation of the parasite to that disease, whether as cause or effect.

2. Mr. LANGTON read a paper on Irreducible Hernia, giving a detailed account of the method of treatment pursued by Mr. Kingdon and himself at the Truss Society, and exhibiting the form of truss required for these cases.

3. Dr. LANCHESTER exhibited a specimen of Aneurism of the Descending Aorta which had burst into the œsophagus.

4. Mr. HODGSON exhibited different forms of Uterine Speculum.

The Dinner took place at 6 P.M., and was attended by twelve gentlemen.

CUMBERLAND AND WESTMORLAND BRANCH: AUTUMNAL MEETING.

THE autumnal meeting of this Branch was held at the Globe Hotel, Cockermouth, on Wednesday, 13th of October; M. W. TAYLOR, M.D., President, in the Chair. There were about twenty members present. The minutes of the preceding meeting were read and agreed to.

Committee on Clubs and Benefit Societies.—The PRESIDENT read a draft copy of a circular which he proposed should be sent to all medical officers of sick clubs and benefit societies in the two counties. This proposition, after some discussion, was agreed to.

Medical Acts Amendment Bill.—A letter on this subject, from Dr. Green of Kendal, was read, and led to some discussion.

New Members.—Henry Miller, M.B. Edin., C.M., of Aspatria, was elected a member of the Association and Branch. A. Harwood, Esq., M.R.C.S. Eng., of Cleator, and G. Shannon, M.D., of Wigton, were elected members of the Branch.

Papers, etc.—Dr. WALKER (Carlisle) read a paper on a case of Parasitic Disease produced by the Larva of the *Cæstrus Bovis*.

Dr. KNIGHT (Keswick) read the notes of a case of Locomotor Ataxy.

Dr. FOTHERGILL (Morland) read a paper on the Present Aspect of Medicine, considered socially.

Dr. CAMPBELL (Garlands, Carlisle) read a clinical report of three cases of Perityphlitic Abscess.

Dr. JONES (Aspatria) showed a Public Vaccinator's Lymph-Register, and related a case of Injury to both Legs.

Dr. DICKSON (Whitehaven) related some cases illustrative of the Carbolic Acid Treatment.

Dr. H. BARNES (Carlisle) exhibited Dr. Richardson's Apparatus for Restoring Suspended Animation.

There was a large collection of Surgical Instruments, sent for exhibition by Mr. Young of Edinburgh; and a number of Microscopical Specimens, prepared and exhibited by Dr. Dodgson and Mr. Fleming of Cockermouth.

At the conclusion of the meeting, the members availed themselves of the opportunity of visiting the ruins of Cockermouth Castle and other places of interest in the neighbourhood. They met again in the evening for dinner; the President occupying the Chair, and Dr. T'Anson of Whitehaven the Vice-chair.

WEST SOMERSET BRANCH: AUTUMNAL MEETING.

THE autumnal meeting of this Branch was held at the Royal Clarence Hotel, Bridgewater, on Thursday, October 20th, at 5 P.M. H. J. ALFORD, M.B., President, occupied the Chair; and thirteen members were present.

New Member.—Mr. Thomas Clark of Dunster, already a member of the Association, was elected a member of the Branch.

The SECRETARY stated the results of the special notice he was instructed to append to the circular giving notice of this meeting. Of the forty-nine members of the Branch, eleven did not forward replies as requested. He produced letters from Mr. Martin, Mr. Salter, and Mr. Collyns, on the subject. It was resolved, "That the verbal alteration suggested by Mr. Collyns be adopted in the next circular."

Next Annual Meeting.—Mr. CORNWALL (President-elect) and Dr. KELLY (Honorary Secretary) reported that, pursuant to the resolution passed on July 1st, they had communicated with the Somerset Central Medical Society; and that the said Society would be happy to join in a combined annual meeting next year; but they wished this Branch to fix the place of meeting.

It was proposed by Mr. ALFORD, senior, seconded by Mr. RAN-DOLPH, and resolved—"That the next annual meeting be held at Weston-super-Mare; and that the Council be requested to make such arrangements, in concert with the Central Somerset Medical Society, as may be deemed necessary for ensuring a successful result."

Communications.—Dr. CORDWENT exhibited the model of an ingenious Splint-Apparatus (constructed under his directions), applicable to fractures, etc., of the thigh and leg, which combined perfect extending powers with great facilities for dressing wounds. He related the advantageous use he had made of it in various cases.

Mr. H. J. ALFORD read a case of Stone in the Bladder, and exhibited a preparation of the same.

from a female who had suffered from repeated and intermittent attacks of hæmaturia up to six months ago: she died, ultimately, of strangulated hernia and peritonitis. There was nothing microscopically diagnostic during life in the urine. The pelvis of the kidney was much dilated; and a large villous mass, with other smaller ones, hung from its lining membrane in a fluid composed of nucleated cells and granular masses. The vessels of the kidney were very large; the bladder was healthy.—Mr. DE MORGAN remarked that the cells were similar to those exuded from cancer. He also referred, for Dr. Murchison, to an example in a man who had lately been admitted into the Middlesex Hospital, and who died of villous disease of the kidney, ureter, and bladder—incipient in the former two situations. The interest of the case, however, was in the extreme urgency of the early symptoms of the disease in the kidney; for the patient, who was never free from bladder-symptoms, was seized with urgent renal symptoms, and died in a week.

Mr. HOLMES showed the Os Calcis from a young woman. He had gouged out part of the bone for disease, but was ultimately obliged to remove the whole bone. Cases of this kind were frequent. The disease was generally limited to one bone—not commencing in the articular surfaces, and not occurring in tubercular subjects, as was usually believed. The cases were, therefore, suitable for excision. In answer to Mr. Nunn, he said that the tendo Achillis usually became united to the cicatrix, and performed its function partially at least.—Mr. W. ADAMS thought that these cases were not cases of caries, but of primary necrosis.—Mr. DE MORGAN approved of gouging, and also of injecting potassa cum calce into the bone.

Mr. ADAMS showed an Unreduced Dislocation of the Head of the Femur upon the spine of the ilium from a man aged 29. The capsular ligament was lacerated, and the quadratus and obturator muscles were torn across. The patient died in nine days, and pus was found around the dislocation.

Mr. GAY brought forward the Bones of the Fore-arm from a man who had received a gunshot wound in the hand. Myelitis had afterwards set in, and the bones of the carpus, metacarpus, and phalanges, were in some parts very much disintegrated.

Dr. TILBURY FOX exhibited a good specimen of Fungous Foot of India, sent by Dr. Shortt of Madras. He requested that a committee should be appointed to examine the case. Dr. Moxon and Mr. Hogg were appointed.

Mr. HOGG showed an Encysted Orbital Tumour of the size of a hen's egg, of several years' growth, which had pushed the eye aside, and which he had successfully removed. The cyst was composed of dilated vessels, cellular tissue, and epithelium.

Mr. HOGG also exhibited a Horny Growth an inch long, which he had removed from the upper eyelid of a male patient.

Dr. DOUGLAS POWELL brought forward a case of Lympho-Sarcoma of the Anterior Mediastinum, which had involved the pleura and the lungs by continuity. A few cervical glands were affected. Microscopically, the structure consisted of cells imbedded in a stroma of articulated fibres. There was slight hoarseness.—Mr. CHRISTOPHER HEATH remarked that Mr. Turner of Edinburgh had pointed out that there was a plexus of vessels at the entrance to both the anterior and the posterior mediastina, and that their presence was likely to encourage the growth of tumours in those localities. Referred to the committee.

Mr. POLLOCK brought forward a Myeloid Tumour of the Head of the Tibia from a child 15 years old. It was exceedingly vascular. There were no enlarged glands.

Mr. GAY showed specimens of Dry Gangrene of the Extremities of the Hands from a very weak lady, aged 36. It had come on after enteric fever. The toes and nose were also affected, but she recovered. The phalanges and some of the metacarpal bones were affected. The line of demarcation took place where the bone ceased to be affected.

Dr. ROBINSON showed a case of what he believed to be Syphilitic Cirrhosis of the Liver from a soldier, not of intemperate, but otherwise of dissipated, habits, who, in 1867, had an indurated chancre, and another in August of this year. Ascites and hydrothorax followed. He never suffered from secondaries. The liver was lobulated, with fibroid deposit. Referred to Dr. Murchison and Mr. De Morgan.

REPORTS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, OCT. 19TH, 1869.

RICHARD QUAIN, M.D., President, in the Chair.

Dr. MORELL MACKENZIE exhibited a Larynx and Pharynx, in which a piece of cotton-wool was impacted. It had been swallowed by a patient, suicidally or in delirium, and had blocked up the orifice of the larynx, producing suffocation.

Dr. PEACOCK exhibited two cases of Malformation of the Heart. In the first, from a boy aged 8, who had characteristic symptoms during life, and had died suddenly, the aorta arose from both ventricles, the foramen ovale was open, and there was contraction of the pulmonary artery from adhesion of the valves. The heart weighed 10½ ounces, and was very broad; the septum of the ventricles was deficient. In the second case, from a cyanotic child, 2½ years old, there were the same conditions, except that the foramen ovale was closed. The cases afforded examples of the most common form of serious congenital defect, but the first was remarkable from the comparatively advanced age which the patient attained.

Mr. ROBERTS showed a specimen of Villous Disease of the Kidney,

METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

SATURDAY, OCTOBER 16TH, 1869.

ROBERT DRUITT, M.R.C.P., President, in the Chair.

THE first evening meeting of the session was at the rooms of the Scottish Corporation.

A Practical or Natural History View of Intemperance: its Causes

and Consequences. By R. DRUITT, M.R.C.P. He began by adverting to the acknowledged hopelessness of religious and moral exhortations in deterring confirmed drunkards. He objected to the rhetorical statements that intemperance was the cause of half the crime, two-thirds the insanity that exist, and so forth, as being exaggerated and mischievous; for they leave out of account the persons who take to drink as a consequence of crime, or of a half-insane state of mind. He spoke with great respect of teetotalism, as being the discipline for inveterate drinkers; but said it was better to have a state of entire freedom both from a degrading vice and from a pledge never to use fermented beverages in moderation. The notions of extinguishing the sale and production of fermented liquors altogether were insane. Failing these methods, the only plan was to study intemperance on the true natural history method; to collect all the facts as to its origin and phenomena; and see how they follow one another, and how each is to be met. Man's life was perpetuated by his food; and food produced not only heat and muscular force, but thought, and, beyond this, *happy thought*. All food produced this in various degrees: of those articles called stimulants, alcohol was the chief. The use of alcohol in emergencies was immense, and its use led but too easily to its abuse. Of those who abuse it, some seek in it a remedy for pain, melancholy, and despondency; others use it as a means of stimulation to produce the effects that ought to be got from wholesome food, air, exercise, and amusement. The first class were generally secret drinkers, a majority women. The second class were open, riotous, gregarious drinkers, who boasted of their bibosity, and considered conviviality the one secret of happiness. The effects of alcohol on the systems of both were the same in time, and medicine could do much to help the reformation in the last case; but when legislation for dipsomaniacs is talked of, it is essential to bear in mind the differences between the first class, who are mainly invalids, and the last, who are mainly criminals. The author then went on to enumerate the various morbid conditions which led to secret drinking, and the morbid sensations complained of, and showed how hardly these bore upon women of middle life. As to the relations of insanity to drunkenness, he expressed his belief that the true statement was, not that drunkards go mad, but that half-mad people take to drink. He quoted instances of families with congenitally imperfect nervous systems, father epileptic, children eccentric, or suicidal, or gamblers, most of them remarkable for voracious appetites, and the immense quantity of urea excreted. Some of them drank as well; but the tendency to drink arose from the same cause as the tendency to bet—the craving of an ill-organised brain for excitement. With regard to the dipsomania so called, it was a question how far the condition which led to it was entitled to be called mania; but he believed that some women who had a dipsomania indulged in a kleptomania to enable them to pay for their brandy. The open riotous drinkers' existence was a sign of social maladministration; leisure was found for persons on Saturdays and Sundays who had no rational mode of employing that leisure. How much could be done to diminish gregarious drinking was shown by the improved state of the upper classes in Scotland, England, and France during the last 150 years. The author wound up with the following conclusions: 1. The secret drinkers, for the most part, may be restored by kind medical treatment. 2. Public drinking can only be put down by improved public opinion, education, and circumstances. 3. Every possible restriction should be put upon the sale of spirits, especially on Sundays, and power should be given to the ratepayers to veto the establishment or licensing of public-houses. 4. Habitual drunkards should be encouraged to become teetotallers. 5. The teetotal system operates beneficially, not by the pledge, which is often broken, but by the system of lectures and other means of moral and theological excitement. 6. It were wise policy to provide rational amusement and wholesome refreshment at cost price for the masses. 7. Open drunkards should be punished. 8. Drunkenness, together with the lesser forms of insanity, extravagance, gambling, betting, violence of temper, and other ruinous indulgences should be subject to a Court of Chancery (?) at the instance of the persons on whom the care and maintenance of such drunkard, gambler, etc., would fall in the event of ruin. 9. Houses in which drunkenness is permitted should be shut up. 10. The common education of all classes is defective in moral teaching, and in training in the practice of abstinence.

THE ROYAL MARINE INFIRMARY, Woolwich, which has remained empty since the "disestablishment" of the Woolwich Division of the Royal Marines, is being prepared for occupation.

ANTIDOTE FOR NICOTINE.—M. Armand has discovered that water-cress contains principles which neutralise the poisonous effects of nicotine, but which do not destroy the aroma of the tobacco.—*Chem. News.*

THE POOR-LAW MEDICAL SERVICE OF GREAT BRITAIN AND IRELAND.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

A QUARTERLY MEETING of the Association was held on Monday last, October 27th, at the Freemasons' Tavern. After a report had been read by Dr. Dudfield, the secretary, the President, Dr. Joseph Rogers, delivered an address of considerable length, and entering into some detail, on the practical working of the dispensary system of Poor-law medical relief in Ireland. Dr. Rogers had, quite lately, visited and carefully inspected several of these dispensaries in various parts of Ireland, both in country districts and in the large towns, and had collected a great deal of evidence bearing on the several aspects of this question. With reference to the first and very important point of *expense*, it was shown clearly that in several Irish districts the expenditure was very much less than in unions of the same, or about the same, population in England, where the dispensary system does not prevail. It was stated that the medical treatment is more efficiently carried out in Ireland than in England, and that the dispensary accommodation will bear comparison with that of the best managed hospital out-patient departments. The relations between the medical officers and the guardians were stated to be the most friendly, and there seemed to be none of the obstructiveness to medical officers' wishes which is so prominent a feature in our own Poor-law medical administration.

Dr. Rogers considered that the dispensary system had a beneficial effect on the paupers; they paid more respect to the paid medical officers of Ireland than our own paupers did to English poor-law doctors, who do, in fact, often work gratuitously. A long table was given, comparing the "total Poor-law expenditure including medical relief" in unions where the drugs were and where they were not provided by the guardians; the contrast was most strikingly in favour of the unions in which the drugs were paid for by the guardians, *i. e.* on the dispensary system. The meeting was ably addressed by several Poor-law Medical Officers of London, and from various country districts, and by several guardians, including the Rev. Charles Kitto, of St. Matthias, Poplar. Mr. Torrens, M.P. for Finsbury, also made an able and pointed speech. The speakers one and all advocated the dispensary system of Poor-law relief on the various grounds of economy, humanity to the pauper, and justice to the medical man; the strong point being that the most economical method of dealing with sick paupers must be the one which makes them soonest well, and is therefore the most humane system. Some medical officers from country districts, while upholding the general applicability of the system advocated by Dr. Rogers, pointed out that there might in many cases be practical difficulties in the working of this plan in large districts where the villages are widely placed. Several gentlemen commented strongly on the abuse of charitable medical advice, which they believe to be produced by the indiscriminate supply of medical advice to paupers. It is hoped that, when the cost of medicine is borne by the guardians, they will be as cautious in recommending patients for medicine as they now are in supplying them with relief in the shape of food.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

EXAMINERS.—At a congregation held on October 14th, the following gentlemen were appointed Examiners for Medical and Surgical Degrees during the present academical year. *First M.B. Examination:* J. B. Bradbury, M.B.; and T. W. Danby, M.A. *Second M.B. Examination:* The Regius Professor of Physic; Dr. Drosier; and Dr. Liveing. *Third M.B. Examination:* The Regius Professor of Physic; Dr. Paget; and Dr. A. W. Barclay. *Examination for the Degree of M.C.:* The Professor of Anatomy; C. Brooke, M.A.; and W. S. Savory, F.R.S. Dr. Paget was also appointed Assessor to the Regius Professor of Physic.

MICROSCOPICAL DEMONSTRATIONS.—The Professor of Anatomy gives notice that the Microscopical Demonstrations will be given, as in former years, in the old Anatomical Museum, on alternate Mondays, at 6 p.m., commencing on Monday next.—Also, that, with the aid of Mr. Garrod of St. John's College, practical instruction in Minute Anatomy will be given in the Anatomical Schools every Saturday at 12 o'clock, commencing on Saturday (this day). These courses are open without fee to Students of Anatomy and Zoology.

MEDICAL NEWS.

PROVINCIAL MEDICAL STUDENTS.

THE annual return of the number of gentlemen pursuing their professional studies at the provincial medical schools, has just been made to Dr. Cursham, the Government inspector of schools. The total number amounts to 330, being an increase of 46 over the number of last year, and within 3 of the number registered in 1860, when there was a rush to escape the operations of the new regulations. The great increase in the number of provincial students this session is the more remarkable as one school, the Hull and East Riding School of Medicine, is closed. The return from the Cambridge University School has also not yet been received; this will slightly augment the gross number. The following are, in order, the number of students in the several schools:

1. Birmingham Queen's College.....	96	Dissecting Students.
2. Manchester Royal School of Medicine...	86	"
3. Liverpool Infirmary School of Medicine.	40	"
4. Leeds School of Medicine	38	"
5. Newcastle-upon-Tyne College of Med....	29	"
6. Bristol Medical School.....	26	"
7. Sheffield Medical Institution	15	"

Total.....330 "

The following table shows the number of entries since 1860:

1860. There were	333	1865. There were	249
1861. "	258	1866. "	258
1862. "	248	1867. "	257
1863. "	214	1868. (a.) "	284
1864. "	247	1869. (b.) "	330

It therefore appears that, like the metropolitan schools (where the gross number is now 1,237), those in the provinces are steadily increasing. The total number of metropolitan and provincial students amounts to 1,567.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, October 21st, 1869.

Collins, Edward Lorton, Canterbury
Hiron, John Hickman, Studley, Warwickshire
Rosser, Walter, Risca, Newport, Monmouthshire
Smith, George, Newcastle-upon-Tyne

The following gentleman also on the same day passed his first professional examination.

Lang, J. A. T., London Hospital
Osborn, Samuel, St. Thomas's Hospital

MEDICAL VACANCIES.

THE following vacancies are declared:—

BAILIEBOROUGH UNION, co. Cavan—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Termon Dispensary District: election, 3rd Nov.
BANBURY UNION, Oxfordshire—Medical Officer and Public Vaccinator for the Middleton Cheney District: applications, 10th Nov.; election, 11th Nov.
CHELSEA, BROMPTON, and BELGRAVE DISPENSARY, Sloane Square—Physician.
COLERAINE UNION, co. Londonderry—Medical Officer for the Articlave Dispensary District: applications, 1st Nov.
COVENTRY AND WARWICKSHIRE HOSPITAL—House-Surgeon: applications, 5th Nov.; vacancy, 30th Nov.
EAST CORNWALL HOSPITAL AND DISPENSARY, Bodmin—Surgeon to the Dispensary.
EAST PRESTON UNION, Sussex—Medical Officers for Districts No. 1, 2 A, 2 B, 3, and 4 (the Workhouse): applications, November 6th.
EDENDERRY UNION, King's co.—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Rathangan Dispensary District: applications, 6th Nov.; election, 8th Nov.
HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton—Assistant-Physician; Resident Clinical Assistant.
HUDDESFIELD AND UPPER AGBRIGG INFIRMARY—Surgeon.
LIMERICK UNION—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Annacotty Dispensary District: election, 9th Nov.
LINCOLN COUNTY HOSPITAL—Physician: applications, 20th Nov.; election, 22nd Nov.
NORTH WITCHFORD UNION, Cambridgeshire—Medical Officer for District No. 3: applications, 2nd Nov.; election, 3rd Nov.

(a.) In this year the Cambridge University School first appeared in the returns.
(b.) In this year one school disappeared, the Hull and East Riding.

OLDCASTLE UNION, co. Meath—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Ballyjamesduff Dispensary District: applications, 1st Nov.; election, 2nd Nov.
PETERBOROUGH INFIRMARY AND DISPENSARY AND FEVER HOSPITAL—Dispenser: election, 5th Nov.
ROYAL ALBERT HOSPITAL, Devonport—Resident Medical Officer: applications, 3rd Nov.
ROYAL KENT DISPENSARY, Greenwich—Resident Medical Officer: applications, 6th Nov.; election, 19th Nov.
ST. ALBANS GAOL—Surgeon.
ST. MARY'S HOSPITAL, Paddington—Assistant Dispenser.
ST. PATRICK'S COLLEGE, Maynooth—Resident Medical Attendant.
SHOREDITCH UNION—Medical Officer for the Holywell and Moorfields District.
SIR PATRICK DUN'S HOSPITAL, Dublin—Surgeon.
STOURBRIDGE DISPENSARY—House-Surgeon and Secretary: applications, 11th Nov.; election, 23rd Nov.
SUSSEX COUNTY HOSPITAL, Brighton—House-Surgeon: applications, 3rd November; election, 24th November. Dispenser: applications, 15th Nov.; election, 22nd Nov.
SWANSEA INFIRMARY—House-Surgeon: applications, 24th Nov.; election, 1st Dec.
TEIGNMOUTH, DAWLISH, and NEWTON INFIRMARY—House-Surgeon: applications, 20th.
TOWER HAMLETS DISPENSARY—Medical Resident: applications, 1st Nov.; election, 16th Nov.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

BERNARD, Francis, M.D. and C.M., appointed Demonstrator of Anatomy at the Middlesex Hospital Medical School.
DAVIDSON, A. D., M.B., appointed Assistant-Professor of Materia Medica in the University of Aberdeen.
LAIRD, John, L.K.Q.C.P.I., appointed House-Surgeon to the Bootle Hospital and Dispensary, Liverpool, *vice* Dr. R. V. Clampitt, resigned.
***LOWNDES**, Frederick Walter, Esq., appointed Honorary Assistant-Surgeon to the Liverpool Ladies' Charity and Lying-in Hospital.

BIRTHS.

ASHFORTH.—On October 23rd, at Market Overton, the wife of *G. M. Ashforth, M.D., of a daughter.
CARTER.—On Oct. 25th, at Leamington, the wife of *T. A. Carter, M.D., of a son.
DUNCAN.—On October 8th, at Brighton, the wife of P. C. Duncan, M.D., of a daughter.
KOUGH.—On October 19th, at Bagshot, the wife of *Edward Kough, Esq., Surgeon, of a daughter.
SWETE.—On October 20th, at Weston-super-Mare, the wife of *Horace Swete, M.D., of a daughter.
WORKMAN.—On October 18th, at Reading, the wife of F. Workman, Esq., Surgeon, of a daughter.

MARRIAGES.

ANGOVE, Edward S., Esq., Surgeon, to Constance Marion, second daughter of Benjamin OLDHAM, Esq., of Lower Clapton, at Hackney, on October 20th.
CARDELL, George, Esq., Surgeon, of Wincanton, Somerset, to Frances, third daughter of Edward Y. COOPER, Esq., of Wincanton, at St. Paul's, South Hampstead, on October 15th.
LALOR, James, M.A., M.D., Surgeon Bombay Army, to Matilda, third daughter of C. Robert MOATE, Esq., of St. Aubyn's, Hove, on October 19th.
MOORE, J. Daniel, M.D., F.L.S., of Lancaster, to Annie, eldest daughter of the late Edward ROGERSON, Esq., of Woodlesford, Yorkshire, at Leeds, on Oct. 20th.
RICE, Michael Weldon, M.B., of Sloane Terrace, London, S.W., to Agnes Boyd, younger daughter of the late Thomas JACKSON GRAHAM, M.D., R.N., of Clarendon Crescent, Edinburgh, at Edinburgh, on October 27th.
SPURWAY, Charles, Esq., Assistant-Surgeon Royal Artillery, to Elizabeth I. M., elder daughter of the Rev. W. M. LEE, of Waverland, Isle of Wight, at Sandown, on October 20th.
THORNE, Frederic La C., Esq., Surgeon, of Leamington, to Lillie Anna, younger daughter of the late John EVANS, Esq., of Stoke Newington and Leamington, on October 20th.
WRIGHT, Daniel, M.A., M.D., H.M.'s Indian Medical Service, to Cecilia Anne, second daughter of the late Captain Bryan BROUGHTON, at St. Andrew's, on October 12th.

DEATHS.

BEATSON.—On September 20th, at Nagpore, Anne, wife of *W. B. Beatson, M.D., Civil Surgeon H.M. Bengal Medical Service.
BELL, Arthur, Esq., Surgeon 36th Regiment, at Peshawur, India, aged 41, on October 10th.
CHEKE, George N., Esq., Surgeon H.M. Bengal Army, at Upper Norwood, aged 37, on October 16th.
COOPER, H., Esq., late Bengal Medical Service, at Ashby, Norwich, on Oct. 15th.
DIXON.—On October 2nd, at Montreux, Switzerland, aged 25, Mary Gunthorpe, second daughter of E. Dixon, Esq., Surgeon-Major Madras 4th Light Cavalry.
DUNN, George Carr, Esq., Assistant-Surgeon 5th Lancers, at Lucknow, of cholera, on September 15th.
GORDON.—On October 8th, at Meerut, Mary Dorothea, infant daughter of H. G. Gordon, M.D., Deputy Inspector-General of Hospitals.
HALE, Albert E., Esq., Assistant-Surgeon 103rd Royal Bombay Fusiliers, at Gwalior, of cholera, aged 27, on August 17th.
LAYCOCK.—On October 4th, Ann, wife of *Thomas Laycock, M.D., Professor of the Practice of Medicine in the University of Edinburgh.
MURRAY, Henry A., M.D., at Oaken, Codsall, Staffordshire, aged 36, on Oct. 9th.
SMITH.—On October 17th, at Surrey Villa, Kennington Road, aged 13 months, Alice E. H., daughter of Septimus W. Smith, Esq., Surgeon.
VINALL, Charles, M.D., late of Bombay, at Chelsea, aged 73, on October 16th.

OPERATION DAYS AT THE HOSPITALS.

MONDAYMetropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—Royal London Ophthalmic, 11 A.M.—National Orthopaedic Hospital, 2 P.M.

WEDNESDAY..St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—St. Bartholomew's, 1.30 P.M.—St. Thomas's, 1.30 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.—Great Northern, 2 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAYSt. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Mr. Jabez Hogg, "On a Case of Ectropium, following a Severe Burn"; Mr. Henry Lee, "On a Severe and Long-continued Pain, relieved by the Removal of the whole of the Humerus." Entomological Society.—Epidemiological Society.—Odontological Society, 8 P.M. Mr. Mummery, "On the Evidences of Dental Caries among Ancient Races of Mankind and existing Savage Tribes."

TUESDAY.—Pathological Society of London, 8 P.M.—Anthropological Society of London.

WEDNESDAY.—Obstetrical Society of London, 8 P.M. Dr. Barnes, "On Hæmorrhage after Labour"; Dr. Hall Davis, "On Puerperal Convulsions"; Dr. J. H. Aveling, "A New Principle of Treatment in Prolapsus and Procidencia Uteri"; and other papers by Dr. Madge and Dr. Mendenhall.

THURSDAY.—Harveian Society of London, 8 P.M. Dr. Menzies, "On Small-pox in connexion with Vaccination."—Linnæan Society.—Chemical Society.

FRIDAY.—Western Medical and Surgical Society of London, 8 P.M. For the Narration of Cases and Exhibition of Specimens.

EXPECTED OPERATIONS AT THE HOSPITALS.

LONDON HOSPITAL, Saturday, Oct. 30th., 2 P.M. Lithotomy, Fistula, Tumour of Thigh, Wry-neck—by Mr. Maunder; Lithotomy—by Mr. Couper. Wednesday, Nov. 3rd. Lithotomy and Amputation of Leg—by Mr. Hutchinson.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

MEDICAL REFORM.—In answer to numerous correspondents, we may avow our belief that a medical reform organisation is urgently needed, and that it will shortly be attempted. In reference to the suggestions, that our own Association is the proper body to take it up, there are *cons* as well as *pros*. Large and influential as our Association is, we should like to see a reform movement take a yet wider basis, and include, as we believe it would, nearly the whole profession. The crisis is, we think, come. The long labours of our contemporaries and ourselves, the experience afforded in the partly successful experiment of a Medical Council, and, above all, the inevitable changes which time brings round, have prepared all parties for measures which formerly it would have been Utopian to wish for. The majority of those who have thought on the matter, are convinced that small compromises between our corporate bodies are no longer desirable, and that the interests of the profession demand a thorough revision, to result, probably, in a complete reorganisation. That this must be brought about by some independent body, is self-evident. The profession at large will never be consulted by the Colleges. We need expect no self-denying or self-abrogating ordinances. If the profession wish its voice to be heard, it must speak.

We regret to learn from the Lucknow paper, that Dr. Dunn, of the 5th Lancers, died of cholera on September 15th, the last case in the station. "Dr. Dunn," says our contemporary, "was one of the very ablest of medical men we had, either civil or military. He was indefatigable in his exertions to save the lives of the men of his corps attacked during the recent epidemic, and he was eminently and conspicuously successful in more than one case. The announcement of the decease of Dr. Dunn will be received with unfeigned regret by all who knew him."

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

A STUDENT OF THE UNIVERSITY OF EDINBURGH.—We entirely agree with you, and think that the system at present adopted by the authorities of levying a tax of one penny per letter is, to say the least of it, unhandsome. The matriculation fee ought to cover all expenses.

LEARNED LADIES.

SIR,—No doubt Eleanora reads many other books that she finds on her husband's study table, besides your JOURNAL; but from which of them has she gathered the information with which she favours us, that doctors have, or ought to have, (for I do not quite understand which) "an uniform portal system"?

I am, etc., HUSBAND.

THE ARCH OF THE AORTA.

SIR,—In the BRITISH MEDICAL JOURNAL of October 23rd, appears a review of Mr. Heath's *Manual of Dissections*, in which some exception is taken to the description of the position of the arch of the aorta, given by the author as extending from "the second right costal cartilage to the left side of the body of the fourth dorsal vertebra", and also to that of the base of the heart necessarily influenced by the former. The discrepancy between this description and that given by authorities so high in esteem as Quain and Ellis, is pointed out in a way which implies either a doubt or a want of information as to the proofs upon which the statement is founded.

As the first observer and teacher for the last twenty years of this innovation in topographical anatomy, it seems incumbent upon me to refer your reviewer to a paper written by me upon the subject in the *Journal of Anatomy and Physiology* for November 1868, for the experiments and observations which established the doctrine in question.

I would further take leave to suggest that the primary object of a *Manual* is, to lay before the student the facts of a science in the simplest and easiest form, after a satisfactory examination of their correctness up to the latest date. It is obvious that this simplicity would be impaired by overloading the work with proofs and references, which would undoubtedly be required in a work of a more ambitious and original character. It happens to be known to me that, in this particular instance, Mr. Heath has tested the accuracy of my observations by numerous independent experiments of his own; and from what I have seen of the whole work, I believe that Mr. Heath has done it altogether conscientiously and well.

I am, etc., JOHN WOOD.

68, Wimpole Street, Cavendish Square, October 26th, 1869.

** We are very glad to insert Mr. Wood's note, and trust that it may be the means of inducing the authors of the other works mentioned either to defend their statements or amend them. It is too bad that students should encounter differences of assertion as to simple matters of fact in anatomy. It is also, we think, very desirable that, when an author finds himself obliged to differ from other authorities on a matter of this kind, he should, at any rate, let the student know that he differs intentionally, and has his reasons. We quite agree in Dr. Wood's general estimate of Mr. Heath's work, as our review and a previous notice sufficiently testify.

M.A. CANTAB.—It is not yet settled, but generally understood, that the next Arts Examination in December next will be the last held at the College of Surgeons. A pamphlet, containing the regulations and questions on the last examination, may be obtained of the publishers, Messrs. Hodgson, Gough Square.

SCPTICS AND ANTI-SEPTICS.

WE copy the following *jeu d'esprit* from a Scotch paper:—

Tune—"Away with Melancholy."

Oh! who would be a sceptic?
Oh! who would dare to rail
At Lister's anti-septic,
And hint that it may fail?
You ask me what's the matter—
You ask me what's the row
"Why! Pus, that used to scatter
Disease, is ended now."

We've a new-fangled notion,
Though not from Germany,
That everywhere in motion
Germs of disease there be.
Though these we can't discover
By touch, by sight, by taste,
There they are, and wounds we cover
With anti-septic paste.

One might hope with manner placid
This doctrine they'd receive—
Adopt carbolic acid,
Its miracles believe.
But ah! 'tis most distressing,
There's ferment without end,
Which anti-septic dressing
I fear would scarcely mend.

For Spence hits hard at Lister—
Lister lets fly at Spence;
And like a running blister
They give and take offence.

To keep the peace to bind them—
Strong silk or e'en catgut
Will not suffice—you'll find them
Returning cut for cut.

Catgut, by fiddle scrapers
Was once monopolised;
Now with carbolic vapours
Impregnated 'tis prized.
The tenor of the invention,
Spice of reflections base,
Is by "the first intention"
That healing should take place.

Spence, help'd by Simpson often,
Says catgut plays the deuce—
Maintains that it will soften
And swelling become loose.
But Lister effervescent
Denies that this is true—
"That catgut was putrescent
Which Lawrie sent to you."

The question still *sub judice*
Undoubtedly remains—
It affects both me and you, d'ye see—
Who loses and who gains.
But let it be tried fairly,
That Lister has a right
To ask, for late and early
He works with all his might.

A NAVAL SURGEON.—The Statistical Report of the Health of the Navy, which was ordered by the House of Commons to be printed on the 22nd of April last, is now published, and can be obtained of the Queen's printer for 12s. No award of the Blane Medal has been made lately. Write to Mr. Fossett, Admiralty, Somerset House.

M. A.—The following was to be considered at the meeting of the General Council of the University of Edinburgh, on the 29th instant. Moved by the Rev. K. M. Phin, D.D.: "That the General Council disapprove of the resolutions of the University Court, to admit ladies to medical study in the University of Edinburgh."

DR. S., (Clifton, Bristol).—Our correspondent wishes for information as to Hospitals or Sanitaria for Consumption. In addition to those at Ventnor and at Bournemouth there is, we believe, a large and well managed one at Torquay. Perhaps some of our readers can mention others. If Dr. S. wishes for detailed information, we should advise him to write to each for a report.

PUBLIC VACCINATION.

SIR,—I am glad to see you have given further publicity to the suggestion of the *Saturday Review*, that a statement of "how vaccination acts, what good it effects," etc., should be circulated amongst the poor. During my short experience as a public vaccinator, the fact of the ignorance of the poorer classes as to any connection between the successful performance of the operation of vaccination and its object (the prevention or mitigation of small-pox), has been repeatedly brought before my notice; and, in the Health Section of the Social Science Congress lately held here, I made a suggestion somewhat similar to that of the *Saturday Review*, but with this difference—that the statement in form of tract, or paper, or whatever it may be, should be given to the parent or person having the care of the child by the Registrar, when he gives the notice of the requirement of vaccination.

By this plan, a more widely spread knowledge would be gained than if the copies were distributed at the vaccination stations; as those persons who would receive them there would have already come to have their children vaccinated. Much good would, of course, be done in this way; but the object should be, I take it, to bring home the convincing proofs of the efficacy of vaccination to those persons who are so ready to evade the law, amongst whom are many who would not avail themselves of gratuitous vaccination, and who are not usually reckoned with the poorer classes.

I am, etc.,

L. MATTHEWS GRIFFITHS, Public Vaccinator,

Clifton, October 25th, 1869. No. 1 District, Clifton Union.

SEWING-MACHINES.—A correspondent, referring to the remarks made in a recent number of the JOURNAL on the injurious effects of working sewing-machines by the feet, sends us a copy of an article which appeared in the *Londonderry Standard* of September 1st, describing the Foyle Factory in that city. It is there stated that "any possible danger is obviated by the introduction of steam-power, and the consequent abolition of the obnoxious pedal." At the same time, the productive power of the machines is very much increased.

SHREWSBURY.—If medical men consider it desirable to instruct the public in the means of preventing contagious fevers, they should be careful to observe good taste in doing it. When a letter has to be written to a local newspaper it will probably be quite as useful if anonymous as with a name and address. The latter may cause the motives of the writers to be misapprehended. "Consult thine own conscience as to what to do, and the opinion of the world as to how to do it" is advice very applicable to these matters. The opinion of the world is strongly, and we think quite correctly, opposed to the practice of medical men giving their names and addresses in newspapers.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Oct. 20th; The New York Medical Gazette, Oct. 9th; The Parochial Critic, Oct. 20th; The New York Medical Record, Oct. 9th; The Boston Medical and Surgical Journal, Oct. 7th; The Madras Mail, August 18th; The Indian Medical Gazette, Sept. 13th; The Jersey Express, Oct. 19th; The Port Louis Commercial Gazette, August 12th to Sept. 4th; The Shrewsbury Free Press, Oct. 23rd; The Lincolnshire Chronicle, Oct. 23rd; The California Medical Gazette.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. C. B. Partridge, Birmingham; Dr. Ward, Douglas, Isle of Man; Mr. W. F. Morgan, Bristol; Dr. J. D. Moore, Leeds; Mr. Sands Cox, Birmingham; The Honorary Secretary of the Western Medical and Surgical Society of London; Dr. Armstrong, London; Mr. L. M. Griffiths, Clifton; Mr. J. Birt, Stourbridge; Mr. J. B. Ward, Hatton; Mr. C. H. Taylor, Bradford; Mr. J. de Courcy Young, Liverpool; Dr. Mackerdrick, Edinburgh; Dr. Barber, London; Dr. Bence, Crimond; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. J. Lockhart Clarke, London; Dr. J. Matthews Duncan, Edinburgh; Mr. J. Fagan, Belfast; Mr. J. Robertson, Edinburgh; Mr. T. Watkin Williams, Birmingham; Dr. Lanchester, Croydon; Dr. H. Barnes, Carlisle; Dr. B. W. Foster, Birmingham; Dr. A. T. H. Waters, Liverpool; Dr. Gibson, Newcastle-upon-Tyne; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Lomas, London; Dr. Treutler, Kew; The Registrar of the Medical Society of London; Dr. Jukes Styrap, Shrewsbury; Dr. S. Thomson, Torquay; Mr. H. Lankester, Leicester; Dr. J. Braxton Hicks, London; Mr. E. Bush, Frome; Dr. Kelly, Taunton; Dr. Leet, Dublin; Mr. C. Orton, Newcastle-under-Lyne; Dr. Ashforth, Oakham; Mr. Todd, Southampton; Dr. Corbin, Guernsey; Dr. Chiene, Edinburgh; The Secretary of the Clinical Society; etc.

BOOKS, ETC., RECEIVED.

The Third Annual Report of the Metropolitan Board of Health of the State of New York for 1868. Albany: 1868.
Remarks on the Training of Nurses. By S. D. Gross, M.D. Philadelphia: 1869.
Thoracic Aneurism. By Thomas Hayden, M.R.I.A. Dublin: 1869.
Infant Life: its Nurture and Care. By Erasmus Wilson, F.R.S. London: 1869.

Results of Meteorological Observations, for the week ending Saturday, October 23rd, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.								Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	WIND.										RAIN.	
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.	Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell.	Amount in inches.		
														N.			N.E.	E.	S.E.	S.	S.W.	W.	N.W.				Calm, etc.	
BATH	30.048	1.176	46.4	43.5	40.2	80	56.2	30.7	25.5	52.0	40.9	105.1	..	6.2	4	0.4	0.7	0.6	..	1.6	3.7	3.0*	3	0.41	
Dr. Barter, F.M.S.																												
BOURNEMOUTH	30.091	1.100	44.7	41.6	38.0	77	56.4	31.8	24.6	51.5	40.0	97.0	24.6	5.1	2.9	4	..	..	..	..	0.7	3.3	..	2.3	3	0.73
Dr. Compton, F.M.S.																												
DOVER	29.965	1.112	44.3	42.4	40.1	85	59.4	26.0	33.4	50.9	30.2	..	..	5.4	..	2	..	..	..	1	1	3	..	4.2	5	1.05
Dr. Parsons.																												
DUBLIN	30.131	1.159	46.9	44.6	42.0	84	55.4	35.3	20.1	50.1	42.1	..	30.1	6.4	..	1.5	..	..	..	0.3	2.5	2.7	..	3.3	3	0.21
Dr. J. W. Moore.																												
KEW	30.041	1.145	42.8	41.1	39.1	86	52.9	32.9	20.0	49.4	37.7	101.1	29.7	5.9	2.7	1.3	..	..	..	1	1.7	2.7	0.3	3.1	2	0.76
Dr. Treutler, F.L.S., etc.																												
MALVERN	30.063	1.151	44.4	41.8	38.7	80	55.8	30.2	25.6	50.5	38.0	108.6	26.1	6.1	5.4	2.3	..	..	..	..	1	3.3	0.3	7.2*	2	0.51
Messrs. W. and J. Burrow.																												
SCARBOROUGH	29.937	1.126	44.0	42.0	39.6	84	54.7	33.3	21.4	47.5	37.6	99.0	28.1	8	8	2.3	0.3	0.7	..	0.7	2.7	0.3	5.4	?	0.83	
Dr. Fox, M.R.C.P.																												
SIDMOUTH	30.278	1.130	46.9	43.9	40.5	80	58.0	28.5	29.5	53.4	38.8	..	..	3.6	3.3	5	..	..	..	..	1	1	..	1.4	3	0.44
Dr. Mackenzie, F.M.S.																												
VENTNOR, I. OF WIGHT	30.073	0.962	45.9	44.3	42.5	88	54.7	33.0	21.7	50.9	39.7	..	..	3.4	4.4	3.7	..	..	..	..	1.3	2	..	3.6	2	0.65
J. B. Martin, Esq., M.R.C.S.E.																												
WORTHING	30.049	1.127	45.1	42.3	39.0	80	56.2	32.3	23.9	52.8	36.2	100.0	28.5	6	2.9	1	..	..	..	0.3	1.7	2	2	1.4	3	0.59
W. J. Harris, Esq., M.R.C.S.E.																												

* Mean hourly velocity in miles.

REMARKS.—The mean pressure of the atmosphere has not been very different from that of the previous week, but its range has been very much greater. This was owing to its low state at the beginning, and the very great height it obtained on the last day but one of the week, which was 30.560 at Dublin, and 30.502 at Kew; the greatest range occurred at Bath. The mean temperature of the week has been on an average 10 degs. below that of last week, while the range has been also less, but not to so great an extent. The minimum temperature of the week occurred at Dover, at which place also the maximum of the week was registered, thus giving it the, for the time of the year, very high range of 33.4 degs. Winds have ranged almost wholly between W. and N., the latter being the by far most prevalent direction; their force has been generally moderate, but rather fresh at Scarborough, Dover, and Ventnor. Rain has fallen at all stations, the heaviest fall occurring at Scarborough. The mean amount of clouds has been about the same as last week. During the earlier half of the week the weather was generally cold and boisterous. A heavy gale blew from the N. at Scarborough on the night of the 16th, and on the 17th snow fell almost the whole day on the Yorkshire Moors, with a temperature of 28 degs. Fahr., and ice $\frac{1}{2}$ inch in thickness. From this time,—17th,—onward to the 20th, strong winds from N. and N.W. appear to have prevailed over the whole country, and in consequence the temperature fell at most stations to below the freezing point on the 20th. On the 18th a second heavy northerly gale commenced at Scarborough and continued without intermission till the 20th, attaining its maximum force = 10 on the afternoon of the 19th. On and after the 20th the barometer began to rise rapidly, and winds diminished considerably in force, though still continuing to blow from the northerly quarter. The barometer attained a considerable height on the 22nd, and then commenced to fall slowly and steadily; temperature at the same time rose somewhat, while the sky was generally overcast by dense clouds. Scarlatina caused 13 deaths in Dublin in the week ending Oct. 16th; a few cases have also occurred at Worthing. Otherwise the general health is good.

Kew, W., October 27th, 1869.

W. J. TREUTLER.

REMARKS

ON

PARALYSIS, AND OTHER DISORDERS OF MOTION
AND SENSATION, DEPENDENT ON IDEA.*

By J. RUSSELL REYNOLDS, M.D., F.R.S.,

Professor of Medicine in University College; Physician to University College Hospital; etc.

THE object of this paper is to show—1. That some of the most serious disorders of the nervous system, such as paralysis, spasm, pain, and otherwise altered sensations, may depend upon a morbid condition of emotion, of idea and emotion, or of idea alone; 2. That such symptoms often exist for a long time, appearing as complicated diseases of the brain or spinal cord; 3. That they resist many different kinds of treatment, being alike unmoved by sedatives and irritants, by attention or neglect, but that they disappear entirely upon the removal of the erroneous idea; 4. That they occur independently of anything that could be called either insanity of mind, hysteria, hypochondriasis, or malingering; 5. That they are often, but not constantly, associated with some bodily weakness or general debility; 6. That they sometimes associate themselves with distinct and definite diseases of the nervous centres, so that it becomes very important to know how much of a given case is due to organic lesion, and how much to morbid ideation; 7. That it is possible to make a diagnosis with regard to them in many instances; and, 8. That the principles upon which their treatment should be conducted are simple, and their application marvellously successful.

1. Everyone is familiar with some of what may be termed the "acute" effects of idea and emotion. It is well known that a man may be rendered instantaneously powerless or paralysed, rigid, stupefied, statuesque or unconscious by the sudden communication of startling intelligence. It is of daily occurrence, that pain is taken away by sudden fear; that some sensorial impressions are lost in the state of mental tension that accompanies intellectual effort; *e.g.*, the child loses its toothache when it sits down in the dentist's chair; and the student does not hear the tick or the striking of his timepiece when he is busy at his work. It is familiar enough that the idea of pain constitutes much of what we denominate as pain, and that sometimes it makes up the whole of it, as it did, *e.g.*, in the well known case of the butcher, who was agonised almost past endurance by the fact that a flesh-hook had caught itself, not in his skin, but only in his sleeve. Facts of the kind I have alluded to are at the very basis of our pathological interpretation of cases, but, at the same time, the "chronic" effects of idea and emotion are often completely overlooked when they take the form of muscular and sensory disturbance. We recognise them, at once, when they shew themselves in altered notions, sentiments, or feelings, but we often fail to perceive their true nature when they appear as paralysis or pain. The following case will illustrate this kind of disturbance in its simplest form. A young lady, who has seen better days, is admitted into hospital, paraplegic. She has become so gradually, and has lost flesh generally, and to a considerable extent. For two or three months, she has been quite unable to stand, even for a moment; now she lies in bed almost entirely. Her expression is anxious, but with some hopefulness. She thinks that, having come to the hospital—a great mental struggle for some who have, in former days, enjoyed every luxury at home—she may get better. These points are to be noticed in her case: that the paralysis is almost complete; the patient can just move the toes, or just raise either heel separately from the bed, while lying on her back; but there is no want of control over the sphincters, no local change of nutrition (*i.e.*, nutrition of the legs as compared with the arms); the cutaneous sensibility is perfect; reflex movements are difficult to arouse; the electric contractility and sensibility are perfect; there is no spasm, either tonic or clonic; there is no pain, either spontaneous or producible by movement of limb or pressure on the spinal column. There is no evidence of tubercular or other cachexia; there has been no blow; there has been no hysteria. It would be difficult to place this case among any of the well known categories of spinal disease, and I regarded it as ideal paralysis; her previous and subsequent history demonstrating the correctness of this view. The young lady's father, her

only relation, was, a year and a half ago, reduced from affluence to poverty by one of those commercial accidents which produce effects of "shock" as severe as, and often more permanent than, those of railway collision. He bore it bravely, and so did she; he, in his advancing years, went back into the work that he had long since renounced; she, in her youth, took upon herself duties and responsibilities that were, to her, entirely new. For a little time, all was well, and they did not grieve over their altered fortunes; but, now, the father became paralytic, suddenly, and the daughter nursed him tenderly, and so assiduously, that they soon came to be in the reality of want. The father was helpless, but not so ill that the daughter could not leave him; and so she worked hard as a daily governess, often walked where she used to ride, to save expense, and walked quickly to gain time and be the more at home. Thus, she lived and worked on for many dreary weeks, with paralysis constantly upon her mind, her brain overdone with thought and feeling, her limbs wearied with walking, and her heart tired out with the effort to look bright, and be so. Her limbs often ached, and a horror took hold of her, as the idea again and again crossed her mind, that she might become paralysed like her father; she tried to banish it, but it haunted her still, and, gradually, she had to give up walking, then to stop in the house, then in the room, and then in her bed. Her legs "became heavier day by day"; and she at last reached the state in which I found her when she was carried to the hospital.

She was told, and the nurses, and those about her, were all told, most confidently, that she would soon walk quite well; she was given some mild tonic medicine; faradisation was applied to the muscles of the legs: be it remembered, that the electric contractility was perfect, and that this was done merely to produce a mental impression. The back and limbs were well rubbed, and the patient was taken between two nurses—who acted as crutches—and made to walk up and down the ward for five minutes every four hours. On the day after treatment was commenced, she could stand with a little support; at the end of four or five days, she could walk fairly well; and, at the end of a fortnight, she was as strong and capable of exertion as she had ever been in her life.

2. The chronicity and apparent severity of the malady I am describing, are illustrated by the two following cases; chronicity by the one, severity by the other. A girl, aged fifteen, is admitted into hospital because she has been "paralysed" for two years, since an attack of typhoid fever. The patient is thin, but not unhealthy looking; her manner is bright, even merry; she busies herself with her hands, and is clever in their use; she appears to be possessed of something more than average intelligence and energy; there is nothing "hysterical" in her history. She is partially paraplegic, however, and has been so for two years. She can not stand for one moment; her legs, when she is placed upon her feet, "double up" under her "like wet brown paper," and she "drops upon her knees". When lying on her back, it is found that she can draw her knees upwards, both briskly and strongly; that she can raise her heels from off the bed, when the legs are extended; and that she can throw the foot downwards with vigour. She moves along the floor, briskly, on her hands and knees, dragging the legs after her, with the feet turned downwards, and the toes inwards. Sometimes she entangles her feet, or gets one of them under the other in such manner that there is some difficulty in starting again; but, habitually, her movements are prompt and energetic. Below each knee, and on the dorsum of each foot, there are patches of hardened cuticle, resembling somewhat those usually present on the soles of the feet: these, of late, have become sore round their edges, and, in several places, are bleeding. The skin on the soles of the feet is thin and soft; the gluteal muscles are flaccid. Sensibility and electric contractility are perfect everywhere. The treatment adopted in this case was the same as that used in the preceding one; and, within a week, the patient could walk well, and without any assistance.

The third case that I propose to read to you, illustrates the apparent severity of symptoms. A boy, nine years of age, is admitted into hospital with inability to walk, or even stand; with paroxysms of violent pain in the body and limbs when the attempt is made to adopt the erect posture; with difficulty of swallowing, and spasmodic movements of the eyelids, coming on in paroxysms, and followed by contortions of the body. The attempt to swallow brings on spasmodic movements in the face and throat, followed by general convulsions of the limbs and trunk, and loud crying, as if in pain. The boy is pale, but not wasted; his aspect is intelligent, and he answers questions sensibly and without any difficulty of articulation. The moment that he is put upon his feet, the legs "double" under him, and he screams with pain, various spasmodic movements following the attempt. The following facts, however, are to be noted. There is no irregularity of the spine, no tenderness of the spinous processes; and, as the boy lies in bed he can execute every variety of movement of the trunk and of both the lower extremities;

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

the vertical position does not cause pain, for I can hold him under the armpits and let his legs hang down, or I may swing his legs backwards and forwards, while thus holding him, without causing any inconvenience, except to myself. It does not hurt him to have the soles of his feet knocked sharply upwards against the trunk, nor, when he is lying in bed, does it give him any pain when I take hold of his heels and pull him downwards, or even raise him upwards from off the bed. There is no tenderness of the skin, nor of the muscles; no loss of electric irritability, no undue pain when the muscles are made to contract forcibly, by faradisation with well wetted sponges. But yet, when the boy, supported under either axilla, is made to touch his feet to the ground, he howls with apparent pain. It is noticeable, however, that the expression of countenance is one rather of alarm or fear than of actual suffering.

Of the history of this case, I was furnished with notes by my friend Dr. Ransom, of Nottingham, and the main facts of that history are the following. The father was "a nervous man"; the mother delicate. Sixteen weeks ago, the boy had influenza and sore throat; diphtheria was carefully inquired into, but believed not to have existed. A fortnight later, the patient had severe pain in the mid-back, thought to be from "liver", and was treated, not by Dr. Ransom, with mercurials and blisters, for sixteen or twenty days. The pain was paroxysmal, and there was no fever. He was allowed to get out of bed at the end of the third week, but walking was painful, and, indeed, impossible, from pain in the legs, groins, and sides of the trunk. He was seen by Dr. Ransom, six weeks ago, and then found unable to stand or walk, the inability being ascribed by Dr. Ransom to pain rather than loss of power. The pains came on in paroxysms which made him call out violently for hours during the day, but he slept well at night, and during the intervals of pain was cheerful and playful. Morphia, belladonna, quinine, failed to give relief. Between three and four weeks ago, rigid spasms came on in the flexors of the feet and hands; but these ceased during sleep. Bromide of potassium was given, and a blister was applied to the spine, and, by degrees, the spasms and pain were somewhat reduced in severity. The hypodermic injection of morphia gave no relief. Spasms of the eyelids occurred a fortnight ago, followed by pain, in which, often, the body was contorted, and knocked about dangerously. The urine was alkaline and phosphatic at first, but less so of late. The difficulty of swallowing commenced about a week before admission into hospital. Now, the attempt to open the mouth brings on spasms, and the symptoms are those already described. I was convinced that, whatever may have been the pathology of the case at its onset, its present symptoms were due to mental and emotional disturbance. I regarded the pain, the apparent paralysis, and the spasmodic movements as of imaginary origin, and treated the case accordingly. It was obvious, from what I have stated, that neither position of body, nor action of muscles, nor pressure on the vertebral bones was in itself painful; and it was obvious that there was no true paralysis. There was no reasonable explanation of the pain which walking, or rather the attempt at walking, caused; and the expression of countenance was unlike that of pain. Although, therefore, the boy asserted that the pain was very bad, and howled vociferously when put upon his feet, I believe that the pain was of the same kind as that of the butcher, when the flesh-hook had caught in his sleeve. I do not mean, for one moment, to say that there was no pain. I believe there was, and that in both instances it was severe, but it was of similar origin in the two instances.

The prescription for him was, that minced meat and vegetables should be placed beside him every four hours, and that no attempt should be made to coax him to take the food, but that, at the end of an hour, if he had not eaten any, the plates should be removed; he was told that he must be walked up and down the ward, between two nurses, every four hours, and that he must try not to mind the pain, for it would soon be better, and the walking would do him good; and he was further enjoined to "try and be a man", and make as little noise as possible by howling. No medicine was prescribed for him except a mere placebo; his legs and back were to be rubbed well twice daily.

For the first twenty-four hours, he took no food, but, on the end of the second day, said he was "so hungry", and on "the sister" bringing back his plate of meat, he ate it all without difficulty or spasm. At first, he howled loudly when made to walk, but this soon ceased altogether; and, in the course of a few days, he walked well, made no complaint of pain, and, before he had been in the hospital for a fortnight, he converted himself into an amateur messenger's boy for the other patients, running often up and down stairs on errands for the patients and the nurses.

Now, in this instance, I believe the boy at first was really ill; that he had genuine pain; that it hurt him to walk; and that the pain brought on spasmodic movements; but I also believe that, at the time when I saw him, all his symptoms were the result of idea, or imagina-

tion only; the former impressions being perpetuated, perhaps after the manner that certain impressions may be retained by the organs of special sense after the removal of their first-producing causes. We know that individuals differ in the readiness with which spectra, of form, and of complementary colour, may be produced, and in the length of time during which they may be retained by the eye. It sometimes happens that the individual believes in the real existence of these spectra, but in the very large majority, of even the most sensitive individuals, they are held to be hallucinations of the senses, and that which enables this conclusion to be immediately arrived at is the possibility of confronting the romance of one sense with the realism of another. But in the matter of pain, or of a feeling of powerlessness, there is no such correction to be obtained; the physician may find facts enough to guide his mind to an interpretation of the phenomena, but the patient cannot separate the unreal from the real, and is often aided in exaggerating the importance of the former by the kind but ill-advised solicitude of anxious relatives and learned friends.

3. The resistance offered by these maladies to ordinary modes of treatment has been already illustrated in some degree. Those forms of medication which may be employed for the relief of a neuralgia, of hysteria, of spasm, and of paralysis, when dependent upon organic disease, generally fail entirely here. It has often occurred to me to see cases which have gone the round of many theories with their therapeutic applications. The notion of "some inflammatory change" has led to the use of mercurials, iodides, counter-irritants, and depletives; the diagnosis of neuralgia has been followed by heroic doses of quinine or arsenic, by hypodermic injections of morphia, of atropia, and the like; the idea of hysteria has been met by the whole paraphernalia of antihysterical remedies, by assafoetida, valerian, and musk, by blisters, by "actual" and other cauteries; by stimulants and sedatives, by coaxing, by scolding, and the like; but the malady has resisted all such efforts; and has resisted them for months, and indeed for years; and yet the patients have been speedily cured by measures similar to those which I have described, viz., such as at once practically counteract the morbid notion, and compel the patient to use the voluntary power, which remains, but which has become practically inoperative under ordinary circumstances.

4. Cases of the kind which I have described are by no means necessarily associated with any of those recognised forms of disease to which the technical terms of insanity, hypochondriasis, or hysteria, can be fairly applied. They may be combined with these affections, but they may and do exist in entire independence of their presence. The mind may be healthy; there may be nothing whatever of the hypochondriacal temperament; nothing that even resembles genuine hysteria; *i.e.* there may be perfect freedom from all the ordinary characteristics of insanity; there may be no undue apprehensiveness, but, on the contrary, a cheerful tone of feeling, and a hopefulness that is quite marvellous amidst so much helplessness and dependence; and there may also be an entire absence of anything like hysterical spasm, or general habit of either mind or body. At the same time it is most obvious that such patients are often as far removed as it is possible to be from anything like the wish or the habit of deception. They believe, and they believe utterly, in the reality of their symptoms; they are anxious to be cured, and they readily follow out the processes of treatment, sometimes wearisome and often painful, that are suggested for their relief.

5. The association of this form of disease with local bodily weakness or with general debility is very commonly observed, and such alliance is of much importance in a comprehension of its pathology, and in the direction of its cure. Already I have shown that this was to be observed in three cases, in the one there was the gradual exhaustion of over-anxiety and over-exertion, both of body and of mind; in the second there was the feebleness induced by typhoid fever; in the third there was the weakness that follows influenza and sore throat; in two others I have observed the symptoms to follow upon rapid child-bearing. In another, a very marked case, the symptoms followed upon chronic diarrhoea; in several they have been preceded by sexual excess, or masturbation; and, in very many, upon the shock of and subsequent thought about a railway accident. It is probable that a general impairment of nutrition has very much to do with these results, but there is also usually some accidental determination of thought to one set of limbs or symptoms. This is often of the kind that I have mentioned, and also of another kind, viz., the solitary poring over some wretched book that deals in descriptions of all the horrible results of youthful indiscretion.

It seems to me that many of the severer forms of nervous disturbance that follow the shock of railway accidents, are of this nature. On the one side, there are cases of distinct nervous injury, on the other, cases of malingering and sham; but between these two extremes there are very many of morbid ideation. An honest man, and a bold one, may

be shaken physically and frightened morally; he is told to rest; he has nothing to do; all his kind friends who call on him tell him of the Messrs. So-and-so, all of whom met with "just such an accident," and who became "quite paralysed after a time." His doctor asks him if he feels this and that; his lawyer shakes his head mysteriously, and the last straw that often breaks his back is either the very grave face and sympathetic tone of the "Company's doctor," that convinces him that something is very seriously wrong, or, on the other hand, the extreme cheerfulness of that functionary, which is, to the patient's mind, distinct evidence that his hopefulness is all put on. The man becomes really ill, but the region of illness is idea.

6. The degree to which the form of malady enters into the complicated histories of chronic cases of nervous disease, is one of its most interesting features; because it often happens, on the one hand, that such symptoms as it can produce may be supposed to be the result of real organic lesion, and so place the case among the category of incurable diseases, and, on the other, that a recognition of their true nature may lead to their speedy removal, and an amount of encouragement that shall be very useful in the alleviation of more grave derangement. A few facts of an actual case will illustrate this point. A married lady, the mother of four children, and the victim of several mishaps, suffered much from hæmorrhoids, fissure of the anus, great debility, and convulsive seizures of epileptoid character. She was intensely anæmic, had much headache, attacks of occasional delirium, sometimes hysteric in form, but sometimes passing beyond that type. There was much to distress her in surrounding circumstances, impaired fortune, and a necessity for exertion beyond her powers. She gradually became paralytic, lost control over the sphincters, and was confined to bed. Her nights alternated between fainting and delirium, the passage from the one to the other being marked by some convulsive seizures, of what may be termed hysterico-epileptic character. This state of affairs continued for many months; the helplessness of the patient, and the distress of her husband, increasing week by week. Upon examination, I found inability to move the lower limbs to any extent, occasional involuntary micturition, and escape of feces; but the nutrition of these limbs was not specially affected, there was no alteration of sensibility, no bed-sore, and no tenderness of spine on deep pressure; but there was a great sorrow on account of her helplessness, and an admission that she had for a long time "feared that she might become paralysed." This patient was quite well in a fortnight, and the treatment that was used was that which I have already described. The first night that she was taken to the hospital, the evacuations occurred in bed; but she was told by the nurse that "such things were not allowed," and they never occurred again.

The subsequent history of the case was one of the kind that might be supposed; some of the nervous symptoms remained in a diminished degree, but the general health became fairly good, and the paraplegia disappeared altogether.

7. The diagnosis of the condition which I have endeavoured to describe is to be framed—1. Upon a consideration of the mode of onset of the symptoms, and especially upon the discovery of an idea which should take possession of the mind, and lead to its own fulfilment; 2. Upon an estimate of the symptoms actually present, and, particularly, upon the discovery of phenomena which can not be explained by what we know of the history of organic lesion. Here I would draw attention to such anomalies as these:—*a.* That a patient cannot raise the heel off the bed, or draw it upwards towards the body, and yet that he or she can sit up in bed, or lie down voluntarily and slowly without assistance, or can turn from side to side without aid; *b.* That this apparently absolute paralysis co-exists with perfect sensibility of skin, electro-muscular sensibility, and contractility; with unimpaired nutrition of the muscles and the skin; and with no sign of disease in the spinal bones; or, *c.* That there is absolute inability to maintain the erect position, although there is the possibility of moving the limbs in any direction, and this, without failure of irritability, or nutrition, or sensation. 3. Upon the observation of the effects of treatment; *a.* The absence of beneficial result from ordinary medication; and, *b.* The almost immediate advantage to be seen on the adoption of methods which are directed to the alteration of idea.

8. The treatment is that which I have already described, viz.:—*a.* A real, earnest dealing with the case, as one of grave character, although not of the kind supposed; *b.* A confident expression of hope, if certain plans are followed out; and the steady conveyance of this hope habitually to the patient, not only by the physician, but by those in constant contact with the patient. This is, I believe, of paramount importance; and hence it is that much more can be done in hospital than in private practice. Still, sometimes, it is possible to place a patient away from home, with a well-instructed nurse, and so gain the main points of hospital treatment. This it is desirable to do when-

ever it is possible; but sometimes much may be gained by sending an accomplished nurse to the house to take the patient well into her own hands, and out of those of kind but over-anxious friends. *c.* Making the patient attempt to walk at once, and at stated intervals, with support on each side, the amount of support to be gradually diminished day by day. *d.* The employment of faradisation to the muscles, partly as a moral and mental agent, partly as a physical occasion of muscular contraction. It is important to discover the muscles which are the most flaccid and the least susceptible of voluntary work, and to direct especial attention to their treatment. *e.* Friction and passive movements of the limbs. *f.* Such regiminal, dietetic, and medicinal means as may be required by the special condition of the patient.

By such means as these, and by their careful variation and manipulation, I believe and know that many cases of apparently grave disorder of the nervous centres, may be removed entirely; and that, in other instances, when the ideal affection is grafted upon organic lesion, much may be done to remove the former, and afford so much of the stimulus of hope that the cure of yet graver symptoms is brought within the range, not only of possibility, but of probability, and of actual fact.

ON THE REGISTRATION OF DISEASES.*

By G. H. PHILIPSON, M.A., M.D. Cantab., M.R.C.P. Lond.,
Physician to the Newcastle-upon-Tyne Infirmary, etc.

THE study of the diseases which prevail, or are common, forms a portion of our daily occupation. By the interchange of ideas consequent thereon, many important facts and phenomena respecting their natural history and pathology become imparted from one to another, and are thus not only preserved, but, in addition, may be suggestive of new views in other minds. By the mere mention that a contagious and epidemic disease is raging in a district, a warning is given to others in distant parts, who at once have their attention riveted to the probability of their own district becoming similarly affected, make timely preparation for the approach of the enemy, whose course, happily, may be intercepted, and the magnitude of the calamity lessened. This is especially the case with what may be termed the fresh epidemic diseases, or those which are new in a district, as the occurrences of diphtheria and cerebro-spinal meningitis within the last few years. If we were not, in this way, made acquainted with the peculiarities or characteristic symptoms of such diseases, how could they, with any certainty, be recognised by those who had been precluded the opportunity of observing them? Again, the more severe epidemic diseases are frequently preceded by a similar but milder disease, the resemblance being in the similitude of the symptoms, the mild disease giving a timely warning, or occupying the position of herald to the graver disease. These forerunners, then, are to be regarded, and the incidents which are happening to others heeded; for by such means we may, peradventure, prevent, mitigate, or arrest the prevalence of an epidemic outbreak.

If, by any possibility, we mitigate the outbreak of an epidemic disease, we are rendering service to the public by screening them not only from that disease, but from others which have been observed to follow closely in its footsteps, and which are known to be of a much more fatal character. When it is considered how exceedingly rare it is for even a single individual, and certainly for a collection of people, to pass through an outbreak of a contagious or epidemic disease, without being taken possession of thereby, unless they have been rendered impenetrable to the influencing effects by a former attack of the same disease, all our efforts should be roused to the investigation of these important subjects. For how often does it happen in those who have recovered from an attack of one of the epidemic diseases, that the constitution is so weakened that the former state of vigour is never re-attained; or, if the health appear re-established, the ground is all prepared for the more ready occupation by some other disease; or, after a varying time, the strength gradually declines, finally yielding, without any organic disease being discoverable.

The study of epidemic diseases, therefore, calls for our best energies, but is yet quite in its infancy. The labourers may be said to have only passed the threshold. This is not from the number of those thus employed having been small, or from the workers having been idle or unable to solve the many difficult problems. A large portion of those who have selected this field for their labour have been from the foremost ranks of men of science, and have shown an affection for their work, which could with difficulty be excelled; even some, by their devotion, have sacrificed their very lives. In a measure the scanty results

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may have been caused by some of the inquirers having only prosecuted their researches during the time when an epidemic was prevalent, and not also when absent. It is absolutely necessary that the inquiry should be continued after the epidemic has passed away. When an epidemic disease unhappily visits a neighbourhood, all the community become excited; all thoughts are roused; some facts may possibly be observed, and the cause of the visitation conjectured; but when the mortality again declines, and the health of the locality returns to its former condition, those thoughts which had been occupied with such fearful forebodings become engaged with other subjects, and all the distressing circumstances are soon forgot, or certainly remembered as of the past. It may be, in some favoured district, that an official inquiry is instituted, and, after a certain time occupied in eliciting evidence and the examination of witnesses, a report is published, which necessarily cannot be very complete, because the most important element for its perfection is wanting; namely, reliable *data* upon which to base the deductions.

The diseases which prevail, or have most influence upon the community, are those which belong to the contagious and epidemic division, or, according to the new nomenclature of diseases, "general diseases, which appear to involve a morbid condition of the blood." What the exciting cause of these diseases is, whether they are due separately or conjointly to changes in the temperature, moisture, pressure, composition, electric condition, or the amount of ozone in the atmosphere, is not the object of this communication. But, of all these causes, that the changes in the temperature occupy a prominent position will readily be admitted. In great changes or extremes in the temperature, a corresponding increase or decrease of sickness is always noted. In a very hot summer, derangements of the viscera connected with the mucous membrane of the stomach and intestines occur; that extensive and internal tract reciprocates with the surface of the body, under the agency of external heat; on the contrary, in extreme cold weather, the mucous membrane of the air-passages becomes affected, and the important structures in contiguity suffer.

Season has a great influence upon certain diseases. Of all the seasons, the Registrar-General thinks "that summer is the healthiest, winter the most unhealthy." This is the reverse of what was the case in former times, when the number of deaths occurring in the summer always greatly exceeded those in the winter. At the present time, the winter mortality is by far the greatest, unless an epidemic outbreak have occurred to swell the list of summer deaths. Here is an evidence of the good effect of legislative interference in the establishment of sanitary measures in most of the large towns.

It is now well known that the entire class of infectious and epidemic maladies exhibit variations, not only in intensity but also in fatality, from year to year. These propositions are illustrated by the following calculations, which have been made from the Reports of the Newcastle-upon-Tyne Dispensary, for the last ten years. The percentage of cases of a few selected diseases, in comparison with the whole number of medical cases treated at that institution, being as follows:

DISEASES.	Smallest number of cases.	Greatest number of cases.	Ratio of fre- quency.
Variola.....	0.2	5.0	1:25
Rubeola	0.1	6.0	1:60
Scarlatina	0.2	7.9	1:40
Pneumonia	1.3	2.4	13:24
Bronchitis	15.5	23.4	2:3

In the diseases—variola, rubeola, and scarlatina—all produced by some alteration in the constitution of the blood, the fluctuations in the number of cases is very considerable; whereas in pneumonia and bronchitis, diseases primarily due to some structural alteration, the variations are very small.

To illustrate, also, the proposition, that the fatality of these diseases is very variable, in comparing one year with another: in the same ten years, the percentage of deaths from variola, taking the whole number of cases in each year, was as low as 6.0, and as high as 23.4, or four times as fatal; from rubeola, as low as 0.9, and as high as 17.0, or eight times as fatal; from scarlatina, as low as 2.6, and as high as 20.0, or eight times as fatal.

Again, it may be said by some, that the right way to investigate the violence or strength of an epidemic is to refer to the number of fatal cases during a visitation. Without doubt this mode of procedure will illustrate the fatality of an epidemic, but cannot show its magnitude. In all epidemic outbreaks, the number of recoveries and deaths must be compared with each other, with the number of those affected, and with the aggregate of those who have escaped. In this manner a measure is obtained of the severity of the epidemic, from time to time, in the same outbreak, and in former visitations of the same disease. If the explanation of the causes of epidemic diseases have to be sought by

a reference to the number of deaths, this is too long deferred. The mortality of a disease is by no means an accurate measure of its prevalence. It is true that from the right statements of the fatality of an epidemic some lives may be saved, it may be, from the institution of more stringent sanitary measures. We must strive for something more than this. Endeavours must be made to save the earlier of those who are stricken down. This can only be hoped for by having some "mark" or "sign" to guide us; some "caution", or rather "previous notice", which is to be gained by the regular observation and registration of the diseases which are daily prevailing in our midst, in our cities, towns, villages, and rural districts.

Having indicated some of the advantages that are to be gained by studying more closely the diseases which are prevalent, more especially so, by the employment of a methodical system of registration, we would now direct your attention to the manner in which this may be accomplished.

In a system of registration, it is necessary, 1st, to collect facts; 2nd, to classify and compute the facts that have been collected.

In the collection of the facts, two elements are needful; the assistance and cooperation of the whole available scientific strength, and uniformity in the system of observation, consisting of a simple and easy mode of recording the notes.

A single individual can do little without the help of others in the carrying out of any plan. From his isolated position, the vast extent of the population, the great difference of circumstances in which they are placed, it is clear that a result, and that even greatly deficient in the approximation to perfection, can only be obtained by the united and devoted efforts of a band of workers. For as, in mechanics, power is obtained by a combination of forces all directed to the same object, so, in the investigation of some of the recondite problems in the science of medicine, a leaguering together of those so employed is absolutely necessary. The advantages that would accrue, as well as being of general value, would also redound upon each individual. In the words of the Registrar General, "the register of the medical practitioner would, at the end of a few years, be of incalculable interest to him; he might refer back to it for important information, transmit it to his sons or successors in practice, analyse the results of his experience, and, in conjunction with his brethren all over the country, would ultimately accumulate a large mass of materials which could not fail to advance medical science"; and as "medical science is based upon extended observations," the collected notes of a number of individuals scattered over a district would do far more for the advancement of this science than the writings of single individuals, no matter how highly gifted in power of observation and expression they might be.

In the classification and computation of the facts collected, a properly constituted plan is absolutely necessary, which could best be carried out under the direction of a central authority, independently of the observers of the facts.

At once it will be recognised, that the fundamental step for the statistical registration of diseases must be uniformity in the system of registration. Such has been effected by this great and powerful Association. For, in the year 1865, at the annual meeting held at Leamington, a Committee was appointed "to encourage the registration of diseases," who agreed upon a form of return for uniform registration, which form was approved in 1867, at the annual meeting held at Chester, and afterwards issued to the members. The form is simple, yet complete, and is one which may be nationally adopted. As stated in the report of the Committee on the observation and registration of disease, presented in 1868, at the annual meeting held at Oxford, "the registration of disease occurring in public practice was commenced upon the same plan, and with the same list of diseases, at the following places; Manchester and Salford, under the direction of the Sanitary Association; St. Marylebone, London, by Dr. Whitmore; Birmingham, by Dr. Alfred Hill; and Newcastle-upon-Tyne and Gateshead, by the Northumberland and Durham Medical Society." Monthly or more extended reports, based upon these returns, with observations in meteorology, have also been issued. It is only just, also, to add that, for some years previous to 1868, the registration of diseases had been carried on at St. Marylebone, London, Manchester and Salford, and Newcastle-upon-Tyne and Gateshead. The plan, however, was different, and was in each case modified, in 1868, to that recommended by this Association.

The possibility of the registration of diseases having been exemplified, and the manner in which it may be best accomplished having been fully delineated, what is wanting now is, that the system should become general; in a word, that the statistical registration of diseases should be "national". There exists a national system of registration of the causes of death; so there might be a corresponding national system of registration of the actual cases of disease, which might justly be called "vital statistics," and which would indicate the resistance of one portion of the community

against disease as compared with another. Undoubtedly, the statistics of a single town are instructive; far more instruction, however, will be gained from the compared statistics of various and many towns. In addition, also, it would tend to throw light upon the causes of diseases, on the means of their prevention, and the right understanding of their etiology, the greatest reward of the worker in the wide expanse of "the science of medicine."

ON BICHLORIDE OF METHYLENE.

By BENJAMIN W. RICHARDSON, M.D., F.R.S.

THE recent notes in the JOURNAL on bichloride of methylene call for one or two explanatory sentences bearing on the action of that substance. I shall say what has to be said best by stating briefly the physical character of the bichloride, and the relation it bears to chloroform and other allied anæsthetics.

Chloroform and bichloride of methylene belong to one family of chemical organic bodies, in which family, carbon, as the base, combines with hydrogen and chlorine in different proportions. If one opens the hand, extends the thumb, and lets the extended thumb represent the carbon, all the other combinations of the group can be shown with the four fingers. Let the thumb represent carbon; extend the first finger, and let it represent hydrogen; keep the second, third, and fourth fingers together, and let them represent chlorine: the hand describes the composition of chloroform, which is composed of C. H. Cl Cl Cl. Bring up the second finger to the first, and let it now represent hydrogen, and the hand describes the composition of bichloride of methylene, which is composed of C. H H. Cl Cl. Bring up the third finger to the second and first, and let it also represent hydrogen, and the hand describes chloride of methyl, which is composed of C. H H H. Cl. Bring the fourth finger to the other fingers, and let it, with the others, represent hydrogen, and the hand describes marsh gas, C. H H H H, or, as it is called chemically, hydride of methyl. Or, let the fingers altogether represent chlorine, and the hand describes the tetrachloride of carbon, which is composed of C. Cl Cl Cl Cl, the hydrogen of marsh-gas being entirely substituted by chlorine. In these compounds, we have a complete chemical anæsthetic family group. Every member of the group produces sleep, and insensibility to pain, when inhaled by the living animal. In this respect, all the members of the family resemble each other in one leading characteristic, but they differ in detail; the difference turning on difference of physical property, and this, again, turning on the proportion of chlorine.

Let us compare, from this point of view, chloroform with bichloride of methylene. Chloroform, we have seen, is composed of C. H. Cl Cl Cl, and bichloride of methylene is composed of C. H H. Cl Cl. Thus, chloroform has one more equivalent of chlorine than bichloride of methylene, and bichloride of methylene has one more equivalent of hydrogen than chloroform—in fact, in it, an equivalent of hydrogen is substituted for an equivalent of chlorine in the chloroform.

This difference causes essential alterations in the physical property. The combining weight of chlorine is as thirty-five to one of hydrogen; the difference causes an alteration in the specific gravity, the vapour density, and the boiling point of the two fluids. For example, the vapour density of chloroform, taking hydrogen as unity, is 59.75; of the bichloride of methylene, 42.5. The boiling point of chloroform is 142 deg. Fahr., and that of bichloride of methylene (according to the researches of Mr. Perkins, who has corrected the earlier observers), 104 deg. Fahr.

In turn, the difference of physical property modifies action. The lower boiling point of the bichloride causes it, when exposed to the air, to diffuse with greater rapidity than chloroform. I have seen it diffuse so rapidly that the condensed water from the breath of the patient became frozen in the inhaler. For this same reason, there is also a quicker diffusion of the vapour in the lung, and a quicker action on the blood. Again, for the same reason, there is quicker elimination of the substance from the body, with a less expenditure of the animal force, than occurs with the heavier chloroform.

In other respects, bichloride of methylene resembles in action the remaining chlorides; *i.e.*, it causes, sometimes, muscular excitement, and, occasionally, vomiting. These symptoms are more or less severely produced by all the representatives of the series; the effects varying with the amount of the chlorine. The chloride of methyl produces very little excitement, and no vomiting. Chloroform produces great excitement, and vomiting frequently; the latter symptom being often active and prolonged. Bichloride of methylene holds a place, in these respects, between the two.

When we correctly understand these points of difference between bichloride of methylene and chloroform, we see, with a little more reflection, what difference of symptoms will result from their inhalation, and what differences of method are required in their administration. If we diffuse equal portions of chloroform and of bichloride in an equal space of air, at the same temperature, each in a closed chamber, and place two animals of the same kind, weight, and condition, one in each chamber, the animal inhaling the vapour of the bichloride is narcotised more quickly than the animal in chloroform, and with less excitement; being narcotised, it will remain, while in the same atmosphere, as deeply narcotised as the animal in the chloroform, but it will die later; further, if it be taken out when it has ceased to breathe, it will more readily recover under artificial respiration than the animal which has ceased to breathe in the chloroform. If, however, two animals be exposed to the same quantity of the two narcotising agents, at the same temperature, not in a confined chamber, but in an open space, there will be difference of action. The animal breathing the bichloride of methylene, unless the dose be very large, will be excited, and will possibly not pass into the third degree of narcotism at all; while the animal breathing the chloroform will be narcotised to the third degree. The reason of this difference is obvious enough, and is, that the lighter bichloride has been lost by diffusion in the air, more rapidly than the heavier chloroform. Again, if the two animals be narcotised to the same degree, one with the bichloride, the other with chloroform, and the narcotics be withdrawn at the same moment of time, the animal narcotised with the bichloride will recover more quickly than the animal narcotised with chloroform, and the return to the natural temperature, from the reduced temperature to which both will have been brought, will also be more quickly effected.

These facts explain all the anomalies which those who exhibit bichloride of methylene to the human subject have so often observed; they explain, moreover, that the anomalies depend, not on the substance, but on the mode in which the substance is administered. Bichloride of methylene, owing to its rapid diffusion, can be made to produce good anæsthesia for short operations within the minute; an operation lasting two minutes may be performed, and, the vapour being withdrawn, recovery may be perfect in five minutes. We can scarcely want anything more in the direction of rapidity of action. Bichloride of methylene can be made to produce deep anæsthesia in four minutes; and, when a long operation has to be performed, the sleep can be sustained, without a struggle, for an hour (I am speaking from experience); recovery, when the vapour is withdrawn, being complete in from ten to twenty minutes. We can scarcely want anything more in the direction of prolonged action.

To obtain these two different results, there must be a principle in the method of administration of the bichloride. To produce the rapid effect, the agent must be given as Mr. Rendle gives it; *i.e.*, its vapour must be confined in a small, simple, hollow cylinder, which adapts itself to the mouth and nostrils at one end, and is perforated with holes, for admission of air, at the other; the cylinder being lined within with loose demette. The diffusion of a drachm of the fluid is sufficient for very short operations when applied in this way. To produce the prolonged effect, the same cylinder may be used, but air must be more freely admitted by holding the inhaler more loosely over the mouth and nostrils; and, when the insensibility is complete, the administration must be continued in full, for a minute or two, unless some urgent symptom should interfere, until the organism is well charged with the narcotic. A sufficient charge once introduced, the sleep may be sustained by the simple process of readministration, carrying the effect each time a little longer than the period when the anæsthesia is perfect and the voluntary muscles are quiet.

The question of the age of the patient has been adduced as having a bearing upon the action of bichloride of methylene and of chloroform, the idea being that chloroform is best suited for the young. There is really no ground whatever for the fancy, except this: that, as the respiration of children is quicker than that of adults, they come more quickly under the influence of the vapour of the bichloride, because they inspire more of it. Hence, to babes and young children, the vapour, even for short operations, should be administered more diluted with air than to adults. Happily, if in young children or other young animals quickly narcotised with bichloride of methylene, the respiration be for a moment checked, prompt artificial respiration, gentle but prompt, suffices to restore animation with a certainty that is remarkable. I have restored suspended respiration in a young animal under bichloride of methylene, two and even three times after respiration had ceased.

A practice has been suggested of first putting the patient to sleep with the light bichloride, and of keeping up any required prolonged effect with chloroform. I have already said enough to shew that this practice is unnecessary. I would add, now, that it is excessively dan-

gerous, and I predict, without any hesitation, that fatal accidents must inevitably follow upon it. It is far better to use chloroform from the beginning of an operation to the end of it, than to begin with a lighter anæsthetic, push that to the degree of annihilating sensibility, and then to cap the proceeding by adding a dose of the heavier agent. A horse at its fullest speed in a race might possibly reach the goal successfully if, by some sleight of hand, the jockey on its back could be suddenly weighted; but, as a rule, the horse, already well-nigh exhausted, would begin to flag and would go down under the additional burthen.

I have written these lines about the bichloride without any desire to praise it because it is an introduction of my own. It is naturally gratifying to observe that a theory of action, based on knowledge of physical laws, proves correct in practice, as the theory relative to the action of bichloride of methylene has proved; but men who are absorbed in the study of natural phenomena, as I am, soon die daily to their work, and when once they have placed a thought or practice before the world, treat it as belonging entirely to the dead. To me, bichloride of methylene is the same as to others; and, although I know it has many advantages, I am so far open to its faults, that if, to-morrow, I could find an equally manageable and effective volatile anæsthetic, out of the chlorine family altogether, I should throw over the bichloride without a moment's hesitation, feeling the act a duty. At the same time, while it retains its place in practice, it is just to remove any prejudices against the bichloride of methylene, resting on imperfect perception of its properties and action.

POSTSCRIPT.—The above paper was sent to the JOURNAL in September last; and since that time a case of death has occurred at the Charing Cross Hospital during the administration of the bichloride of methylene. The facts of that case, ably and faithfully reported by Mr. Peter Marshall, suggest to my mind no modification of what I have written, since the administration of the narcotic and the proposed operation in the case referred to were planned almost against hope, to save a man who was sinking from exhaustion, and whose breathing was mechanically obstructed by cancerous growth. I do not see that any general anæsthetic can ever be discovered to meet successfully a case of this extreme character. It is a case in treating which science can only be relieved from the chance of discredit by the firm refusal of her ministers to accept in her name, under the blessed, even though unreasonable, impulse of human kindness, an useless responsibility. In this position, we can put ourselves only in the place of the sufferer, greeting the impulse as the noblest gift that we could ask for or receive, and accepting ourselves (as the patient in the case of which we are speaking did) the responsibility of the attempt made to save us from a death inevitable, imminent, and, in its threatened natural aspect, far more cruel and terrible than if it came from the effort to avert it.

CASES OF HERPES CONTAGIOSUS (?).

By J. BRENDON CURGENVEN, M.R.C.S., etc.

MATTHEW PAINE, aged 22, a coachman, married, of sober habits, inhabiting a newly built stable in a healthy situation, was in good health until October 13th, when he felt his throat sore; he had shivering, and severe vomiting of water and mucus, which was described by him to be "as green as grass".

Oct. 14th. I first saw him. He complained of great muscular soreness over the trunk and limbs. His skin was hot; face flushed; pulse over 90; tongue red and clean. There was a white patch of herpes on each tonsil; redness and swelling of the fauces; and the submaxillary glands near were swollen and tender. Deglutition was difficult and painful.

Oct. 16th (fourth day). The tonsils and the mucous membrane of the pharynx were more swollen, and there was greater difficulty in deglutition. The pimples on the tonsils had coalesced into uniform white patches, yet they were not more extended in circumference. Other patches had appeared on the uvula and the upper and under surfaces of the tongue, which organ continued red.

Oct. 17th (fifth day). He slept very little last night, being constantly disturbed by difficulty of breathing and accumulation of large quantities of thick tenacious mucus in the throat; and towards morning he became delirious. He discharged, by retching, about six ounces of thick jelly-like mucus, that adhered firmly to the bottom of the basin. The inflammation—possibly the herpetic eruption—had extended down the œsophagus and into the larynx; for he was now quite hoarse, his voice being not above a whisper. There had appeared, since the previous day, clusters of herpetic vesicles at the corners of the mouth, at the orifices of the nostrils, on the eyelids near the inner canthi, on the left

side of the scrotum and prepuce, with single vesicles scattered over the thighs, forehead, and backs of the hands. He had partial loss of power in his hands and wrists; he could not close his hands, nor straighten his wrists. The temperature was high; pulse 98; bowels regular.

Oct. 19th. He had a better night, but continued to bring up a quantity of thick mucus after each dose of the medicine (chlorate of potash and hydrochloric acid). There was a patch of vesicles on each side of the neck, immediately over the tonsils: these, about a dozen in each patch, had not coalesced, but the vesicles of all the other patches had, forming one scab for each group; that on the scrotum rubbed off, leaving a raw surface. His hands and wrists had recovered their power, which might or might not be due to a blister applied between his shoulders on the previous night.—His wife complained of lassitude, slight shivering, and sore throat. She had a patch of herpes on the left tonsil; the tongue was slightly coated; pulse 84; skin hot.

Oct. 20th. The husband's symptoms were improving; he could swallow better, and took a little bread in his beef-tea. The discharge of mucus was less.—The wife had a patch coming on the right tonsil.—His mother, who had sat up two nights with him, and had been with him more or less from the commencement of his illness, had a patch on her right tonsil.

Oct. 21st. The husband was better; temperature by thermometer, 100.6.—His wife vomited, yesterday and to-day, a watery fluid. She had muscular soreness, heat of skin, pulse 92, and aching of the hands.—His mother had muscular soreness and aching pains in the hands. A patch had appeared on the left tonsil. Tongue slightly coated; pulse 90.

Oct. 22nd. The wife had several red spots on her hands last night ("*herpes sine vesiculis*," Wilson), only two or three of which on the left hand gave rise to vesicles.—The disintegrated mucous membrane over the spots of herpes on the husband's tonsils and tongue had been cast off, leaving ulcers with well defined and healing margins.

Oct. 26th (fourteenth day). The husband was still hoarse. The wife and mother were almost well, their throats being only slightly sore; the herpes was gone. The husband's voice gradually returned during the next few days. The cuticle is peeling from the hands and feet.

Oct. 27th. The husband's brother was attacked with shivering, sore throat, and fever. He had a group of white pimples on each tonsil. Tongue coated; pulse 102; skin hot and perspiring.

Oct. 28th. The pimples were less perceptible; pulse 120. He had cramp in his feet occasionally.

Oct. 29th. The eruption on the tonsils was gone; the tongue was coated and swollen. He had a troublesome cough last night; no chest-symptoms. He had an inflamed gland in the right axilla.

Nov. 1st. The symptoms were, copious perspiration, occasional cough, and cramp in the feet. Pulse 84.

Second Group of Cases.—Oct. 22nd. On visiting a family that I was attending, I found the housemaid with a sore throat, which, on examination, presented a patch of herpes on the left tonsil, and two or three pimples on the right. She had had shivering and muscular soreness, but no sickness. The cook had just recovered from a sore throat that commenced seven days previously. The two servants slept in the same bed.

Oct. 23rd. Last night, the mistress was taken with shivering and sore throat. The tonsils and fauces appeared red and swollen, but there were no pimples.

Oct. 24th. She was sick twice last night. There were two pimples on the left tonsil.

Oct. 25th. She felt much better; the pimples were gone, and the redness was less.—The patches on the housemaid's tonsils had gone, and she felt better.

REMARKS.—It is evident that these cases are cases of herpes in which the whole system is involved. In this, they differ from those local and milder forms with which every one is well acquainted. The disease differs also, in that it is contagious, as far as these two groups of cases permit an opinion. But herpes may be said to be a local neurosis, and cannot appear as a general febrile neurosis. I would ask, Do we not meet with hemicrania and other kindred local neuroses? and can we say that these are in no way produced by a similar disturbance of nerve-force as those general febrile neuroses, ague and remittent fever?

Herpes has been divided by Willan, Hebra, and Wilson, into herpes labialis, nasalis, and præputialis; herpes zoster, iris, and circinatus. I can find no mention by these authors of any form of the disease like the one I have described, in which all the species of the first class were combined in one case. Hebra remarks, that "an herpetic affection of the skin of the face, the red parts of the lips, and the mucous membrane of the mouth, sometimes occurs in perfectly healthy subjects, being then the only morbid condition which is to be detected; but, in

other instances, such an eruption precedes or accompanies the outbreak of a febrile or non-febrile complaint." Erasmus Wilson says, at page 213: "Herpes labialis is sometimes associated with aphthæ of the mouth."

It is quite clear that these writers observed the association of herpes in the mouth and on the face; but I do not think that their descriptions convey the idea that they ever witnessed such a train of symptoms as occurred in the first case above related. Nor is it correct to call the white spots or pimples aphthæ; the two are widely different. Hebra says: "Herpes of the anterior part of the oral cavity, and especially of the gums and tongue, may easily be confounded with aphthæ."

The question naturally arises, Is this disease the same as the "foot-and-mouth disease" in cattle? and is the poison conveyed through the medium of the milk? I do not believe in its spontaneous origin through the influence of season or weather, or that it was derived through the medium of the air.

Neither of my patients had been near any cattle. The first two patients had their milk from one dairy; and I was able to examine all the cows in the dairyman's shed, in company with Dr. Hardwicke, and again with Dr. Buchanan, without detecting any disease amongst them. But, during the last four months, nearly twenty cows had been sold, which were said to have fattened and lost their milk. It would, I think, be too much to expect a dairyman to tell the whole truth in answer to inquiries such as ours. We are, consequently, restricted to a comparison of symptoms; and, on making this, it will be seen that a close similarity exists between the case first related and others that are known to have suffered from direct contagion on the one hand, and the disease as it appears in cattle on the other. The disease is not an eczema, nor does it in its symptoms in any way resemble that form of disease. It is not aphthæ, because that term is now restricted to the fungoid disease found in infants and in old and diseased subjects; but it strongly resembles herpes in symptoms, course, and duration. The vesicles are the exact counterpart of herpetic vesicles; and the patches appear on all the spots usually subjected to attacks of the ordinary forms of herpes. As an appropriate name, therefore, for the disease, I would suggest "herpes epizooticus contagiosus".

On referring to the literature of the subject, I find that, during the prevalence of all the epidemics of what has been called epizootic aphthæ on the Continent and in England during the last two hundred years, the extension of the disease to the population of the affected districts has been recorded.

It becomes a matter of great interest to the profession, to the Government, and to the public, that all cases bearing upon this subject should be carefully recorded; that, by an accumulation of facts, the question may be decided, whether or not the "foot-and-mouth disease" can be conveyed to the human subject. It must be borne in mind that every person would not be susceptible in the same degree to the poison; and that the disease is, in all probability, contagious only through the mucous secretion from the mouth, and the products of the vesicles in the mouth and on the udder. Milk free from the latter may not be injurious.

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

PSEUDO-MEMBRANOUS STOMATITIS PRODUCED BY THE MILK OF A COW WITH INFLAMED UDDER.

By JOHN FAGAN, F.Q.Q.C.P.I., Belfast.

ON the 12th January, 1869, I was called to see Mrs. C.'s child, a healthy boy about two years old. His lips were much swollen, and there were a number of aphthous ulcerations on their inner aspect, and on the roof of the mouth. The tongue, all but the extreme tip, which was preternaturally red, was covered with a creamy deposit. The sub-maxillary glands were slightly swollen. There was some dribbling from the mouth; the pulse was accelerated; the skin hot, and child suffering from great thirst. On the 13th and 14th, there was an exacerbation of all the symptoms; on the 15th, he began to show signs of improvement; and on the 18th, appeared quite well.

The mouth was frequently sponged out with a solution of chlorate of potash, borax, honey, and rose-water. An alterative dose was given, followed by quinine, three times a day.

On inquiring as to what was likely to be the cause, I was told by the

mother that, for some time past, she noticed a sediment of a dirty appearance in the bottom of the vessel where the milk was kept, and she began to think that might be the cause. On putting some of the suspected sediment under the microscope, corpuscles of both pus and blood appeared in abundance. On making further inquiries, it was found that the cow that gave the milk had suffered from inflammation of the udder, which had at that time formed an abscess.

The above case, although in no way connected with the "foot-and-mouth exanthem", shows the bad results that may follow the drinking of impure milk, and the necessity of a careful selection, by parents and nurses, of that aliment which is of such vital importance during the periods of infancy and childhood.

MUSEUM NOTES.

RARITY OF OSSEOUS UNION AFTER TRANSVERSE FRACTURE OF THE PATELLA.

CAN any one inform us where a specimen of a patella, fractured transversely and united by bone, is to be found? We shall not accept the proof unless the bone have been cut across, and the actual condition of the uniting medium demonstrated. Its value will also be much diminished if the history of the accident be not forthcoming, since it will then be doubtful whether separation had ever occurred. We have searched through many museums without finding a single specimen proving bony union after transverse fracture with separation. There is one in the London Hospital Museum, in which it is quite close and firm; but the section shows that it is not bony. Specimens of comminuted fracture are of no value, because in them very often there is no separation. There is one such shewing partial bony union, in King's College Hospital, No. 1125.

STARRED FRACTURE OF THE PATELLA.

WE could find but two specimens of fracture of the patella in the Bristol Infirmary Museum. One of these showed a double transverse fracture, the second having occurred some years after the first (*b. 2*). The other specimen was an interesting example of a starred fracture, and had been caused, as usual, by direct violence. Its subject, a woman aged 28, had fallen from a window, and was admitted, on account of her injuries, under the care of Mr. Lowe (in 1832). Probably she lived a very short time. The patella has been macerated, and all soft parts removed. It is crossed in various directions by lines of fracture, breaking it into several separate fragments, the larger of which show fissures. One line of fracture is obliquely vertical, and at the upper part of this two others pass laterally. There is no statement of the condition presented during life.

CASES OF RECOVERY AFTER FRACTURE OF THE SPINE.

IN the Leeds Museum is a specimen of union after fracture of the spine at the second lumbar vertebra. The patient died of typhus fever, under the late Dr. Hardwick's care, twelve years after his accident. For the accident, he had been treated by Mr. Teale in the Infirmary. His injury was from a beam falling across his back; and he had, when admitted into the Infirmary, all the signs of fracture. He was unable to move his legs, but sensation was perfect. His urine was drawn off for three weeks. At the end of three weeks, he became able to pass his urine without assistance, and could walk across the floor by the aid of a stick. He was discharged recovered six weeks after the accident. A projection of the spinous process of the first lumbar vertebra could be distinctly felt during his first illness, and also at the time of his death.

The specimen shows an obtuse bend forwards at the upper lumbar region. The body of the second lumbar vertebra has been crushed, and its anterior half is not more than half its natural thickness. Ankylosis has occurred between the laminae of the first and second; and from the crushed body of the second, lips of bone have been developed.

The two following cases, which we abstract from the pages of the *Liverpool Medical and Surgical Reports*, may, with the above, be of interest to those who advocate trephining of the spine after fracture. The cases are recorded by Mr. Manifold.

A sailor fell from the rigging, and had a fracture, with displacement, in the lower dorsal region. He had complete paralysis of the lower extremities, and required the catheter for three months. Fourteen months after the accident, he could walk about with the aid of a stick, and had control over his sphincters.

Another sailor fell sixty feet; had a fracture, with displacement, in

mid-dorsal region, and paralysis of lower extremities and of sphincters. Sixteen months later, he was in good health, but still paralysed.

These cases show, at any rate, that the let-alone plan is not always unsuccessful.

UNREDUCED DISLOCATIONS OF THE HUMERUS.

WE could find in the Leeds Museum but one specimen of an un-reduced dislocation of the humerus. It shewed a subcoracoid displacement. The posterior part of the head of the bone had been absorbed by pressure, and a new lip of bone had been developed on the inner side of the glenoid cavity. No. 1213.

We have seen in different museums at least twenty specimens of un-reduced dislocations of the humerus, and in not a single one did the bone rest below the glenoid cavity. In former times it was believed that almost all "dislocations into the axilla" were subglenoid ones, and to Mr. Flower, of the Royal College of Surgeons, we chiefly owe the correction of this mistake. The evidence of specimens would certainly favour the belief that almost all are subcoracoid. The differential diagnosis in the living patient is liable to error unless special care be taken. Can any of our readers refer us to a specimen of un-reduced subglenoid displacement?

REVIEWS AND NOTICES.

FAILURE OF SIGHT FROM RAILWAY AND OTHER INJURIES OF THE SPINE AND HEAD, etc. By T. WHARTON JONES, F.R.S., F.R.C.S., etc. London, Walton, pp. 308.

NOTWITHSTANDING our reverence for the labours of Mr. WHARTON JONES as a physiologist, we cannot say that we are much pleased with this work. We do not like the word "Railway" on the title page; and we like it still less in large gilt letters on the back of the book. What is there in railway injuries, apart from their well known connection with law-courts, which should cause us to single them out from all others and devote a book to their consideration? Railway concussions are, after all, but a small minority of those to which the human spine is liable, and it is unfair to the rest to give them such prominence.

In making these remarks, we are far from insinuating that the work is an insincere one. On the contrary, we are convinced that Mr. Wharton Jones, if wrong at all, is self-deceived; without the smallest doubt, he believes most thoroughly all that he states. That he has been too credulous of his patients' statements we do believe; and, the subject being a very important one, it becomes a duty to examine his assertions carefully.

The book consists of two parts, by far the larger being an exposition of the physiology of the vaso-motor nerve, its influence in regulating the circulation of blood, and especially its distribution in connexion with the eye. There are not many new facts in this part, and at the same time there is nothing to take exception to. No one now doubts that the vaso-motor nerve has very important connections with the cervical spine, or that it supplies certain parts of the eye, the blood-vessels included. From these physiological facts it is, however, scarcely safe to conclude that, whenever a man who has been shaken in a railway carriage alleges a defect of sight, the vaso-motor nerve satisfactorily explains all. We have read the book carefully through, and nowhere do we find any hint of a suspicion on the part of its author that in many of these cases the complaints are in reference to damages expected rather than those already received. Now a surgeon ought surely to come to a "railway case" with a sceptical mind: he should believe nothing until he has most carefully sifted the evidence, and his suspicions should be constantly present. Mr. Jones appears to us to have allowed his physiology to put all doubts to rest. "I have shewn that it is possible, therefore it is true" is the line of reasoning suggested. Now, in the first place, we will suggest that there are facts which do not support the belief that irritation to the cervical sympathetic is likely to disturb the nutrition of the eye. Cases are fairly common in which, from aneurisms, solid tumours in the neck, accidental violence, or other causes, the cervical sympathetic has been first irritated and then paralysed, and in these, as a rule, no disturbance of the retina has resulted. The symptoms are definite and well known, and do not include any degree of blindness. Nor do we, in the numerous cases of disease of the cervical spine itself, from causes other than railway accidents, meet with any form of amaurosis. Far from denying that there may be such a thing as "spinal amaurosis," admitting fully that Mr. Jones's hypothesis may sometimes be correct, we urge simply that there are numerous difficulties to which he has not alluded.

If, however, our author seems to have too readily fallen in with the

temptation to make pathological inferences from physiological facts, he has undoubtedly found confirmation in his creed from the ophthalmoscope. From this method of observation, there is at first sight no appeal. An ophthalmoscopic witness in court is a tough customer. He deposes to what he has seen, and to what, probably, no one else has had any opportunity of examining. If he assert that there are visible changes in the eye which enable him to prognosticate blindness, he can be met only in one way; and that is, by producing another skilled witness who will depose that he sees nothing of the sort. Hence those displays so discreditable to our profession. We feel, therefore, very unwilling to admit ophthalmoscopic data of a doubtful kind. A wit once asserted that clergymen were obviously likely to get behind the rest of the world in theology, for said he "I hear a hundred sermons on it yearly from different men, but a clergyman hears only himself." We fear that something like this has befallen Mr. Jones: he has taught himself the ophthalmoscope. If he had ever listened to a class lecture on the fallacies of the instrument, he would, we feel sure, have been more careful as to such expressions as "congestion of the retina," "pigment on the disc," etc. Increase of arterial blood supply to the retina is a thing often talked about, but very rarely seen, and deposit of pigment on the disc is almost infinitely rare. Passing by these, however, as matters on which perhaps our opinion might be disputed, we find, at page 215, conclusive proof that Mr. Jones never heard the lecture to which we have referred. "Under the ophthalmoscope, the optic discs were observed to be opaque and white in the middle, and very red from vascular injection in the peripheral part. Supposing the diameter of the disc divided into three, the central opaque white part occupied the middle third." It is easy to recognise in this description what is called the *physiological cup*, an appearance which is perfectly normal. The same error is repeated at another place. We are also told respecting several eyes, that the disc appeared so much congested as scarcely to be distinguishable from the adjacent retina, an expression which is puzzling to those who know that the disc is normally much redder than the retina, the latter indeed being not red at all, but perfectly colourless.

The ophthalmoscopic evidence is, in every case, of that vague kind about which observers might easily differ—"tortuous veins", "injection of retina", "redness of disc", are the expressions which occur over and over again. In no case is it stated that any other authority saw the same patient and agreed in the report; and we must note it as singular that no case is given in which Mr. Jones found nothing abnormal. Such must surely have come under his observation.

The tendency to take things for granted is shown repeatedly. Thus at page 223, under the head "Amaurosis from Tumours of the Brain", a case is given "as a standard by which to illustrate and compare the cases of amaurotic failure of sight from injury to the head." Now, after this statement, we find a case in which the patient is still living, and in which, therefore, there is no proof that his symptoms depend upon a tumour or other morbid state of the brain. The following is the curious description of ophthalmoscopic appearances in this case. "The choroid pigment was seen shining through the retina, and the optic disc presented the dense blueish whiteness of atrophy. The retinal veins were gorged and tortuous." Now, surely, the choroidal pigment always does "shine through the retina", the latter being, in all states of health, perfectly transparent; and it is, perhaps, as a set-off against this statement of the universal that we are favoured with another, which is almost incredible, that the veins were gorged whilst the disc was atrophied. We would gladly have abstained from drawing attention to these little matters had we met with them under other circumstances; but, when they are found in a work on the railway speciality, and when we find the ophthalmoscope appealed to as bearing testimony from which there is no escape, it becomes our duty to show that, at least, opinions may differ as to the interpretation of what it reveals.

In conclusion, if any one wishes to read a good summary of the neuro-vascular doctrines of the day, or to study the phenomena of inflammation, so far as the vessels are concerned, we can cordially recommend this work. As regards its clinical, or rather its railway part, we must protest, however, that it is thin and unsatisfactory.

THE STUDENT'S GUIDE TO MEDICAL DIAGNOSIS. By SAMUEL FENWICK, M.D., Assistant-Physician to the London Hospital, etc. Pp. 176. Churchill and Sons. London: 1869.

THIS little hand-book will, we think, serve its purpose admirably. It is just what students have wanted. It is concise, clearly written, and well up to the day. The sections and paragraphs are so arranged that reference is most easy; and, in addition, a good index is appended. Dr. Fenwick states, in his preface, that as the work is intended "for students who have not as yet acquired any professional knowledge, ex-

cept in anatomy and physiology, all technical words have been avoided, as far as practicable, and the explanations given in the plainest language. Drawings and diagrams have been employed wherever the nature of the subject permitted their use." There are more than forty illustrations, and, with a few exceptions, they all tell their tales well. To facilitate the making of bedside diagrams, some outline figures are introduced, with a piece of carbon-paper, which will be found very useful.

The only improvement which we would venture to ask for in another edition is that some of the diagrams which are copied from other authors may be replaced by original and better ones. That at page 32 explanatory of crepitation, *râles*, etc., is surely misleading. A *râle* is not produced by a larger or smaller vesicle floating about like a soap-bubble in the air-passages, but by the existence of diaphragms of adhesive mucus in the tubes through which the air bubbles as it ascends. Da Costa's interpretation of it seems to us absurd.

NOTES ON BOOKS.

Dr. Tanner's Manual of Clinical Medicine and Physical Diagnosis. By TILBURY FOX, M.D.—"Small Tanner" has appeared in a new form, revised and enlarged by Dr. Tilbury Fox. The work is elaborated with great ability, and the matter brought up to the present date. Chapters are devoted to the laryngoscope, ophthalmoscope, sphygmograph, and thermometer, with directions for their use, and with the indications which they afford in regard to disease. The present volume is neatly got up, and in a more portable form than the last edition.

An Introduction to the Study of Heat, by TEMPLE AUGUSTUS ORME, Teacher of Chemistry and Experimental Physics in University College School, is written for use in schools by those who have a fair knowledge of arithmetic and an ordinary amount of intelligence. Mr. Orme has succeeded admirably in avoiding the extremes of extensive scientific elaboration and puerile superficiality, and has thus produced an educational work which is well fitted for giving all, who study it with understanding, a very thorough insight into the laws and phenomena of Heat. Examples are given, here and there, involving arithmetical computations, with the view of bringing into application the principles learned in the study of pure mathematics.

Is Vaccination Injurious? By HENRY ALLEYNE NICHOLSON, M.D., D.Sc., M.A., etc.—This pamphlet is avowedly popular, but it strikes us as combining precision with comparative absence of technical terms in a manner that we do not commonly meet with in popular expositions of scientific subjects. In the first chapter, we find a concise account of small-pox, from which any one may learn the broad facts in the natural history of this disease, and gain a glimpse of some points common to variola and other contagious fevers. There is next a chapter on vaccination, explaining the relation of vaccinia to variola, and the reason why small-pox may occur after vaccination. The author is cautious in giving a verdict on the "deterioration of humanised lymph" question; but he evidently leans to the side of those who believe that transmission through the human organism does not diminish the protective power of vaccine matter. He throws out the suggestion that the apparent deterioration may be due to hereditary transmission of immunity—an hypothesis which has also been suggested in the case of syphilis. He advocates revaccination. The concluding chapters are occupied with the possibility of other diseases being communicated by vaccine lymph, and in a refutation (unnecessary, certainly, for any medical man) of the moral objections to vaccination. The author evidently does not believe in the occurrence of any but the most exceptional bad results from the operation—results which may follow any breach of surface from any cause. He makes some suggestions for the efficient performance of vaccination, with several of which we cannot agree, but which we give almost *verbatim*:—"1. That the public vaccinator, as at present appointed by Government in every district, should be compelled, prior to his appointment, to give full and satisfactory evidence that he is thoroughly acquainted with the principles and practice of vaccination. 2. That the public vaccinator be compelled to vaccinate in the manner and to the extent recommended by the best authorities; and that he be compelled to state on his certificate the number and characters of the cicatrices produced in each case. 3. That all persons residing in the district be compelled to employ the public vaccinator to vaccinate their children, whether he be their medical man or not. 4. That Government should allow a small additional fee for every case in which the vaccination is of the 'first class' as regards protective power. 5. Compulsory revaccination between twelve and sixteen years old is desirable."

Manual of Comparative Anatomy and Physiology. By S. MESSENGER BRADLEY, F.R.C.S.—Mr. Bradley has published this little book for the use of those who require an elementary knowledge of comparative anatomy, and who have not time to master the excellent and voluminous treatises on the subject which already exist. He has collected his information from the best sources, and has put it into a shape which is likely to be useful in laying a good foundation of knowledge. With mastering the contents of the book, some may be satisfied; but we may hope that they will, in many cases, stimulate the desire for a more intimate acquaintance with the facts of one of the most interesting of sciences.

Syphilitic Waxy Degeneration of the Liver is the subject of a pamphlet by Dr. L. WETZLAR. The following points are brought prominently forward. There was frequently an interval of many years between the syphilis and the liver-disease. During this interval, there was often entire absence of external signs of syphilis. Nearly half the patients under Dr. Wetzlar's care were suffering from well marked disease of the cerebro-spinal system (epilepsy, paraplegia, hemiplegia). Anæmia was noted in nearly all, and in many the spleen was enlarged. There was no reason to suspect disease of the kidneys in any case. Syphilitic waxy degeneration "seems not to bring on such disturbance of nutrition and of general health as we might expect from an organic change marked by such immense enlargement as syphilitic waxy degeneration generally shows." Dr. Wetzlar considers mercury in small doses very decidedly the best treatment, unless the patient have already taken it in large quantities. Iodide of potassium is often given after bichloride of mercury or mercurial inunction. The effect of mercury in reducing the size of the enlarged liver and spleen is said to be very marked and very rapid. In several cases, the liver was reduced to its normal size in about eight days. Dr. Wetzlar considers that iodide of potassium is of no use unless preceded by mercury. In most cases, the coexistent symptoms of disease of the nervous system were improved while the patients remained under observation. No opportunity has yet occurred for a *post mortem* examination in a case of syphilitic waxy disease of the liver.

A Guide to the Examination of the Urine. By J. WICKHAM LEGG, M.D.—We are glad to welcome this little work. It contains, with one or two omissions, sufficient information for the student regarding the methods of examining the urine in all ordinary cases. It at the same time points out the fallacies into which he is likely to be led, and notices the clinical import of the absence, decrease, or increase of the normal constituents of the urine, or the presence of foreign substances. An appendix, with directions for estimating, by volumetric or other analyses, the principal substances found in the urine, and a short chapter on the use of the polariscope, are added. The book is just what was wanted—a handy guide to the examination of the urine, for students and busy medical practitioners; and it only requires a little more care and elaboration to make it an admirable one.

The Annual Report of the Resident Registrar of St. Mary's Hospital, 1869.—The Report of the Resident Registrar, Mr. MILNER MOORE, is just out. It contains many valuable details of medical and surgical interest. The total number of patients admitted during the year was 2,022. The mean residence in the hospital of each patient was thirty days. The number of deaths was 176, the rate of mortality being 8.7 per cent. In the medical wards, there were eighty-one cases of acute rheumatism, two of which died—one of pericarditis; and the other, suddenly, with delirium. As many as seven patients died with cirrhosis of the liver, and fourteen with granular degeneration of the kidney; in four of these latter, there was also cirrhosis of the liver. Of eleven cases of typhus fever admitted, seven died; and of typhoid fever, six out of thirty-three died. There were three cases of pyæmia, all of which died. On the surgical side, amputations of the thigh were very successful, there being only one death in seven; while, in amputations of the leg, there was a mortality of three out of six cases. Pyæmia proved the most frequent cause of death in the surgical wards; fifteen cases of that disease occurred during the year—four after amputations of the extremities, two from lacerated and incised wounds, two after fractures, one after ligature and incision of hæmorrhoids, one after stricture of the urethra, three from scalp-wounds, one from embolism after confinement, and one from metritis after dilatation of the os uteri by a sponge-tent in a case of fibrous disease of the uterus. There were four cases of cut throat, of which one died (from fracture of the skull). Ovariectomy was performed during the year on three patients, two of whom died. In twenty cases of fractured ribs, there were three deaths—one from pyæmia, two from general contusions. These are a few details which we have culled from a report which contains a mass of admirably arranged and most valuable material, and which is well worth careful perusal.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, NOVEMBER 6TH, 1869.

PREVALENT DISEASES.

RELAPSING fever and scarlatina are, we believe, the only maladies of the more dangerous class at present unusually prevalent in London. The wide spread of the foot-and-mouth exanthem in cattle, and the belief that, under certain circumstances, this disorder is communicable to the human subject, have set many skilled observers at work to see if cases of illness attributable to this cause could be found. We have more than once, in these pages, invited our readers, should such facts come under their notice, to record them. The result has been, "much cry and little wool." Excepting a few ill-observed cases, in which sore mouths have happened in several members of a farmer's family, and have been attributed to diseased milk, but little has been brought to light. Whether these sore mouths were really in such relation or not, it is impossible to say; and should it be admitted that, in some instances, the milk was probably the cause, we still have the important question to ask, Was the effect merely a local one, or was it a manifestation of the specific fever? In cattle, the malady is not merely a sore mouth; it is a fever with general symptoms, and with a symmetrical eruption on the hairless parts of the surface. Were it communicated as a specific fever to man, we should, *à priori*, expect not merely follicular ulcers in the mouth, but a cutaneous rash also.

There appears to be a strong impression amongst those having good opportunities of observation, that follicular stomatitis in children has been unusually prevalent of late. It is, however, a complaint which is always about more or less; its contagious nature has not been proved, and it would be unsafe to infer much from what may, after all, be a mere coincidence. We would, however, ask the careful attention of those who see much of children's diseases to this malady, with the view of deciding, if possible, whether it be infectious, whether it observe stages, and whether it be attended by any skin-eruption, which is more than a merely accidental concomitant. Mr. Curgenvin records in our present number some interesting facts as to a malady which in two groups of cases appeared to be contagious, and of which the chief phenomena were a febrile attack with sores in the mouth and on the tonsils, and an eruption looking like herpes on certain parts of the surface. The eruption did not shew itself in all, and in those in which it was limited to the lips and the adjacent parts, may have been merely symptomatic herpes—the herpes which comes out in every malady preceded by a rigor. Those cases in which the backs of the hands were affected resemble closely some of the forms of the malady to which Bazin has given the name Hydroa. It would be very interesting to know whether other observers have recently seen other cases resembling those referred to, and if so, under what circumstances. The evidence connecting these cases with diseased milk seems very slight.

The easterly winds and sharp weather which set in so suddenly three weeks ago, must have afforded to a large portion of the profession the opportunity of studying, subjectively, the phenomena of "a common cold." They are well worth study. In the first place, we may note the remarkable difference in liability of different persons. A very few are able to boast that "they never take cold"; and it is perhaps probable that those engaged wholly in out-door occupations are much less liable than others. A great many robust persons are liable, however, almost periodically, to bad colds; not that the cold ever comes quite spontaneously, without any

exciting cause, but often the cause is a very slight one, and would have been quite inadequate at other times. Such a person, having gone through his cold, and got rid of it, feels confident of immunity for a time. His period may be one of weeks or of months; but, until it comes to an end, or nearly so, he may run almost any risks, and will take no hurt. To expect, by any kind of care, to go long past the usual time—to go, for instance, through a whole year without a cold, would, in such a person, be about as reasonable as to hope that the tax-collector will forget to call. If the interval be unusually long, the cold will probably be unusually severe. Those who are liable to periodic catarrhs, may almost be compared with those liable to periodic epilepsy. In each it would seem as if the nervous system had to regain a certain degree of tension before the explosion could recur. The phenomena of periodic colds are usually remarkably uniform in each attack. You have been feeling remarkably well—boasting, it may be, that you have at last succeeded in hardening yourself, and "do not catch cold now"—when suddenly you begin to be aware of a salt taste above the soft palate, and a disagreeable sense of constriction in the nares. You know what that means, and you recount your doings of the last twenty-four hours, and probably recollect that you sat in the board-room in a draught, which was so disagreeable that you were obliged to change your seat, or that you got your feet a little damp. Damp feet, however, we may remark in passing, are more likely to bring on sore throat than nasal catarrh. Soon following the saline taste in the throat, is a tendency to sneeze, and a discharge of clear watery mucus from the nostril, and you now begin to feel generally uncomfortable. On the next day, your jaws ache, and your tongue is dryish, for you have been obliged to keep the mouth half open; you have profuse mucous discharge, and feel miserably chilly and ill. The one comfort is the certainty that your complaint is one which will go through its stages and then vanish. During the decline of the cold, there are some occurrences worth noting. Herpes comes out about the lips, in connection, no doubt, with the tendency to rigor in the early stage, and usually proportionate in severity with that tendency. The throat becomes sore as the nasal discharge ceases, and there is a little expectoration, with pharyngeal cough. In some persons, the reverse of what we have described takes place, and sore throat and cough come before the nasal flux. The throat-symptoms may last ten days or more, and may be aggravated into a catarrhal tracheitis, or even bronchitis. At length all passes away; you feel as well or better than before, and rejoice in the prospect of immunity for a long time to come.

The *juvantia* are as interesting as the malady itself. If, during a bad catarrh, you go out into the cold, you will be, whilst exposed, tolerably comfortable—at any rate, if taking exercise; the discharge from the nose will abate, and you will fancy yourself much better; but in returning to a warm room in the evening, the penalty will have to be paid, and the catarrh will return with increased violence. If you go to bed and take measures to secure diaphoresis, you will be fairly comfortable as regards the nose and head whilst the skin is acting. If you drink hot brandy and water, you will find that, when just short of slight intoxication, your feet become hot, and all tendency to shiver ceases; you are no longer fidgety as regards draughts, and the nasal discharge is suspended. With some persons, the same effect may be gained by a full dose of opium; and, after either opium or brandy, if other advantages (a warm bed, etc.) be secured, the cold rarely returns so severely as before. Sometimes a real cure, or cutting short of the attack, is the result. Whilst a cold is passing off, it is wonderful how susceptible the nervous system is. The slightest causes will induce ear-ache or tooth-ache, or make the glands swell. In those liable to it, neuralgia testis may happen.

The advocates of the modern doctrines of nerve-pathology think that they see in the causes, symptoms, and sequelæ, of a common catarrh, illustrations of the correctness of their opinions. The differences in individuals, which make one liable and another not so, are clearly differences in nervous susceptibility, and not in blood. The causes which excite colds are also those which act on the nervous system, not in

the blood. Is it possible, they ask, to account for the everyday fact, that cold-damp to the soles of the feet will induce sore throat, or will relax the blood-vessels of the Schneiderian membrane, and cause a profuse secretion of mucus, except by believing that the nervous system is the agent? That the phenomena are not the result of local causes is, they say, clear enough, for every one knows that the direct inhalation of cold air rarely hurts, and that a draught from behind or from one side is more risky than one in front, and that cold applied to the feet is far more efficient than cold to the face. They insist that the *rationale* of a cold is that of a reflex disturbance of nutrition; and that in it we have a proof that it is possible for a cause applied at a distance to induce vascular turgescence and flux of secretion in a part which is correlated only by means of nerves. They add, also, that what we see so constantly in an ordinary cold is but a type of what is probably common in many other maladies—pneumonias, diarrhoeas, pleurisies, hepatic disturbances, etc., are all of them catarrhal in nature, and of reflex-nervous causation. They push their doctrine yet further, and wish us to believe it probable that, if cold to the feet can make the throat inflame, heat to the feet may do something in the opposite direction; and they think they see here the real explanation of the uses of counter-irritants.

If these views may be accepted, it is clear that we have in the proneness to catarrhal explosions a very valuable means of estimating the nerve-tension of the individual. We can tell, respecting such a man, whether it is easy or difficult to derange the working of the vaso-motor nerves. It would be a very interesting task for any one of leisure, and with a taste that way, to collect particulars as to those who "never take cold." First, we might get to know whether they are liable to any other substituted ailment—such, for instance, as diarrhoea and liver derangement; secondly, of those who neither take colds, nor show any other form of periodic ailment, it would be interesting to know whether they enjoy a remarkable steadiness of circulation, not being liable to cold feet or to flushings, not excitable, not easily cognisant of changes of weather, and the like.

Catarrhal maladies generally are worthy of more investigation than they have received, and much light would, probably, be thrown on several departments of pathology by work in this direction. The *Catarrhal Constitution* might, perhaps, be defined to be that state of organisation which renders its subject liable repeatedly, on slight and indirect causes, to local inflammations, each attack having usually a definite duration, and affording a temporary protection against another. It would be a matter of great convenience if the epithet catarrhal were refused to all disorders which do not, as a rule, recur over and over again in the same individual. The more intense the catarrhal constitution, the shorter the intervals between attacks, and the slighter the causes requisite to produce them. It by no means follows, however, that in those in whom the intervals are short the attacks will be severe; rather, they are often most violent in those who have long rests.

The disorder known as *catarrhal ophthalmia* has not, as far as we are aware, been unusually prevalent during the last month; nor is it, indeed, noted to be in any relation to changes of weather. According to the definition which we have tried to give, it is not a catarrhal malady at all; it is rather a local and accidental one. It rarely occurs more than once to the same person; and, if it do, it is a mere matter of second contagion. Catarrhal ophthalmia, in the specialists' sense, is a specific malady, wholly distinct from the watery eye which attends a common cold. It is scarcely ever seen in conjunction with nasal catarrh. It is characterised by puro-mucous secretion, by intense congestion, and the liability of the congestion to result in ecchymoses. Its tendency to become chronic, if not properly treated, and the remarkable certainty with which it can be cured by mineral astringents, are also noteworthy features. It is remarkably contagious, and is wholly unattended by febrile disturbance. Contagious puro-mucous ophthalmia, although not such a convenient name, would be a far more correct one than that which it at present bears.

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EARLY MARRIAGES.

THE question of early marriages is, perhaps, rather a social than, strictly speaking, a medical one. It is, nevertheless, very closely connected with many others upon which medical men must give their advice, and respecting which it is desirable that they should form opinions.

That the asserted danger of over-population is a matter of great importance to us all, may be enforced by reference to the fact that one of the most philosophic and thoughtful, as well as perhaps the most responsible in our ranks, has just strongly recommended early marriages as the only true means of preventing prostitution and diminishing the prevalence of syphilis. When men like Mr. Simon and Mr. Mill are found actively engaged in opposite camps, we may infer that the subject is not only one of importance, but also of great difficulty. In further proof of the importance of the matter to our profession, and that of the right of medical men to be heard respecting it, we may allege none understand so well as they what most of the "preventive checks" really mean, or are so competent to judge as to the probable consequences of attempts to prevent or modify the natural development of the sexual instinct.

About the question as to the law of population, we shall hold no dispute. That Malthus made a most important step in our knowledge of our relations to the world on which we live, when he drew attention to the fact that the ratio of increase of food is often far below that of the human family, no one can doubt. No one who has mastered his statements can question for a moment that his so-called law is a fact in Nature, from which there is no escape, and that it points to a possible danger of frightful extent. We will add further, that no one who has read in the original the writings of this much traduced author, can hesitate to accord admiration to the benevolence of his heart and the sagacity of his intellect.

The great Malthusian principle is simply this, that living beings, if they multiply at all, do so in an increasing ratio—in other words, that when you have doubled your brood-stock, you have a double stock to breed from. This seems the merest truism; but it is strange how easily it is lost sight of. A farmer, for instance, who begins with a pair of animals—knows well enough that, within a definite period—say in three years—he may expect to have four, if procreation be favoured and life protected; in another three years, he will have eight; and in three more, sixteen; and so on, until he has a gigantic herd, which herd, if the pastures be large enough, will still go on doubling every three years. It is quite clear that no amount of human industry or skill can make the same plot of earth increase in productiveness in anything like a corresponding ratio, and therefore evident that, sooner or later, this multiplying herd will want for food, and that its winter shelter will be insufficient. Now will come into play "checks on population," and they may be of various kinds. The farmer may, if he likes, leave it all to so-called "Nature", and allow positive starvation to do its work; or he may resort to murder, or he may take measures to restrict procreation. We beg to assure our readers that we are not about to suggest anything horrible, or to repeat in any form the dark hints of the dialecticians. In due time we are quite prepared to go as far as one of our eloquent cotemporaries has already gone in denunciation of Lord Amberley and his counsels. Meanwhile, however, we should like to know our ground; to look the matter, with all its intricacies, fairly in the face; to understand first, and condemn or approve afterwards. No honest man, with any reputation for taste whatever, can look at English society, as it at present exists, and say that he is pleased. For the moment, we will make no comparisons either with other countries or with past times in our own land; we will take simply the features which are offered by the present, and say of them merely that they might be much more beautiful than they are. Poverty, intemperance, luxury, prostitution, ignorance, infanticide, and crime, are rather prominent features in the picture which we are asked to criticise; and, as fair critics, we must declare that they are ugly, and that they detract most grievously from the general effect.

Now, as regards a certain portion of these evils—those especially

which spring from poverty—there are many amongst us who incline at once to attribute them to over-population. Malthus has more disciples than most people think for; many who almost shudder at his name, practise and recommend his doctrines. Those who hold that over-competition is wearying men's souls and wearing out their bodies; that superfluous population is the cause of want of work, and, therefore, indirectly the cause why young men take to dishonesty, and young women to prostitution, are all in Malthus' camp. The poor woman who suckles her child a year longer than the proper time, in the hope of delaying her next pregnancy, is a practical Malthusian; and there is a yet larger class, and one which still less suspects its own leadership. The parent, who discourages his son's marriage because his business is not good enough; the Poor-law guardian, who angrily asks his quivering applicant, "Why did you marry?" the benevolent lady or clergyman, who looks regretfully on the teeming alley, and sighs over "the improvident marriages of the poor," are all Malthusians at heart. They one and all acknowledge that over-population is an evil—and more than that, in the prudence which they recommend, they admit the principle that it is right, or indeed a duty, to allow human thought to act as a check on human instinct, and to alter what would otherwise be the natural current of things. Of course! for what other earthly use was the faculty of thought given us, than that we should look beforehand and regulate our present conduct by its probable results? To deny this, is to deny the nature of prudence; to become natural in the sense of falling back on the ignorant instincts of the brute. Yet this is precisely what Malthus asserted. He went into no detail as to the remedy; he simply stated what all must believe, that over-population is a great evil; that natural laws and natural instincts tend inevitably to produce it; and that it is for the nobler faculties of man, his conscience, his benevolence, and his intellect, to find the best means of help.

All shrink instinctively from what is well called the "misery-check" on population. It is the only one to which the lower animals in a state of nature are subject, and with them it works well enough, killing off the weakly and saving the strong. It would act in the case of man, it has acted on many a sad occasion, it still silently acts; but there can be no *degeneration*, it *degrades* it and robs it of every blessing. Man is provided with faculties of a kind which render it impossible that he should be submitted without detriment to such rough discipline. His memory is retentive, his affections are deep and lasting. Instruct him, whether by precept or by the lessons of stern necessity, that he must fight his fellow man for a living, that the battle is for existence, and that the weakest must succumb; tell him that this is nature's law, and in proportion as you make him feel and believe it you isolate him from his fellows, you debase that perception of mutual relationship which is at once the glory of humanity and the bond of love. To leave the population question to work itself out unaided, under natural laws, would be indeed to secure in due time the realisation of everything that is opposite to the maxim—

"Oh! make us happy, and you make us good."

The misery check is a very dreadful one; let us ask next how the prudential check stands. We will understand for the present by "the prudential check" simply delayed marriage. It has, as all know, several other developments, and to some of these we may refer at a future time, but prefer to pass them by for the present. There are probably but few in any civilised community who do not recognise the duty of delaying wedlock until there is a reasonable prospect of being able to maintain a family. Differences of opinion as to detail of course abound, some thinking that a man should be bold, and take the future somewhat on faith; others, that he should not go a step further than he can see his way with the utmost clearness. But all acknowledge the principle, and hope by its aid, each individual doing his share, that population will increase no faster than the food, clothing, and means of education which are provided for it. So far all seems well; but let us, as medical men, conversant with the secrets of social life, look at the other side of this prudential principle, and say whether it be not very dark. Mr. Simon, as the responsible adviser of our Government, has,

as we have seen, given his verdict. He finds syphilis an enormous evil: he has examined the measures proposed for its mitigation, and to his mind early marriage, as a national habit, is the only feasible one. The moralist, perhaps, need scarcely be reminded that the prevalence of syphilis implies that of prostitution and of sexual debasement generally; and the social statistician knows well enough that these, as a rule, increase with density of population and the development of detailed civilisation. There are many of the latter class who will regard the recommendation of early marriage to the English population, in its present state, as simply idle. They will say that it is utterly contrary to the prudential instinct, and that, apart from the question of desirability, it cannot be followed. They will point to the lesson of the past, and say that with a dense and increasing population the tendency is always to late marriages, and that the ratio of the single to the married invariably rises under such conditions. And, seriously, this is the true state of the case. Unless the English nation can change its habits; unless it can adopt a social code far in advance of what any other nation has ever practised, there can be no question that earlier marriages are beyond our hope. They will be deferred in the natural course of things later and later in each succeeding generation, and to the poorest part of the community, if it be prudent, they will be almost forbidden. What is known as "immorality" will increase correspondingly, and that, too, in spite of any exertions which may be made by the religious world. The prospect is not cheerful, but at the bottom of the Pandora box there is hope still.

We have admitted candidly the truth of Malthus' law; we have granted that to willingly permit the unrestrained action of nature's check is a thing not to be thought of without horror; we have asserted, lastly, that the prudential check—the form of repression generally approved by society—is the parent of vice. What then remains? From this dilemma is there no escape?

THE sum already subscribed to the Faraday Memorial Fund amounts to upwards of £1,100.

THE new wing at Guy's Hospital is almost half finished, and will be completed in all likelihood by July 1st.

THE building of a new hospital has been commenced in New York. It is to consist of seven buildings, and to cover a space of 56 by 178 feet. The funds for its erection were left two or three years ago by a Mr. Roosevelt, and now amount to nearly a million dollars.

THE new convalescent hospital at Cheadle, in connexion with the Manchester Infirmary, is to be called "The Barnes Convalescent Home", in honour of Mr. Robert Barnes, who has contributed £10,000 to the support of the institution.

SOCIETY OF APOTHECARIES: PRIZES IN MATERIA MEDICA.

AT the recent competitive examination of medical students for the prizes in Materia Medica and Pharmaceutical Chemistry, annually given by the Society of Apothecaries, the successful candidates were:—1. William Johnson Walsham, St. Bartholomew's Hospital—a gold medal; 2. William Allnutt, King's College—a silver medal and a book.

THE WELSH FASTING GIRL.

AT the request of several medical and other gentlemen in Wales, it has been arranged to send three reliable nurses from Guy's Hospital to watch the girl who has lately been the cause of so much curiosity in the public mind, and thus, once and for all, expose the imposition in which she has been so long encouraged.

DONATIONS TO LONDON CHARITIES.

DURING last week, large sums of money, amounting to more than £13,000, were presented by anonymous donors (or perhaps a single donor with different initials) to hospitals, convalescent homes, refuges, etc., in and near London. Among the donations was one of £1,000 to the Metropolitan Convalescent Institution.

THE MEDICAL COUNCIL.

DR. G. M. HUMPHRY was, on Tuesday last, elected representative of the University of Cambridge in the Medical Council, in the room of Dr. Paget, lately appointed President. There was a contest for the office between Dr. Humphry and Mr. Lestourgeon—the former obtaining sixty-eight votes, and the latter sixteen.

PAYMENTS BY HOSPITAL PATIENTS.

AT a quarterly meeting of the Governors of the Bristol Royal Infirmary held on October 26th, an amended code of rules was taken into consideration. In the course of the discussion, Dr. Davey suggested that the plan should be adopted which was followed at the Hambrook Village Hospital, where each in-patient paid an average of three shillings per week (the sums varying from one to seven shillings); and each out-patient one shilling, if visited at his own house, or sixpence, if attended at the hospital—the privilege in each case lasting six weeks. He considered that such payments would not only do good to the Infirmary, but would have a beneficial effect on the patients by preventing them from feeling that they came as paupers. It was decided by the Chairman that the question could not be discussed on that occasion; but that, if desired, a special board might be summoned to discuss it.

POOR-LAW UNIONS AND PUBLIC HOSPITALS.

AT the meeting to which we have above referred, Mr. Bernard called attention to the practice followed by Poor-law Unions, of subscribing to public hospitals in order to send patients to them. He said that each patient would cost the union eight shillings a week; and he saw no reason why unions which sent their patients to the Infirmary should not pay this sum with each. The subscriptions from Poor-law Unions, for the privilege of admitting patients, should be refused.

OPENING OF THE MEDICAL SESSION IN LISBON.

THE Session of the Medico-Chirurgical School of Lisbon was opened on the 5th October, in the presence of King Luis. Dom J. da Luz, the director of the school, conveyed, in brief but warm terms, the thanks of the school to His Majesty, who, in reply, expressed the deep interest which he felt in the prosperity of the Faculty of Medicine in Lisbon, and in the progress of science. After the proclamation of the names of the prizemen, Dr. Alvarenga delivered an address.

THE SUCCESS OF THE COMPULSORY VACCINATION ACT.

DR. ROSS, the Medical Officer of Health for St. Giles's, has recently inquired into the operation of the Compulsory Vaccination Act in that populous district; and, in a report to the Board of Works, he states that "during the year 1867, the year preceding the operation of the new Act, the mortality from small-pox was thirty-one. On January 1st, 1868, the Act came into force, and during that year the mortality sank to six; whilst, during the first nine months of the year 1869, there has not been registered a single death from this disease. Stronger proof," Dr. Ross adds, "can scarcely be afforded of the beneficial operation of any legislative measure for the arrest of a frightful disease."

OPENING OF THE SESSION AT THE UNIVERSITY OF MADRID.

THE recent opening of the Session in the central University in Spain was, says the *Gazette Medicale*, a scene of indescribable noise and confusion (*tohubohu*). Every cry, articulate and inarticulate, from the Indian war-whoop to the crowing of the cock, was to be heard. The sounds of the trombone were mingled with those of the fife—at least, there was a very good imitation of this. There was a disorderly push and scramble on entering the amphitheatre, and again on leaving it. In the midst of the confusion, the orator of the day pronounced an eulogy on M. Zorrilla, who, on the occasion of the revolution, established a new system of instruction, which, it is said, is full of error and deception. The Madrid medical journals lament the scene of anarchy; and the *Gazette Medicale* rightly observes that progress is obtained by gradual and wise reforms, not by sudden overthrows.

AN INHUMAN INVALID.

MR. RITON OLDHAM of West Hartlepool was recently called to attend a man who had met with an accident on the railway. Mr. Oldham was at the time ill and in bed, and sent a message requesting that another doctor might be called. The man died; and, at the inquest, the jury thought fit to censure Mr. Oldham for "inhumanity." To increase the absurdity of the proceeding, the censure was given in Mr. Oldham's absence, and without having heard his explanation in any way. The coroner has since explained, in a letter to a local paper, that the only verdict really recorded was "Accidental Death;" and that he did not consider the words of censure in any way a part of the verdict. Still the fact remains as we have recorded it.

MEDICAL CLUB.

THE opening dinner for the present season of the members and friends of this club, was held on Wednesday last. Sir W. Fergusson, Bart., presided. At a meeting of the committee of the club, on Wednesday, the same day, Dr. Livingstone was unanimously elected an honorary member of the club, on the proposal of Dr. Richardson, seconded by Mr. Edwin Saunders. The honorary secretary was requested to write to Dr. Kirk, Zanzibar, conveying to him, for Dr. Livingstone, the above resolution, and expressing the gratification which it will afford to the members and committee to offer to Dr. Livingstone a home at the club upon his return to England.

APPOINTMENT OF THE PUBLIC VACCINATOR IN LIVERPOOL.

WE learn from the *Liverpool Daily Post* that the select vestry of that town have recently conferred the appointment of Public Vaccinator, vacant by the death of Dr. Games, upon Dr. A. B. Steele, who also holds the office of teacher of vaccination and distributor of vaccine lymph for the public service in connexion with the Medical Department of the Privy Council. We believe that this appointment has given much satisfaction to the profession in Liverpool, and is regarded as a fitting recognition of Dr. Steele's labours as an earnest and zealous worker in vaccination. The selection is one on which the vestry may be congratulated, as doing credit to their judgment.

DISPENSING PHYSICIAN.

THERE is a vacancy for a physician to the Lincoln County Hospital. We notice, as a not unimportant sign of the changing times, that the Committee have thought it advisable to alter one of the rules, and to omit from it the words, "and no one practising pharmacy shall be eligible for the office of physician." The Lincoln Hospital has two physicians and one hundred beds, and is in its centenary year. Dr. Harrison is, we observe, a candidate for the vacancy.

A NEW VILLAGE HOSPITAL.

THE Rev. Henry Majendie, Vicar of Speen, Berks, has just erected in that parish a commodious and well designed village hospital for the reception of poor persons suffering from disease or accident. It is built of brick, and stands in an open and pleasant part of the village. Six or seven beds will be made up to commence with. The management has been entrusted to a skilled nurse from London. The practitioners in the neighbouring town of Newbury will attend the patients. The furniture has been supplied gratuitously by the parishioners, some of the poorest having contributed.

DEATH OF A LUNATIC FROM INJURIES.

AN inquest was concluded at Hanwell on Saturday last, on the body of a man who had died with a fracture of the sternum and nine broken ribs. He had only been eleven days in the asylum, and had been previously twelve days in the Westminster Union House. There was no reason to think that, when brought to Hanwell, he had any serious injuries. At the *post mortem* examination, an abscess was found behind the fracture of the sternum, which made it certain that the injuries had been received some days before death. The man died on a Thursday; and it was admitted that, on the Sunday before, two of the attendants had

dressed him by force, holding him in bed at the time. During the whole of the interval, the man had been very ill, though he still got up each day. It was stated that he had also had a fall. He was an emaciated, feeble man, but somewhat violent. A suspicion naturally occurred that the attendants had used undue violence; but, as both denied the charge, and there were no witnesses, no satisfactory conclusion could be arrived at, and the jury returned an open verdict. The injuries were first discovered on the day before death. Supposing the injuries to have been received in a fall, it is improbable that the attendants should not have observed their effects; whilst, on the supposition that they had occurred otherwise, there would have been a motive for concealment.

THE SMALL-POX HOSPITAL.

We can state that the authorities of the Small-pox Hospital have no intention whatever of purchasing the Richmond Hill Hotel as a convalescent hospital.

MR. PEABODY.

We regret that we are not able to give a more favourable report of Mr. Peabody's progress during the past week. Though there has been no accession of unfavourable symptoms, Mr. Peabody still remains very weak, not rallying, as could have been hoped.

THE OBSTETRICAL SOCIETY.

THE last meeting was unusually well attended. Dr. Aveling of Rochester reported a case of Prolapse of the Uterus, in which he had done a kind of modified Emmett's operation, with the effect of curing, by causing retroversion of the uterus; and suggested the principle of inducing alterations in the relations of the utero-vaginal axes, as a means of keeping the organ *in situ*. Dr. Barnes followed with a very interesting paper on Flooding after Removal of the Placenta. After reviewing the various methods of treatment at our command, he laid especial stress upon the great value of the direct application, by means of a Higginson's syringe, of a solution of perchloride of iron (one part of the liquor ferri perchloridi fortior (B. P.) to four of water) to the bleeding surface of the uterus. Drs. Graily Hewitt, Braxton Hicks, Tyler Smith, Meadows, Wynn Williams, Playfair, and others, all concurred in the great value and safety of this method of treatment.

PAID NURSES FOR WORKHOUSES.

THE Cockermouth Board of Guardians has negatived, by a majority of two to one, the proposition of the Workhouse Committee that "one paid nurse be appointed for the workhouse." The medical officer of the house, Dr. Dodgson, had forcibly insisted on the inefficiency of pauper nurses. More than a year ago, it was on several occasions noticed in this JOURNAL that the Cockermouth guardians were at issue with the Poor-law Board and Dr. Dodgson as to the necessity of certain improvements in the house. Dr. Dodgson's reward for his exertions to teach the guardians common sense is but a sorry one, as far as they are concerned.

SCOTLAND.

UNIVERSITY OF GLASGOW.

DR. G. H. B. MACLEOD, the new Professor of Surgery in the University of Glasgow, delivered his inaugural address in the Common Hall of the College on Tuesday last before a large attendance of students.

THE NEW UNIVERSITY BUILDINGS, GLASGOW.

THESE buildings are expected to cost £400,000, which is almost £40,000 more than was originally anticipated. As much as £122,879 have been already subscribed by friends of the University, but it is hoped that subscriptions sufficient to cover the additional expenditure on the buildings will be forthcoming.

ST. ANDREW'S UNIVERSITY.

THE Session of the united colleges of St. Salvador and St. Leonard's, was opened with an inaugural address by Professor Shairp.

THE UNIVERSITY OF EDINBURGH AND FEMALE MEDICAL STUDENTS. It was definitely settled, on Friday of last week, by the Council, that ladies should be admitted to study medicine in the University.

ANDERSON'S INSTITUTION, GLASGOW.

DR. DUNLOP has been appointed Lecturer on Surgery at this Institution in the room of Dr. Macleod, appointed to the Chair of Surgery in the University. There were two other candidates; Dr. Robertson, who was recommended by the medical staff, and Dr. Dewar; both of whom obtained considerable support.

THE ABERDEEN AND GLASGOW UNIVERSITIES ELECTION.

THE nomination of candidates for the representation of the Universities of Glasgow and Aberdeen took place last Tuesday in the Fore Hall, Glasgow. Principal Barclay, Vice-Chancellor of Glasgow University, presided. Mr. Smith of Jordanhill, and Mr. E. S. Gordon, Q.C., were nominated. A show was taken, and declared to be in favour of Mr. Gordon. A poll was demanded for Mr. Smith, and was appointed to begin on the 15th inst. The letters (which will be found in another page) from the two candidates speak for themselves.

OPENING OF THE SESSION AT EDINBURGH.

SIR ALEXANDER GRANT, Bart., Principal of the University, delivered an able and elaborate opening address in the Music Hall. The body of the hall was filled by students, and in the galleries was a large number of ladies and gentlemen. He proposed for consideration the following as leading features for University policy. First, to give the University as much connection as possible with the organisation of public instruction in the country; second, to open as much as possible the curriculum of study to the free choice of students, so as to meet the wants and circumstances of all classes; third, by the introduction of public triposes and honours, to stimulate more profound attainments in the different and special branches of knowledge. At the Royal College of Physicians and Surgeons, the Introductory Address was delivered by Dr. Argyll Robertson.

SHELTER FOR CABMEN.

A MOST important movement has been commenced in Edinburgh to afford shelter for cabmen. Through the exertions of Mr. A. B. Fleming, a neat wooden building, designed by Mr. Pilkington, and provided by subscriptions from inhabitants in the neighbourhood and the cabmen themselves, has been erected at the stand at Randolph Crescent. Large side-windows are provided in it, by which a full view of the road in each direction can be commanded; and it is entered by a door from the street-side immediately facing the stand. A gas-stove is to be provided for it, along with which there will be a small boiler for the supply of hot water. The movement is on the face of it so admirable, that we think there would be little difficulty in raising the funds necessary to provide similar shelter in London and other large towns. The nature of their employment exposes the cabmen to all the influences of cold and wet, and accordingly they are great sufferers from consumption and acute and chronic rheumatism, but more especially from bronchitis; and they are rendered the more liable to these from their intemperate habits, which are, under the circumstances, easily understood, as they find that stimulants "keep out the cold" for the time. If shelter, such as has been provided in Edinburgh, were procured for the cabmen in every town, there would be less encouragement to intemperance, and their calling would be rendered in every respect a more healthy, profitable, and respectable one. If, in addition, these stands were each provided with a restaurant, where good food was provided, the movement would prove a still greater boon to poor cabby.

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 Douglass, George, M.D. Surgeon to the Dispensary, Gateshead
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 Eastwood, J. W. M.D. Dinsdale Park, Darlington
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 Fox, Edward C. M.D. West Auckland
 Frain, Joseph, M.D. Surgeon to the Dispensary, South Shields
 Fraser, Robert M'L. Esq. Darlington

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 to the Bristol General Hospital, and
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 ing Physician to the Bristol General
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 Wilson, Edward T. M.B. Physician to the
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 Winterbotham, L. Esq. Surgeon to the
 General Hospital, Cheltenham
 Wintle, H. Esq. Kingsdown, Bristol (dead)

HAMPSHIRE.

Number of Members. 69

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 logy in the Army Medical School, Wool-
 ston, near Southampton
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 Southsea
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 Wight
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 Bullar, J. M.D. Physician to the Royal
 South Hants Infirmary, Southampton
 (dead)
 Burslem, Willoughby M. M.D. Senior Phy-
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 Hants County Hospital, Winchester
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 Portsmouth, Portsea, and Gosport Hos-
 pital, Southsea
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 Hants Infirmary, Southampton
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 County Hospital, Winchester

Longmore, Thos. Esq. Professor of Mil-
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 Turner, Thomas, Esq. Surgeon to the In-
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Butler, James, Esq. Beeston
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Elmes, W. H. Esq. Dispensary, Retford
Grewcock, George, Esq., Nottingham
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Higginbottom, J. Esq. F.R.S. Nottingham
Higginbottom, Marshall Hall, Esq. Nottingham
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Johnson, Osborn, Esq. Bassingham
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Taylor, C. M.D. Surgeon to the Eye Infirmary, Mansfield Road, Nottingham
Taylor, Henry, Esq. Surgeon to the Dispensary, Nottingham
Thompson, John N. Esq. Nottingham
Thompson, Joseph, Esq. Surgeon to the General Hospital, Nottingham
Watchorn, Isaac, M.D. Nottingham
White, Joseph, Esq. Surgeon to the General Hospital, Nottingham
Wilkinson, W. Esq. Harthill, Worksop
Wright, James, Esq. Bottesford
Wright, Thomas, M.D. Surgeon to the General Hospital, Nottingham
Yates, Walter, Esq. Nottingham

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Fox, Edward F. Esq. Brislington
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Pearse, F. E. L.R.C.P.Ed. Wellington
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Smart, John N. Esq. Bedminster
Smith, Charles I. M.D. Physician to the
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Spender, John Kent, M.D. Surgeon to the
Mineral Water Hospital and the Eastern
Dispensary, Bath
Stockwell, Thomas G. Esq. Surgeon to the
Mineral Water Hospital and Royal
United Hospital, Bath
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Number of Members..88.

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Belcher, Robert Shirley, Esq. Surgeon to
the Dispensary, Burton-on-Trent
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Coleman, E. Hayling, Esq. Consulting-
Surgeon to the South Staffordshire Hos-
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Cooke, William H. M.D. Aldridge
Cooper, Richard, Esq. Leek
Cotterell, Peter, M.D. West Bromwich
Davies, W. Esq. Smethwick
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Burntwood, Lichfield
Dawes, William J. Esq. Longton
Day, Henry, M.D. Physician to the Gene-
ral Infirmary, Stafford
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Duncalf, Henry, Esq. West Bromwich
Dunn, Frederick, Esq. Wolverhampton
Evans, Alfred P. Esq. West Bromwich
Ferne, Edward, M.D. Stone
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Garman, William C. Esq. Wednesbury
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Newcastle
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Holoake, T. Esq. Kinver, Stourbridge
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Hopkins, George H. Esq. Stone
Hopkins, William, L.R.C.P.Ed. Handsworth
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Jackson, Thomas V. Esq. Surgeon to the
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hampton
Jackson, W. F. M. Esq. Smethwick
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Lomax, H. T. Esq. Stafford
Lowe, George, Esq. Burton-on-Trent
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Manby, F. E. Esq. Wolverhampton
Manley, John, Esq. West Bromwich
Martin, E. N. L.R.C.P. Ed. Burton-on-Trent
Miller, Richard M. M.D. Physician to the
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hampton
Millington, William, M.D. Physician to the
South Staffordshire Hospital, Wolver-
hampton
Monckton, D. Henry, M.D. Rugeley
Moore, R. B. Esq. Wolverhampton
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 Smith, Robert W. M.D. Professor of Surgery in Trinity College, and Surgeon to the Richmond, Whitworth, and Hardwicke Hospitals, Dublin
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THE DUBLIN MEDICAL SCHOOLS.

ST. VINCENT'S HOSPITAL.

ON Friday last, Dr. Quinlan gave the opening lecture. He dwelt at great length on the life and labours of the late Dr. O'Ferrall, who was the founder of the hospital. The history of the institution, which was wholly managed by Sisters of Charity, and of the Convalescent Home connected with it, was next given; and the lecture terminated with a statement of the arrangements which had been made this session for clinical instruction.

THE MEATH HOSPITAL.

ON Monday, the session was inaugurated with an address from Dr. Stokes. After some observations addressed to students, he said:—

"As to the relations of the profession to society, it had been too much the habit to find fault with the Government and the public. There was a large class who sought to remedy this evil by a demand for class legislation, which some men called medical politics. All this was a mistake. The Legislature would pass no law to serve the interest of class unless it could be shown that the public would be benefited thereby. The evils at present existing in connexion with the medical profession would continue to exist until the public mind was better educated, and the profession became wholly a profession, getting rid of the principle of trade, its members learning to be just and generous one to another, and to honour all men, and to do the best they could for society in whatever circumstances they found themselves.....He read, afterwards, extracts from letters written by the Lord Chancellor, the Chief Justice of England, and Dr. Taylor on the subject of medical witnesses, and referred to the course pursued by medical men at inquests. He heard daily of evidence being given by them as to the causes of sudden death, and his opinion on that subject he would not venture to give. They questioned, whether if a man died with a certain disease, he died of it. It was impossible in the present state of knowledge to determine the cause of some deaths. Medical men in such cases should acknowledge their ignorance."

The lecturer concluded with remarks on the duties of professional men towards their brethren.

THE LEDWICH SCHOOL.

DR. CAMERON, Professor of Chemistry, delivered the introductory lecture. It was a learned discourse on the characteristics of the physiological and empirical methods of medicine, and a review of the various subjects which should, *seriatim*, engage the pupil's attention. The labours of Irish Physicians and Surgeons were portrayed in very glowing terms.

MATER MISERICORDIÆ HOSPITAL.

AN influential meeting was held on Monday, under the presidency of His Eminence Cardinal Cullen, for the purpose of procuring funds for the completion of the hospital. The second wing will be ready for patients next May. The Lord Chancellor, Mr. Pim, M.P., Earl of Granard, Sergeant Dowse, M.P., Sir W. Wilde, and Dr. Stokes addressed the meeting; and the last-named announced that Dr. Nixon had been appointed Assistant-Physician, and Dr. Coppinger Assistant-Surgeon. The medical session was opened on Wednesday by an address from Mr. Tyrrell.

THIRTY-SEVENTH ANNUAL MEETING

OF THE

BRITISH MEDICAL ASSOCIATION.

Held in LEEDS, July 27th, 28th, 29th, and 30th, 1869.

SECTION B.—SURGERY. President, WM. HEY, Esq., F.R.C.S.

Wednesday, July 28th, 1869.

Stricture of the Urethra; its Prevention, Early Detection, and best Method of Treatment. By W. F. TEEVAN, B.A., F.R.C.S.—Mr. TEEVAN wished to draw attention to the importance of detecting stricture of the urethra in its earliest stage. The ideas as to the sign denoting the presence of stricture were vague. Mr. Teevan defined stricture to be "any diminution of the normal calibre of the urethra, the result of the contraction of organised lymph." The presence of a gleet, of six months' duration or more, might commonly be regarded as the outward and visible sign of the existence of a stricture which might, perhaps, in no way interfere with the flow of urine; and the actual presence of such stricture might be demonstrated by the *bougie à boule*. That instrument was invented by Sir C. Bell, and was by him made in metal. Leroy d'Etiolles improved its usefulness by making it of an elastic material, which allowed the instrument to follow the deviations of a tortuous and deformed urethra; its diagnostic value was still further enhanced by Dr. Henry Dick, who had the shoulder of the bougie made sharp and angular. The *bougie à boule* was simply for diagnosis. It would, as it was being withdrawn, catch at the slightest unevenness in the urethra, and told accurately the slightest change in the mucous membrane. That tissue, in its normal condition, transmitted through the bougie the sensation of travelling along a velvety path; and, if there were any constriction, not only would that fact be communicated to the surgeon, but also the degree of pathological change which the urethra had undergone. The *bougie à boule*, therefore, would detect stricture of the urethra in its earliest stage; and the treatment of such stage might correctly be termed the preventive treatment. When a patient went to a surgeon for a gleet, he ought always to be examined with the *bougie à boule*, for it was necessary to ascertain the pathological condition of the canal before an appropriate treatment could be decided on. If there were no constriction, deep injection was proper; but if there were contraction, however slight, it would be aggravated by injection, but cured by gradual dilatation. Mr. Teevan, after enunciating M. Mercier's views of the pathology of stricture, discussed the seats of stricture, as deduced from facts observed by himself. He grouped together stricture at the bulb or membranous urethra, and called it "subpubic." This was by far the most common kind of stricture, simply because the triangular ligament favoured its production. The next stricture in order of frequency was the "penile", situated at a spot varying from two-and-a-half to three-and-a-half inches from the meatus externus. This stricture was rarely absent, in some degree, when the other was present. The rarest form of stricture was that just within the meatus, the "orificial." Strictures, regarded in their physical conformation, were of two kinds—the "tunnel" stricture and the "ring" stricture. He called them so on account of the sensations communicated to the *bougie à boule* when passing through them. Subpubic strictures were generally of the tunnel kind; orificial strictures were of the ring character; and penile strictures partook of both forms.

The measurements given of the length of the urethra varied from seven to eight or nine inches. He had found the average length to be $7\frac{1}{8}$ inches, as deduced by himself, from measuring the urethra of one hundred males. Regarding the treatment of stricture, he stated that, after witnessing the practice of various surgeons, and trying different methods, he had come to the conclusion that there was no treatment equal to that of gradual dilatation by means of the *bougie olivaire* and the pili-form bougie, which treatment, he believed, he was the first to introduce into English hospital practice. Forcible dilatation was only applicable to the easier kinds of strictures; it was not devoid of danger; it caused an unknown lesion; it had to be always followed, and often preceded, by gradual dilatation, so that it could only be regarded as an occasional auxiliary in the treatment of stricture. Gradual dilatation was the safest treatment for the patient, for, out of one thousand recorded cases, there had not been one death; all the sufferers could be treated as out-patients, and no man need ever lose an hour's work during the treatment. The *bougie olivaire* glided in so easily that the patient was scarcely aware of its presence. It was necessary to pass an instrument about once in every three or four months, even after an apparent cure. Dilatation ought to be conducted up to the highest size that the urethra would take.

The Treatment of Organic Stricture of the Urethra by Rupture. By G. H. B. MACLEOD, M.D., Glasgow. (See BRITISH MEDICAL JOURNAL, September 18.)

The Use of the Probe Dilator in Operations on the Posterior Part of the Urethra. By C. G. WHEELHOUSE, Esq., Leeds.—Mr. Wheelhouse exhibited the instrument, which had been invented by the late Mr. Teale, for introducing instruments into the bladder through a small orifice in the urethra. Through the orifice, a director is first introduced, over which is passed the dilator; and this is of sufficient width to allow the ready passage of an instrument along it into the bladder. Mr. Wheelhouse pointed out that, in lithotomy, incision of the neck of the bladder is rendered unnecessary. In cases, also, of impenetrable stricture, or of laceration or division of the urethra, where it is often very difficult to introduce a catheter, the urethral orifice is readily formed by means of a probe-dilator.

Mr. MACNAMARA (Dublin) was considerably surprised to find that Mr. Teevan thought it necessary to bring forward facts that had been known to every surgeon in Ireland for the last fifty years. As to the operation described by Dr. Macleod, he thought that it was of the greatest importance.

Mr. STOKES (Dublin) thought that, in every case of gleet, an examination should be made by means of the endoscope, to ascertain whether a granular condition of the urethra existed.

Dr. KING (Hull) recommended that a bougie should be passed occasionally for some time after rupture of a stricture. He was in favour of a gradual treatment of dilatation.

Mr. VICTOR DE MÉRIC (London) pointed out that Mr. Teevan's paper was directed to the importance of the early treatment of stricture.

Mr. TEEVAN, in his reply, said he granted that every surgeon knew that gleet was the cause of stricture; but what he wished to direct attention to, was not only gleet as the cause of stricture, but as the beginning of stricture. He was anxious that attempts should be made to stop the disease at its very roots.

A Demonstration of Rectangular Stumps. By T. PRIDGIN TEALE, Esq., Leeds.—Previously to commencing his paper, he stated that he had exhibited, in the large room of the Infirmary, twenty-five stumps, made by the following surgeons: By the late Mr. T. P. Teale, two; by the late Mr. S. Smith, one; by Mr. S. Hey, two; by Mr. C. G. Wheelhouse, eight; by Mr. Pridgin Teale, seven; by Mr. Jessop, three; by Mr. Lodge (Bradford), one; by Mr. Greenwood (Ossett), one. A few of the stumps were exhibited in an adjoining room of the Town Hall. Several photographs of rectangular stumps had also been sent to him. After stating that, since the publication by his father, eleven years ago, of the work on *Amputation by a Long and a Short Rectangular Flap*, the operation had held its ground in the Leeds Infirmary, Mr. Teale produced evidence to show that the two cardinal advantages claimed for the operation by his father—namely, an improved stump, and diminished mortality after amputation—were realised in subsequent experience. In illustration of the first point, the series of patients with rectangular stumps of arm, forearm, thigh, and leg, made at various periods of time, and by various surgeons in the neighbourhood, that had been exhibited, fulfilled the canon of excellence laid down by the late Mr. Teale, "that a good stump ought to have a cushion of soft tissues, free from great nerves and bloodvessels, over the end of the bones; that the cicatrix should be at a distance from, and non-adherent to, the sawn end of the bone; and that the stump should be capable of taking part of the weight of the body on its extremity." In some instances, so much work had been borne by the stump, that a bursa had

become developed over the end of the bone. On the second point, of diminished mortality, Mr. Teale stated that he had collected statistics of all the amputations performed by Mr. S. Hey, Mr. Wheelhouse, and himself, in the Leeds Infirmary during the last five years, and that he found 57 rectangular amputations and 50 non-rectangular. Omitting amputations of the upper extremity, as not involving great risk of life, and all amputations for accident, as in them danger to life varied with the circumstances of the accident, there remained 39 rectangular amputations and 7 non-rectangular of the lower extremity for disease, with the following results:—Rectangular amputations of thigh, 21, with 5 deaths, or 1 death in $4\frac{1}{5}$; non-rectangular ditto, 2, with 2 deaths, or 1 death in 1; rectangular amputations of leg, 18, with 1 death, or 1 death in 18; non-rectangular, ditto, 5, with 1 death, or 1 death in 5. If to these be added the statistics in the late Mr. Teale's work, we find a total of—rectangular amputations of thigh, 38, with 8 deaths, or 1 death in $4\frac{3}{4}$; ditto of leg, 45, with 2 deaths, or 1 death in $22\frac{1}{2}$.

Mr. FOLKER (Hanley) stated that in the Infirmary where he was surgeon, they never performed any other operation than that described by Mr. Teale. There was, however, a little puckering on the surface of the flap, the difficulty of removing which he had often experienced.

Mr. TERRY (Bradford) had performed the operation sixteen times. It was a great blessing to the working classes, as they could leave the hospital much sooner after undergoing that operation, than the old one. He could bear strong testimony to the value of the operation.

Mr. CROLY (Dublin) had amputated according to Mr. Teale's plan; and, as far as his experience went, there was no mode of amputation equal to it. He was aware that it had failed in the hands of some operators, but he thought that due to the fact that they did not make careful measurements before commencing the operation. His colleagues in the City of Dublin Hospital gave the preference to the rectangular flap in every case requiring amputation.

Dr. WHITEHEAD (Manchester) had tried the operation lately in a case where the patient had serious joint-disease, requiring amputation above the knee. It was quite impossible to get his constitution into a satisfactory state; and, after waiting some time, he performed the rectangular flap operation. Recovery was quite as rapid as could have been expected. The stump was a most excellent one. He saw the youth only a fortnight ago, and found he was able, by means of an artificial leg, to take as much exercise as any other young man of his years.

Mr. LEEHING (Kendal) had had fourteen cases, and the whole of them had turned out extremely well.

Mr. CALLENDER (London) stated that, at St. Bartholomew's Hospital, Mr. Paget and his colleagues frequently adopted Mr. Teale's mode of amputation, and good results had followed it. All the stumps that he had made of it had turned out extremely well.

Mr. MACNAMARA (Dublin) referred to one case, out of many, in which he had found the operation turn out highly successful. A Fenian, who had been shot in the leg two years ago, came into his hands, and he performed on him the rectangular flap operation. The stump proved to be an excellent one, and the patient could now use it freely.

Mr. BAKER (Derby) stated that, in his Infirmary, the results of the operation were most satisfactory.

Mr. TEALE thought that, if proper measurements were made, the puckering to which Mr. Folker referred would not occur. His late father was always most careful with his measurements. It was perhaps to be regretted that, in his work on the subject, his father had not gone more into practical details as to the operation. In a subsequent edition of his father's book, he hoped to be able to bring out some of these details.

Amputation at the Ankle-Joint. By G. H. B. MACLEOD, M.D. (See JOURNAL, August 28th.)

Mr. SOUTHAM (Manchester) remarked that the amputation described was one of the greatest improvements in modern surgery.

Mr. VICTOR DE MÉRIC remarked that Dr. Macleod inclined to Syme's operation; and he had undoubtedly given very excellent reasons for doing so. Still, it would be a great pity altogether to discard Pirogoff's operation, which he had employed in two or three cases, with excellent results. His idea would be to use Pirogoff's always, when there was no disease of the ankle-joint. The fact of Pirogoff's being much easier than Syme's, would perhaps explain why it was more generally used. He should like to hear Dr. Macleod's opinion on the relative value of the two operations.

Mr. LUNN (Hull) could bear testimony to the value of Syme's operation.

Mr. HUMPHREYS (Shrewsbury) also bore testimony to the importance of Syme's operation. He had performed that operation in many cases, and always with the very best possible results. He was rather surprised to hear Mr. de Méric hint that there was more difficulty with

Syme's operation than with Pirogoff's. In his own experience, he had found the greatest difficulty in connection with Pirogoff's operation. In his opinion, Pirogoff's plan, whilst bad in theory, was worse in practice. All the cases in which he had tried it, had turned out so badly that he would never attempt the operation again.

Mr. LAWSON TAIT (Wakefield) stated that his experience corresponded, to a great extent, with that of Mr. Humphreys. All the cases in which he had adopted Syme's operation, had done well, whilst all those in which he had employed Pirogoff's, some farther removal of the bone was necessary.

Dr. MACLEOD, in reply, remarked that perhaps the most conclusive argument as to the value of Syme's operation over that of Pirogoff, was to state, on the best authority, that Pirogoff himself had abandoned his own operation, and adopted that of Syme.

A Painless Method of Cutting in Surgery. By B. W. RICHARDSON, M.D., F.R.S.—Dr. Richardson first explained that a certain duration of time was required for the reception of every physical impression by the brain, and for transforming the impression into an act of consciousness. He illustrated this fact by many examples; and explained that, if an incision were made in the skin with sufficient rapidity, the consciousness of the fact, as usually evidenced by pain, was not recorded. In order to render this fact applicable in surgery, he had invented a small knife with a very sharp revolving blade. The blade revolved from a small pulley which lay by its side, and could be made by means of a strong spring to revolve over twenty times in a second. It cut through the skin, when working well, without causing pain; and he had found, by experiment on his own arm, that an incision half or three-quarters of an inch in length could be painlessly made, deep enough to go quite through the skin. The incision made was beautifully clean; there was no mentionable after-pain; and the healing was excellent. For small operations on the human subject, the knife might, therefore, be very effectively employed; and it might be used also for many similar operations on the inferior animals. An incision such as the author had described could, indeed, be made on an inferior animal, as on the ear of a rabbit, without disturbing the animal, or producing the merest movement indicating pain or consciousness of touch or impression. Some mechanical difficulties had yet to be overcome, in order to render this knife available; but the principle on which it acted was correct; and the author hoped that in a short time he should be able to produce the instrument in so practical a form that every surgeon could carry a pocket-instrument which would enable him to perform a very large number of minor operations without pain, and without the risk of administration of chloroform, or other general anæsthetic.

Dr. MACLEOD (Glasgow) thought that possibly Dr. Richardson might be able greatly to extend the method. It was well known in surgery that parts of limbs and portions of the body were sometimes carried away by bullet or cutting machinery, and that the fact of the injury was not known at the time to the injured person. Dr. Richardson had utilised that knowledge, and it was not easy to foresee the limits of so useful an application.

Mr. JESSOP (Leeds) expressed similar views as to the correctness of the principle which Dr. Richardson had laid down, and the support which it received from the experience of surgical accidents.

Dr. RICHARDSON, in reply, expressed his regret that an accident, by which the instrument was disabled, prevented him from making, as he had intended, a demonstration of its action on himself. He wished the use of the knife to commence in cases of small operations, such as the opening of abscesses, the division of carbuncles, and the like. On the experience derived from these smaller operations, the larger application would readily follow.

Brief Notes (on Cataract Extraction) from Berlin, Wiesbaden, and Utrecht. By C. B. TAYLOR, M.D., Nottingham.—Von Graefe, in his recent method of extraction, enters his knife (which is of reduced dimensions) in the sclerotic, a line and a half from the cornea, and half a line below the place of its vertex, emerging at a counter-puncture similarly placed. When the incision is completed, a flap of conjunctiva is turned over the cornea, and a small portion of iris excised *in situ*, without drawing it out of the wound. The capsule is then lacerated with a peculiar cystitome, and the lens extended by pressure with a caoutchouc spoon; cortical masses are subsequently removed, and vision is tested. Pagenstecher uses the same form of incision as Von Graefe, but always endeavours to remove the lens with the capsule entire. This may frequently be effected by pressure on the cornea alone. If not, and the lens shew a disposition to come forward from the co-existence of a strong capsule with a weak suspensory ligament, Pagenstecher dips it out with his large spoon. If not, he prefers not to run the risk of a broken capsule, and cortical fragments which could not subsequently be removed, by persisting in his endeavour to extract the capsule entire, and opens it in the ordinary way. Dr. Snellen of Utrecht,

after a long trial of Von Graefe's method, is returning to the old flap. In cases of threatened suppuration, he turns his patients out of doors even on the second day, and gives quinine in full doses. Dr. Desmarres of Paris adheres to the old flap method, operates without chloroform, and is seated facing the patient. The incision is completed with a secondary knife having a pricker attached. Drs. Wecher, Liebreich, and Meyer, use Von Graefe's method of extraction. After an impartial study of various methods, Dr. Taylor preferred his own, comprising an incision six or seven lines long on the upper surface of the cornea, made with a small bent knife a line in width. In this method of operation the iris may be preserved entire by enlarging the wound to the side, or excised according to the exigencies of the case, and the lens may be removed with the capsule entire, or the latter may be lacerated if it be thought advisable so to do. In one hundred and eighteen cases operated on by the author in this way in succession, many of the patients being marasmic, some above eighty and one ninety years of age, suppuration of the flap occurred in four cases only.

Mr. T. PRIDGIN TEALE said this paper was a most interesting one, dealing as it did with all the chief authorities on the continent with regard to cataract. He had tried the new operation in a considerable number of instances, but had not found that any great success had followed it. In consequence of some important cases disappointing him, he had gone back to the old flap operation—the results from which were, he must say, good.

Dr. RICHARDSON was specially interested at the mention made in the paper of bichloride of methylene, the use of which he himself had suggested.

Cases of Syphilitic Affection of the Third Nerve producing Mydriasis with and without Ptoxis. By VICTOR DE MÉRIC, Esq.—These cases were all clearly traceable to the syphilitic taint; they were five in number, and Mr. de Méric related a sixth, where a syphilitic taint could not be made out, but where mercury acted very advantageously. From a survey of these cases, it became evident that the prognosis is generally favourable, the malady being amenable to treatment, which, in these instances, had consisted in the administration of mercury or iodide of potassium—according to the stage of the disease—the use of the Calabar bean, and the electric current. Medical literature had, from time to time, been enriched with cases of this kind; and these, coupled with Mr. de Méric's cases—the details of which had been carefully noted, and the diagnosis accurately laid down—proved that syphilis, besides occasionally causing disturbance in other portions of the nervous system, may directly influence the functions of the motor oculi nerve. The author directed attention to the rarity of these cases, as he had collected but five during a special public and private practice of 23 years. He was inclined to think that, in syphilitic affection of the third nerve, the sheath of the trunk or filaments principally suffered; as tumours, clots, and abscesses, would not so easily have yielded to treatment. In the instance where mydriasis had existed without ptoxis, he suspected, with some ophthalmologists—especially with Mr. Wharton Jones—that the sympathetic twigs were mostly at fault. Mr. de Méric declared himself a believer in the action of remedies in general, and mercury in particular, although scepticism was, just now, in great favour. He had freely used mercury or iodide of potassium in these cases—according to the period to which the syphilitic diathesis had arrived—and was ready to advise the same line of treatment in analogous affections. The cases proved, moreover, that the third pair may be the seat of a pathological change, due to syphilis, whether the latter be recent or inveterate, or whether the symptoms be of a trifling or very serious kind.

Friday, July 30th, 1869.

On Certain Causes of Mammary Cancer. By C. H. MOORE, Esq. (See JOURNAL, October 30th).

Dr. PROTHEROE SMITH (London) had many years observed the frequency of mammary tumours accompanying uterine disease. The way in which he had to himself explained the frequency of these occurrences was this: there were the periods of teething, of menstruation, and of procreation; and he believed that certain forces were added to the system for these ends; and where these forces were not employed as Nature intended, they had mischievous effects. He would ask Mr. Moore whether he had not observed mammary tumours most frequently amongst women who were either unmarried, or who, being married, had no children. This disease could, to a certain extent, be kept in check by removing the cause, which he believed to be congestion from affections of the uterus.

Dr. ROUTH (London) had no doubt that uterine disease frequently induced breast-disease, which might pass into cancer. Mr. Moore's facts established two points—I, that indubitably one or both breasts might be affected with cancerous disease, and that, under treatment,

portions of the breasts so diseased disappeared; and 2, that cancerous breasts were curable by treatment of the cause, *i.e.*, diseased womb, in many cases. Years ago he had published a paper illustrative of the causation of mammary disease of all kinds by womb-disease. He asserted that the mammary disease would vary according to the seat of the uterine disease. Mr. Moore had stated that cancerous breast-disease was often due to metritis and ovarian disease. He thought he could say that, whereas ovarian disease, and disease of the fundus uteri, were chiefly instrumental in the production of cancer, disease of the cervix and body often produced enlargement and hypertrophy only of the breast. Disease of the body and cervix of the uterus gave rise to hypertrophy of the breast, but chiefly the lacteal part of it. Local applications to the womb would soon, however, bring down their size.

A Pocket-Bellows for Artificial Respiration. By B. W. RICHARDSON, M.D., F.R.S.—The bellows exhibited by Dr. Richardson consisted of two elastic hand-bellows joined together, but ending in a single exit-tube. When the bellows were in action, the tube being inserted in the nostril, one ball, after exhaustion, became filled from the common air, and the other from the air left in the air-passages. During compression, the air in the ball charged with common air entered the lungs, and the air which had come from the lungs was driven into the atmosphere. Thus the precise conditions of natural respiration were imitated. Instruments on a similar principle were made by John Hunter, and also by Mr. Read of Piccadilly; but the elasticity of the present instrument rendered it superior to all that had preceded it. The filling and emptying of the lungs was in the grasp of the operator, who could, therefore, fill or empty gently or forcibly, as he might please. It was good practice, in using the bellows, to begin by a gentle exhaustion; and the gentler the force employed to fill the lung, the better. To excite the merest thoracic movements was sufficient; and the moment there was spontaneous or natural breathing, it was best to cease the artificial process. The author concluded by showing that, in croup and other diseases where the air-passages were obstructed and the patient was sinking from exhaustion of the muscles concerned in respiration, these bellows might be employed with the greatest benefit. [At Dr. Heaton's *conversazione*, Dr. Richardson demonstrated the action of the bellows, and at the same time he gave a short exposition of the principles involved in the process of effective artificial respiration.]

SPECIAL CORRESPONDENCE.

EDINBURGH.

[FROM OUR OWN CORRESPONDENT.]

SINCE the close of the winter session of 1868-9, numerous changes have taken place in the Edinburgh Medical School, and in some respects we still seem to be in a transition state. Three new professors will, this week, deliver inaugural addresses—Professors Crum-Brown, Lister, and Sanders. There have been changes also among the assistants: Mr. James Dewar, also Professor of Chemistry in the Veterinary College, succeeds the late Dr. Allan Dalzell as chief assistant to the Professor of Chemistry and teacher of Practical Chemistry; Dr. McKendrick succeeds Dr. Rutherford, now of King's College, London, as assistant to the Professor of Physiology; and Dr. James Affleck succeeds Dr. Arthur Gamgee (now lecturer on Physiology at Surgeons' Hall) as assistant to the Professor of Medical Jurisprudence.

Owing to the unexpected resignation of the lectureship on General Pathology at the Royal College of Surgeons, by Dr. Grainger Stewart—a step which, we regret to say, has given rise to a good deal of disappointment and annoyance, even to Dr. Stewart's friends—considerable difficulty is being experienced in getting a successor ready to lecture with so short a time for preparation. The offices of Pathologist to the Royal Infirmary, and of Curator of the Museum of the College of Surgeons, are also vacant, and several excellent men have appeared in the field. It is said that several pretty stringent regulations are to be made by the Infirmary managers regarding the office of pathologist, and, among others, that he shall not be allowed to lecture upon pathology. If this be the case, it may possibly deter more than one good man from coming forward. Three candidates for the office of pathologist have been mentioned, namely, Mr. Lawson Tait, of Wakefield, Dr. Wyllie, and Dr. Pettigrew. The last-named gentleman is believed to have the best chance of election; and if his health is so far restored as to allow him to undertake the arduous duties, there can be no doubt he is the candidate who has the strongest claims, both as an anatomist and as a man of science. It is said, Dr. Pettigrew also aims at being the Conservator of the Museum, an office for which he is in the highest degree qualified. Dr. A. Miller (son of the late Professor Miller) and

Dr. Chiene are also in the field; and, if Dr. Pettigrew were to stand aside, their claims would raise a close contest.

Dr. Grainger Stewart has been appointed full Physician to the Infirmary, and it is hinted he may possibly lecture on the practice of medicine next winter session. The managers have this week appointed Dr. Claud Muirhead and Dr. Thomas Fraser Assistant-Physicians. The other candidates were Drs. Smart, Brackenridge, and Angus Macdonald.

Apocryphos of the Infirmary, it is to be regretted that every obstacle is to be thrown in the way of the great work of purchasing Watson's Hospital and grounds as a site for the new Infirmary. A step has been taken which has transferred the matter from the region of common sense into that of Scotch law, by a few of the managers of Watson's Hospital, who are unwilling to sell the property, having applied for an interdict from the court of session to prevent the other managers proceeding further in the matter. These gentlemen no doubt stick to a rigid interpretation of the founder's will; but the interests of the public ought surely to weigh strongly in the matter.

The ladies have triumphed so far! There was a grand tournament, a few days ago, at the meeting of the general council of the University, and Professors Masson and Bennett gallantly entered the lists on behalf of the ladies. The expediency and justice of throwing open the medical teaching of the University to ladies was approved of by a large majority of those present; and the ladies have now the course clear before them. They have started well. Judging from the admirable way in which they passed the preliminary examination, there can be no doubt of the intellectual ability of those ladies who have come forward; and we may be sure they will put forth every effort to maintain the *prestige* they have undoubtedly acquired. Both Professor Turner and Dr. Handyside having declined to lecture to them upon anatomy, a serious hitch occurred, but it has been got over by Dr. Millar becoming an extra-mural lecturer on anatomy specially for the ladies.

Nov. 2, 1869.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paris, November 2nd, 1869.

1. *Proposed Reform of the "Hospices" of Paris.*—2. *Paralysis of the Radial Nerve: a Case of Physiological and Pathological Interest.*—3. *Dr. Ricord appointed Consulting Surgeon to the Emperor.*

1. *Proposed Reform of the "Hospices" of Paris.*—A question of great importance was raised last week in the Town Council of Paris, and is likely, for some time to come, to excite a good deal of interest in medical and general circles, both here and in the provinces. I refer to projects for reforming the *hospices* of Paris—the discussion of which projects is certain to lead to the radical reform, or entire suppression, of these institutions. The advocates of suppression propose, that in future out-door medical relief shall be substituted for the aid now afforded to the sick and infirm poor in the *hospices*. In whatever way the question may be solved in Paris, the solution will lead to great changes in the administration of medical relief throughout the whole of France. Some time will elapse before definite results are determined on; but, in the meantime, it is evident, from the manner in which the subject is being handled, that practical issues are not far distant.

From the earliest times, till the beginning of the present century, the *hospices* and *hôpitaux* of France were the same institutions. But in respect of Paris, a change began in 1800, consequent upon a decree of the Consuls, having for its object the regulation and centralisation of benevolent institutions. At that date, the *hospices* and the *hôpitaux* of Paris began to be separately classed; but in the provinces, with a few exceptions, the two have continued to exist in unity, to occupy generally the same buildings, to derive their revenues from the same sources, and to be under the same administration. In the provinces, they are governed by the municipal authorities, assisted by an administrative committee, composed of five members. In Paris, the *hospices* and *hôpitaux*, placed under the authority of the Prefect of the Seine (in his capacity of Mayor of the capital), are governed by a general council and an administrative committee. Both classes of institutions are very numerous in Paris, and some of them are of great importance.

The *hospices* afford shelter, maintenance, and medical aid, to persons who, from old age or infirmity, are permanently disabled from earning a living for themselves. The *hôpitaux* are set apart for the treatment of all kinds of diseases and injuries. The question of reform or suppression, now raised before the Town Council of Paris, has reference only to the *hospices*.

Some influential and charitable persons, while they wish the *hospices* to be retained as refuges for a certain portion of the old, infirm, and incurable, wish a certain portion of their revenues to be used in affording out-door relief to these classes of indigent persons. This is the course recommended by M. Husson, *Directeur de l'Assistance Publique*, in a very able report on the subject, which he has submitted to the Minister of the Home Department. M. Husson takes up a much more extended view of the question than that now before the Town Council of Paris, which, as I have already said, is limited to the *hospices*.

M. Husson says that hospitals are not conveniently accessible to the indigent poor of country places, and are becoming more and more disliked by the working-classes living in large towns. I am glad to see a remark by M. Husson, to the effect that there is a feeling among the indigent sick which leads them, when it be at all possible, to remain with relatives at home, rather than be removed from them to refuges and hospitals to partake of legal charity. The conclusion arrived at by M. Husson is that, alike in the interests of suffering humanity, and in the interests of the tax-paying community, it is desirable to give succour at their homes, or in the houses of relatives, to a large proportion of the persons now admitted to the *hospices* and *hôpitaux*. All cases of slight illness, he considers, ought to be promptly attended to at home. This is a reform, he rightly maintains, which will prevent much serious sickness, and save a great deal of money.

2. *Paralysis of the Radial Nerve: a Case of Physiological and Pathological Interest.*—On two or three occasions during last week, I have heard Professor Peter call particular attention to a case of paralysis of the radial nerve, at present in his clinical wards. M. Petit, *interne*, in charge of the patient, has kindly furnished me with his report of the case, which I subjoin in an abridged form.

On several occasions, the patient, Emilie Claude, an operative hatter, aged 30, has had very violent neuralgic attacks in the right half of the cranium, and has been under treatment for them in the hospitals. On one occasion, six years ago, he was three months in hospital; on another occasion, for four months, four years ago; and for a somewhat shorter period about two years ago. Since that time he has had no severe attack, but has, nevertheless, had occasional neuralgic pains, generally localised in the orbital regions, but sometimes in the ear, and extending down to the shoulder. About five o'clock in the afternoon of the 10th October, being drunk, he sat down on a tub, leaning his arm against a wall, and, so placed, he fell asleep. After sleeping for about an hour, he awoke, when he found that he had entirely lost the power of motion in his left arm, and that sensation remained. He could not recollect the exact position in which his arm was when he fell asleep. Next day, after a night's rest, he was able to accomplish some movements with the arm, although he was unable to resume work with it. On the 16th October, he came as an out-patient to seek advice at La Pitié; and was forthwith admitted as a patient to the clinical wards of Dr. Peter. At the usual morning visit, on the 17th, the state of the patient was thus recorded: The fingers are in a state of semiflexion; the thumb is extended, and is drawn somewhat nearer to the index finger. The wrist is slightly bent, when the fore-arm is placed horizontally in a state of pronation. The patient can only, to a very slight degree, raise the hand and extend the fingers. When told to squeeze the hand, he makes a very slight degree of pressure; and at the same time it is observed that his hand becomes more and more bent upon his fore-arm. When the wrist is fixed in such a way as to be on the same level as the fore-arm, he can squeeze one hand as vigorously with the left as with the right hand. The relative power, when the wrist was fixed and when it was not fixed, was tested by the dynamometer, with the following results:—With the wrist fixed (imperfectly, however, in consequence of the embarrassment caused by the dynamometer), the pressure indicated was equal to a weight of 22 kilogrammes (45 lbs.); with the wrist not fixed, the pressure indicated was only equal to 5 kilogrammes. When one attempted to stretch the patient's semiflexed fore-arm, having, at the same time, asked him to make resistance, one could neither see nor feel any contraction of the *supinator longus*. The fingers separated with difficulty when the hand and fore-arm were on the same level; and when the hand was left to itself, they separated with still more difficulty.

In paralysis of the radial nerve, the *supinator brevis* is paralysed; and if, the arm being fixed and the fore-arm extended in pronation, the patient is asked to restore the hand to a state of supination, he can only make this movement by contracting the biceps and half-flexing the fore-arm on the arm. Dr. Peter, after various unsuccessful attempts to find this sign, called the attention of the students to the fact that it was absent: he showed that the patient executed the movement with the whole member; or when, his arm being fixed as well as possible, the asked-for result was obtained with difficulty in an imperfect degree, without appreciable flexion, and with slight contraction of the biceps.

When the hand was supported on the same level as the fore-arm, the movements of adduction and abduction were accomplished with difficulty, and only to a slight extent, particularly abduction.

The sensibility of the fore-arm and hand was intact. Contractions were excited by electricity; but to excite them, a strong current was required.

On the day after the patient's admission, treatment by electricity was begun. For ten minutes daily he was subjected to it. On October 18th, the following were the results of dynamometric examination: *Right hand*, 44 kilogrammes; *left hand*, wrist fixed, 44 kilogrammes; and with the wrist not fixed, 1 kilogramme. On October 29th, after twelve applications of the electricity, a little improvement was observed. On that day, the dynamometric results were as follows: With wrist fixed, 45 kilogrammes; and with the wrist free, 10 kilogrammes. It could now be seen and felt by palpation that, during flexion of the arm, the *supinator longus* rose up under the skin to a certain extent. If the flexion was resisted, the bulging of the muscles became more evident. Now, also, the separation of the fingers was accomplished more easily, both when the hand was, and when it was not, held. In respect of the supination of the stretched forearm, it was performed exactly as on the admission of the patient to the hospital—in an incomplete manner, without previous flexion, and with slight contractions of the biceps. It was remarked, however, that, on placing the finger under the extremity of the radius, the contraction of the *supinator brevis* could be felt.

Dr. Peter, in speaking of the *causes* of paralysis of the radial nerve, stated that he had generally found it following a *direct pressure* of the nerve against a hard body; and that in other cases—less numerous—he had seen it result from *exposure* of the arm to a *current of cold air*.

He made some most interesting physiological deductions from the phenomena presented by the case now detailed. He said that such cases demonstrate the synergetic intervention of the extensor muscles whilst the flexors are in action—an intervention destined not only to moderate the action of the flexors, but to enable them to exert their entire power in fixing the wrist, and so placing the fingers in the most favourable positions for the play of the joints, and consequently thus securing the least possible waste of power.

The hope of complete cure is not great, on account of the rapidity with which the nerve undergoes degeneration; but the sooner the treatment by electricity is resorted to, the better is the patient's chance. For the case now under consideration, Dr. Peter is having made a little apparatus to prevent flexion of the wrist whilst the flexors of the fingers contract. This treatment is suggested by the fact that the flexors expend their useful force upon the radio-carpal articulation, in consequence of the inertia of the extensors.

I have now before me the 404th page of the lucid and valuable work of Dr. Duchenne of Boulogne—*De l'Electricité Localisée et de son Application à la Pathologie et à la Thérapeutique* (Paris, 1861)—in which I find that the author attributes this apparent paralysis of the flexors to their being in a state of *permanent shortening*, in consequence of the paralysis of the extensors. Dr. Peter, on the other hand, attributes the phenomena to the *wrist not being fixed*. He says that the available muscular force is partly expended in flexing the wrist; and that the remainder of this force acts at a disadvantage—that is to say, *obliquely*, and not perpendicularly, on the phalanges. He demonstrated on the patient the correctness of his explanation; and I hope I have brought out the facts sufficiently to convince the reader as completely as Dr. Peter convinced me at La Pitié. It was, in fact, not the expression of an opinion, but an absolute demonstration.

3. *Dr. Ricord appointed Consulting-Surgeon to the Emperor.*—Dr. Ricord, well known every where for his pathological and practical researches into the nature and treatment of syphilis and diseases of the genito-urinary organs, has just been officially appointed consulting-surgeon to the Emperor. Practically, he has for a long time past, on various occasions, fulfilled the duties of that office.

FARADAY ON CONSERVATION OF FORCE.—Various circumstances (Faraday wrote, 1857) induce me at the present moment to put forth a consideration regarding the conservation of force.....There is no question which lies closer to the root of all physical knowledge than that which inquires whether force can be destroyed or not.....Agreeing with those who admit the conservation of force to be a principle in physics as large and sure as that of the indestructibility of matter, or the invariability of gravity, I think that no particular idea of force has a right to unlimited and unqualified acceptance that does not include assent to it.....Supposing the truth of the principle is assented to, I come to its uses. No hypothesis should be admitted nor any assertion of a fact credited that denies the principle.

ASSOCIATION INTELLIGENCE.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH.

THE next meeting of the above Branch will be held at the Midland Institute, Birmingham, on Thursday, November 11th, at 3 P.M.

T. H. BARTLEET, *Honorary Secretary*.

Birmingham, November 2nd, 1869.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE next meeting of the above Branch is appointed to be held at the Ophthalmic Hospital, Maidstone, on Tuesday, November 16th, at 4.30 P.M.; Dr. S. MONCKTON in the Chair.

Dinner will be provided at the Star Hotel at 6.30 P.M.

Papers promised.—Case of Ovariectomy; Case of Death under Chloroform; Ophthalmic Demonstrations.

FREDERICK JAMES BROWN, M.D., *Hon. Secretary*.

Rochester, November 1st, 1869.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting of the above Branch will be held at the Fountain Hotel, Canterbury, on Thursday, November 18th.

Gentlemen wishing to read papers, are requested to communicate with the Honorary Secretary without delay.

ROBERT L. BOWLES, *Honorary Secretary*.

Folkestone, November 2nd, 1869.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: ORDINARY MEETING.

THE first meeting of this Branch for the session was held at the Midland Institute, Birmingham, on October 14th, at 2 P.M. There were present, J. VOSE SOLOMON, Esq., President, in the Chair, and seventy-four members of the Branch and visitors.

New Members.—The following members of the Association were elected members of the Branch: J. W. Coates, M.D., and W. H. Dawson, Esq., Malvern; E. Dewes, M.D., Coventry; O. F. Wyer, M.D., Leamington; J. L. Earle, M.D., J. Darwin, Esq., E. B. Whitcombe, Esq., Birmingham; and W. F. M. Jackson, Esq., Smethwick.

Communications.—1. Mr. NEWNHAM exhibited a specimen of a virgin Scirrhus Breast, which he had removed that morning.

2. Mr. PEARCE showed a boy with a large Abdominal Tumour.

3. Dr. SAWYER showed the Heart of a boy, aged 16, who had died in the Queen's Hospital, under the care of Dr. Heslop. It exhibited, in a marked degree, calcareous degeneration of the aortic and mitral valves.

4. Mr. FURNEAUX JORDAN showed a large Fibro-muscular Tumour, and an Uterus, from the fundus of which the tumour had been cleanly removed by the *écraseur*. The patient sank in a week from peritonitis, for which there was no apparent cause.

5. Mr. JORDAN also exhibited a Leg which had been removed at the knee-joint by a new method, in a case of old pathological dislocation into the popliteal space. The tibia was removed from the popliteal space; but the femur and adherent patella (bearing blows and pressure easily) were not touched.

4. Mr. WEST presented the parts removed in a case of Resection of the Shoulder-joint for disease occurring in a strumous young man from idiopathic causes. The cancellous tissue of the head of the humerus was hollowed out by an abscess; the cartilages of the joint were destroyed; and the glenoid fossa was extensively carious. Resection was performed by a vertical incision three inches long, commencing at the tip of the coracoid process; and a small transverse incision, extending from that point to the acromion. The humerus was divided with the chain-saw, and the glenoid fossa cleared with the osteotrite.

7. Mr. LANGSTON PARKER read a paper on the Hypodermic Treatment of Constitutional Syphilis. He gave a short sketch of the history of this mode of treatment. He gave an account of the forms and strength of those solutions best fitted for injections, and the kind of disease in which it was indicated and most likely to be successful. The strength and frequency of the injections, and the parts of the skin best suited to injection, were also described. Mr. Parker brought forward a few cases in which this method had been very useful after the failure of most of the ordinary methods in use, and particularly advocated its

employ in cases of frequently relapsing syphilis, after the failure or in-success of other remedies.

8. Dr. WADE read a paper on Modern Views of Inflammation and its Treatment.

New Members.—At a Council meeting held subsequently, Mr. Morris of Birmingham, Dr. Crespi of Birmingham, and Mr. Hodges of the Birmingham Eye Hospital, were elected members of the Association.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, OCTOBER 22ND, 1869.

JAMES PAGET, ESQ., F.R.S., President, in the Chair.

THE PRESIDENT brought under the notice of the Society the case of a man who, with extensive necrosis of the occipital bone, had Muscular Atrophy of one side of his Tongue. After removal of many pieces of dead bone from about the foramen magnum, the wasted side of the tongue increased in bulk to a considerable extent.

Mr. SPENCER WELLS exhibited a new Clamp for Ovariectomy, which is figured and described at page 467 of last week's JOURNAL.

Mr. MARSH read notes of a case in which a Cleft of the Soft Palate had been cured in a child sixteen months old. The operation was performed in August. Chloroform was used, and the parts were brought into view by Mr. T. Smith's gag. The edges of the cleft were pared, and then brought together with horsehair sutures. The arches of the palate were snipped with blunt-pointed scissors. The greater part of the wound healed in eight days, but a hole as large as a kernel of wheat remained where the soft joined the hard palate. The author offered the case as a contribution to the data on which it might be determined at what age in childhood the operation for closing fissure of the palate should be undertaken. It seemed reasonable to believe that, the earlier the operation could be successfully performed, the better would the child's future power of articulation be. He referred to a statement made by Mr. Lawson Tait in the *Lancet*, to the effect that he had operated with success on a child nine months old (of this case, however, no particulars were given by Mr. Tait); and also to a case in which Mr. Frank Buszard, House-Surgeon at the Northampton Hospital, had closed a fissure of both the hard and the soft palate in a child six months old at a single operation.—Mr. THOMAS SMITH had had an experience of forty-two cases which were operated on under chloroform; half were under seven years of age, and others younger. He had met with no failures in hard palate operations; but in operating on soft palates there were many dangers which affected them more, as scarlatina, whooping-cough, mumps, etc. In the older cases, surgeons were more successful.—Mr. SPENCER WELLS wished to know the effect on pronunciation. He said that M. Nélaton had given up operating on both hard and soft palates, as the artificial palates were better for speech. Mr. Wells had performed eight or ten operations, but they were disappointing.—Mr. SMITH could scarcely give the result, as his operations were mostly on young persons. He thought the difference in cases was due frequently to the shape in which the palate was made. If discretion were used in forming the arch, a good palate could be made. He thought that adults often spoke better with artificial palates; the same men who would take trouble in learning to pronounce with them, would be good subjects for operation; but still the cases in adults were disappointing.—A MEMBER gave his experience of a case of a girl, who in ten days, especially when she took trouble, showed very marked improvement in her speech.

Mr. CAMPBELL DE MORGAN related a case of Fracture of the Base of the Skull. The patient fell on his head in a state of intoxication, was stunned, and had bleeding from the right ear. He gradually recovered, and was in about three weeks so well that he was desirous of going home. But he was then attacked with slight shivering, and became drowsy, and lost his appetite. Soon after he was perfectly comatose, and had complete paralysis of the left side of the body. From this state he entirely recovered, and in about ten days he was nearly as well as before the attack, but he had severe pains in the head and restlessness. On August 3rd, he again became drowsy, and complained more of his head, and remained much in the same condition till the 12th, when he was suddenly taken much worse and died. He had no return of paralysis. The skull was found to have a fissure at the base on the right side, with marks of old effusion of blood about it. There was an abscess in the under and outer part of the middle lobe, near the seat of fracture, and a rupture, shortly before death, of

the abscess into the right ventricle. In reply to Mr. Callender, he said that there was a general paralysis of the tongue, which, however, passed off. There was no aphasia.—Mr. BARWELL spoke of a man who died five days after an accident, and in which the pus occupied almost the whole left hemisphere.—Mr. DE MORGAN said the point of interest was the recovery from the abscess and the succeeding death.—Dr. GREEN thought it likely that embolism of the arteries round the abscess was the cause of death.

Dr. GREENHOW related a case of Diphtherial Paralysis in a woman, aged 21. The local disease had been most severe on the left side of the throat, and the paralytic symptoms, which successively affected the muscles of the fauces, tongue, lips, cheek, eyes, and limbs, were most strongly marked on the left side of the body. The patient was first treated with the tincture of perchloride of iron and with strychnia in the proportion of one-sixth of a grain daily, and was then galvanised from the knees to the feet and from the elbows to the hands on alternate days. She made a rapid and perfect recovery. Dr. Greenhow remarked, with reference to this case, that he had usually observed, when there was any marked difference in the intensity of the disease on the two sides of the throat, a corresponding difference in the severity of the paralytic symptoms on the two sides of the body. He had also noticed that the paralysis usually appeared to spread from the seat of the local disease to the fauces, tongue, lips, and other neighbouring parts, and thence to the eyes, trunk, and upper and lower extremities.—Dr. WEBER had notes of 39 cases. The paralysis of sight never followed, but preceded the affection of the limbs. When both upper and lower extremities were affected, his cases showed that one was affected as soon as the other. Paralysis followed exercise, which was productive of bad results, and in one case of death. He had never observed the correspondence between the side of the throat and the paralysis. The percentage of cases of paralysis since 1862 had diminished.—Mr. NUNN thought that the afferent power was affected by the poison which was spent on the periphery of the nerves.—Dr. BEUMLER thought strychnia of great use, if used in sufficiently large doses.—Dr. GREENHOW, in answer to Dr. Powell, said that the cases in which the pulse is lowered are very fatal.

MEDICAL SOCIETY OF LONDON.

MONDAY, NOVEMBER 1ST, 1869.

PETER MARSHALL, Esq., President, in the Chair.

MR. JABEZ HOGG brought before the Society a young woman upon whom he had operated for Ectropion. The operation was a modification of Dieffenbach's. He made a semilunar incision through the skin and dense structures below the everted lid, and deepened the cut till it reached the conjunctival sac. He then seized a fold of the uninjured conjunctiva with toothed forceps, and passed two stitches through it at short intervals. On drawing this down, the lid became immediately inverted. The ends of the silk were drawn upwards and secured to the superior orbital ridge with plaister. A firm pad and bandage were applied to keep the parts adjusted. The wound made by the knife was left to granulate. Adhesions quickly formed between the conjunctiva and the lips of the wound, and in ten days she left the hospital greatly improved, and with the epiphora (from which she also suffered) quite cured.

Dr. JEPHSON read notes of a case of Cancerous Deposit in the Posterior Mediastinum, with effusion into the left Pleural Cavity.

Dr. SEMPLE read a paper on the Prognosis of Heart-Disease. The author adverted, in the first place, to the general impression long entertained by the public and profession as to the necessary fatal character of heart-disease—an impression which was rather increased than diminished by the invention of the stethoscope and the advances made in pathology. Dr. Semple questioned the propriety of informing the patient of the existence of heart-disease in all cases where some abnormal bruit is detected, not only because this disturbed the mind of the patient, but because both acute and chronic diseases of the heart are far less fatal than is generally supposed. In 1850, he presented a paper on this subject to the Medical Society, and he showed from cases that had come under his own observation that serious disease of the valves was compatible with longevity, and even with a moderate enjoyment of life. These views had been confirmed by all subsequent experience, and were now generally adopted. In reference to life assurance, the author considered that these opinions ought to, and now do, have weight. He recorded a very recent case of a young lady suffering from valvular disease following repeated attacks of acute rheumatism; although the heart is permanently altered, the patient is now enjoying good health, has lately married, has had a child, and has taken a voyage to the Antipodes.

CORRESPONDENCE.

GLASGOW AND ABERDEEN UNIVERSITIES' ELECTION.

SIR, —Will you oblige me by giving a place in the JOURNAL to the subjoined letter which I have addressed to Dr. Andrew Clark.

I have been much pressed by some of my medical friends to enter much more fully than I have done into the various questions which at present interest the medical profession. And nothing would be easier than by their assistance, and by means of the information on the subject with which they have furnished me, to make a show of acquaintance with and interest in, and formed opinions on such questions as the consolidation and amendment of the Sanitary Laws, a new and more stringent Medical Act, the management of the Great Hospitals, including the remuneration of the medical officers, medical relief of the poor, obligations thrown on medical men with reference to registration of deaths and public vaccination, government encouragement of and provision for the study and teaching of the branches of science which concern the medical profession—with all which questions, except the last, my acquaintance beyond that which I have acquired within the last few weeks is necessarily of the most general description.

Of these questions, I can say that I recognise their importance, and the duty of a representative of the universities to make himself master of them and of the views of the profession in regard to them. And I may also say that I think that in this country the law and the Government (and I do not confine this opinion to medical matters) do a great deal too little in the way of the supervision, management, and carrying on of public bodies, institutions, and undertakings, and of protecting the public against becoming the prey of unscrupulous men, whether quacks, promoters of companies, or impostors of other kinds. But having said this, I must add that I think it honest and fairer, both to the profession and to myself, not to bid for their support by making a display of knowledge and interest in enunciating opinions, necessarily crude, on the particular questions to which I have referred, or on others.

A constituency is, in matters which specially affect it, entitled to look on its representative as its counsel—its advocate—even its delegate. And if my recognition in the fullest way of the medical part of the constituency as entitled to look on the member for the universities as filling the character of their representative does not satisfy them, I am quite sure that nothing that I could honestly say on particular questions would.

I am, etc.,

ARCHIBALD SMITH.

[The following letter, addressed by Mr. Smith to Dr. Andrew Clark, is submitted to the members of the medical profession who are members of the General Councils of the above Universities.]

3, Stone Buildings, Lincoln's Inn, 1st November, 1869.

"Dear Dr. Andrew Clark,—I regret to find that some misapprehension exists among the members of the medical profession who are members of the General Councils of the Universities of Glasgow and Aberdeen, as to my view of the duty of a representative in Parliament of the Universities to the medical profession, and I have been urged by several of my friends in that profession, to whose opinion I defer, to endeavour to remove the misapprehension.

"I regard a representative of the Universities as a representative not more of the Universities, considered as educational bodies, than of the great professions whose members constitute so great a part of the constituency, and, therefore, as being in a special sense a representative of the members of the medical profession. I consider that it is his duty to make himself master of questions which affect or interest them, and to be prepared to state and advocate their views in Parliament.

"This wide view which I take of the duties of the University representative might seem to make it unnecessary for me to express my opinion on particular questions, which are, in fact, covered by it; but I have been urged to express on two questions in particular, viz., firstly, the representation of the profession generally in the Medical Council, and secondly, the obligation thrown on medical men to perform professional services for the public without remuneration.

"On the first question, it seems to me there cannot be two opinions; and that the profession is entitled to such a representation as it seeks in the Medical Council. The particular mode of representation should, I think, be decided according to the views of the profession.

"The second question refers to a hardship of which it seems to me the members of the profession affected by it have a right to complain, and I should be glad to assist them in any endeavour to be relieved from it.—I am, dear Dr. Clark, yours faithfully,

ARCHIBALD SMITH.

"Andrew Clark, Esq., M.D., Cavendish Square."

Palace Chambers, Abingdon Street, Westminster, 4 Nov. 1869.

SIR,—Inquiries having been made to me by medical graduates residing not only in London, but in various parts of England, as to Mr. Gordon's views with reference to matters of medical reform, I shall feel much obliged if you will insert the letter which I herewith send, and which I have this morning received from Mr. Gordon on these subjects, as the best means of affording information to the gentlemen who have made inquiries, and to others who may be interested in the subject.

I am, etc.,

The Editor BRIT. MED. JOURNAL.

T. B. SIMSON.

“Edinburgh, 3 November, 1869.

“MY DEAR SIR,—I understand that some of the electors of the Glasgow and Aberdeen Universities, who are medical men, have expressed to you their desire that I should explain more fully than I have done in my address my views in reference to medical subjects. It was not because I did not consider these subjects of importance, or that my attention had not been in various ways directed to them, that I did not allude specially to them in my address, but because I was unwilling to overload it with details; and I gladly embrace the opportunity of complying with their request.

“I think that a new Medical Act is required, which, among other improvements, shall contain a clause or clauses expressed in more comprehensive and clear terms, for the purpose of preventing the assumption of medical titles by quacks and others who practise as medical practitioners without having any qualification to do so, to the great detriment of the public.

“Questions as to the constitution of the General Council, and the more efficient representation of the general body of medical practitioners, will also require to be considered. These are important and somewhat difficult questions; but until I have given them more careful consideration, I am unwilling to pledge myself to support any one of the plans which have been broached, and shall content myself with saying that I think the Council should be constituted on a more popular basis than at present. I shall be glad to receive information on these subjects from those who are qualified to give it.

“I am aware that there is a strong feeling in the profession that medical men are not sufficiently remunerated for their services to paupers under the employment of the Poor-law authorities. I concur in the opinion that these services, as a general rule, are not sufficiently remunerated. I object, in particular, to a practice which prevails in some parts of Scotland—I do not know whether it exists in England—of paying a medical man a small sum, not only as salary for attendance, but also to cover the supply of medicines. This system appears to me to be alike inexpedient as regards the sick poor, and oppressive as regards the medical officers. It is more difficult to provide a remedy for insufficient payment, on account of attendance; but it occurs to me that a scale might be framed, founded upon the number of paupers on the roll, and the extent of the district.

“I am also inclined to think that medical officers in Scotland should be placed on the same footing as inspectors of the poor are—that is, although appointed by the local Poor-law Boards, they should not be removable by these Boards, except with the sanction of the Board of Supervision.

“I think I may claim to have done some service in the cause of sanitary reform. As Lord Advocate I took a very careful charge of the Public Health (Scotland) Act, 1867. It consolidates previous statutes on the same subject, and contains many new provisions which have been found of great importance to the health and comfort of the poor. In particular I may refer to those provisions which secure (and, if necessary, by virtue of compulsory power, similar to those contained in the Land Clauses Acts) water for the supply of small towns and villages. I hear from many quarters that these provisions have been found most beneficial. The measure is not so perfect as I could wish, as I was not in Parliament at the time, and I was obliged to get the Act passed by means of arrangements made at meetings with the Scotch members. I may refer in particular to the provisions relating to medical officers, which, in the Bill as originally prepared by me, were expressed in terms which would have secured that they should not be dismissed without the consent of the Board of Supervision; but this was objected to by the majority of Scotch members.

“There is a special grievance affecting medical men in Scotland. They are bound under the Act for the Registration of Births and Deaths to give a certificate to the registrar, of the death of each patient, subject to a penalty for omission to do so, while no remuneration is given for the certificate. There is no such penalty in England or Ireland for the omission to give such certificates. The medical men of the three countries should be placed on the same footing; that is, there should be no penalty in Scotland, or if it is desired that there should be a

perfect system of registration of deaths, for the public benefit, there should be remuneration from the public funds given for the trouble caused to medical gentlemen in giving such certificates.

“If returned to Parliament, I shall do what I can to promote measures calculated to improve the condition of medical men so far as legislation can properly effect that object; and also to secure greater attention to State Medicine and the laws of public health, for much may be done in the way of prevention, no less than cure.

“I am not ignorant of the position of army and navy medical men, my attention from circumstances having been specially addressed to the grievances of the members of the two services; and the interests of these officers shall receive my best consideration with a view to their improvement.

“I regret having to make such frequent reference to myself; but my apology must be the inquiries made as to my views by so large a portion of the constituency as the medical practitioners connected with the Universities of Glasgow and Aberdeen.—I am, etc.,

“EDWARD S. GORDON.”

THE UNIFORM LICENCE; AND TITLES.

SIR,—Excuse my trespassing on your valuable space with a few remarks on a subject which has of late been prominently brought before us through the medium of the JOURNAL. An uniform examination and licence granted jointly by the Royal Colleges of Physicians and Surgeons, and the Society of Apothecaries, would be a great boon to students and to the profession. Every medical man would then practise the healing art in all its branches without undue preference being given to any particular part (except in the case of specialists); he would also be able to style himself, “Mr. — Physician and Surgeon.” The universities of course would still continue to grant their degrees, and the title of doctor, which, however, would soon be looked upon as an appendage not conferring any particular privilege as regards practice. The Fellowship of the Colleges of Physicians and Surgeons should be reserved as an honour for distinguished members of the profession, as some distinctions will always exist in the world. But, before admitting candidates to the licence, they should be compelled to subscribe to declarations somewhat similar to those required by the King and Queen's College of Physicians in Ireland, which are, that they shall not endeavour to obtain practice, or attract public notice by unworthy means; and shall not engage in any trade in the United Kingdom, or compound or dispense medicines for sale (which, I take it, means keeping an open surgery or shop.) Much has already been done to raise the profession in public estimation by establishing compulsory preliminary examinations, and by stricter and more practical professional ones; both which, but especially the former, will I think, have to be raised to a higher standard, if the uniform licensing system be established. Much remains still to be effected, for the accomplishment of which we are looking to the Medical Council. Could not a society to protect our interests be formed in connection with the British Medical Association, which shall include every member of the profession paying a trifling annual subscription, so that action could be taken against offenders without the onus and expense falling on individual practitioners? I am, etc.,

Oct. 16th. A MEMBER OF THE BRITISH MEDICAL ASSOCIATION.

EXCISION-CURES OF SPINA BIFIDA.

SIR,—In your JOURNAL for September 25th, Mr. E. Sidebottom relates a case of spina bifida radically cured by ligature. He gives no account of the structure of the sac, but states it to have been composed of the “parietal arachnoid”, covered by dura mater and imperfectly developed integument. I take it, also, that the tumour was pedunculated, not sessile; since he speaks of the ligatures being applied “round the neck of the tumour”. Now, I am of opinion that most, if not all, of these pedunculated hydro-meningoceles, especially if they be found above the first lumbar vertebra, even on the head itself, are proper cases for treatment; and that the knife (other remedies having been deemed useless in any given case), combined with the application of the actual cautery to the divided spinal membranes in the neck of the sac, is decidedly preferable to the ligature.

Mr. Sidebottom is mistaken in supposing that the treatment of these tumours by deligation commenced with Forrester or Bell. More than three hundred years ago, Forestus treated a case by ligature, on the faith of instances brought forward in consultation by a surgeon who asserted “that he had performed many cures in this way”. Since that date (1563), the ligature has frequently been applied to these tumours; but it has not been approved, for the long continued irritation produces convulsions; and, as a rule, when the sac sloughs off, a dribbling from

the arachnoid continues; the opening into the arachnoid remains patent; and slow but destructive inflammation about the spinal cord takes place, ending in death.

I wish to record my firm belief that very many cases of spina bifida are amenable to treatment, and that a correct diagnosis in each instance is the proper ground on which to base the treatment. There can be no doubt that the treatment of these cases has been attended with much success of late years; and that the remark of M. Ferrand is correct—viz., that “the omission of the necessary remedies is as fatal to humanity, and perhaps more frequently so, than rash attempts to cure. Everything depends on the discernment of the practitioner. Life and death may be equally the effects of his knowledge and dexterity, or of his want of experience and skill.” These remarks were made with reference to a large hydromeningocele (Fabric. Hildanus, *Observ. Chirurgia*, Cent. Sexta, Obs. 17), which Ferrand considers might easily have been removed. Now, within the last year or two, two similar tumours have been removed by the knife—one with complete, the other with partial, success.

M. Dubourg (*Gazette Médicale*, July 31st, 1841) records three cases of spina bifida on which he operated. In the first, he used the ligature. The child died in two days. In the second, he used the knife. The child was cured, and, four years afterwards, was quite well. In the third, he used the knife (the tumour was situated over the last cervical and first dorsal vertebræ). The child was perfectly cured, and remained well when seen two years and a half afterwards.

I myself have had two most happy results of the treatment of spina bifida by the knife. The sacs removed are both in the Museum of St. Bartholomew's Hospital, London. The children, both of them threatened with immediate death before operated on, are now healthy and strong. One is eight years of age, the other four years. An account of the first case will be found at page 215 of the *Pathological Transactions*, vol. xiv. I do not endorse all that is there written, and purpose writing further on the subject, if I am enabled to find time to visit the museums and libraries of the metropolis. I have seen, in the Museum of St. Bartholomew's and the Hunterian Museum, sacs containing brain-substance or posterior spinal roots of nerves, which would probably have been better removed.

I am, etc., W. J. WILSON.

Hill House, Clay Cross, October 1869.

CARBOLIC ACID.

SIR,—Dr. Thomas Keith's letter corroborates, rather than invalidates, my position. Allow me to state:

1. That it is my belief that, like creasote, which has been long used as a dressing, and with which carbolic acid has the closest chemical affinities, the latter will be found of use in the treatment of indolent sores; or solutions of continuity, accompanied with bruising, whereby the vitality of the part is depressed; while I am persuaded in my own mind that, in the case of clean wounds, the interposition of any foreign material whatever is opposed to the reparative process.

2. That it has never yet been proved that suppuration is due to spores, as Mr. Lister asserts, for suppuration has taken place since humanity was formed, in situations to which atmospheric sporules could never have had access; that the existence of these sporules in the atmosphere is problematical; while the persistence of suppuration may be due to any irritant, atmospheric, mechanical, or constitutional.

3. That, if it be simply the exclusion of air that is desiderated in Mr. Lister's method, the practice is by no means new; while, to accomplish this, carbolic acid possesses no superiority over other applications that have been used for this purpose.

4. That, if the whole air be excluded, how can it be proved, granting even beneficial results, that the benefit is due to the exclusion of a hypothetical component part, and not to the exclusion of other parts whose existence has never been disputed, or to the exclusion of the entire atmosphere?

5. That, granting that carbolic acid is an antiseptic, and may, and doubtless does, act beneficially in wounds having a putrefactive tendency, it is but one of a numerous class whose good effects no one disputes (*Vide* papers on Syphilitic and Phagedænic Ulceration, by D. C. Black, M.D., *Lancet*, 1866); and that it is unphilosophical to give undue prominence to one, at the expense of all the rest, as Mr. Lister and his disciples have unquestionably done.

6. That some mystery underlies its form of application; for Mr. Lister admits that, as a remedy, it will fail in Glasgow, as elsewhere, without due regard to antiseptic principles. Other antiseptics applied to wounds act beneficially as antiseptic remedies, no matter how applied. By their action, they make the principles—not the principles them.

7. That carbolic acid has been made of late years a medical and surgical hobby, as the pages of our leading journals can testify; so much

so, that the difficulty consists, not in stating what it has cured, but what diseases have not yielded to its therapeutic properties. If those diseases have yielded to it, why retain our cumbrous materia medica? If they have not, as I contend, notwithstanding all that has been said to the contrary, what then? Why, blow off the cloud of chaff in the shape of coincidences, and retain the grain of wheat; and matters will remain just as they have been!

8. That, as a rule, those medical and surgical sensations are obstructive to the progress of true science, owing to the mental diversion from other and rational subjects, and the necessary time spent in unlearning.

Will Dr. Keith dispassionately show, then, what he is pleased to term “Mr. Lister's discoveries”? Dr. Keith has not informed the profession whether he has met with greater success from the employment of carbolic acid than such old-fashioned yet good antiseptics as “bags of charcoal, sulphate of soda, sulphate of iron, and Condy's fluid and tar.” That Mr. Lister's recent publications regarding carbolic acid have given our Medical School a “name”, I will not dispute. Of the value of that “name”, greater authorities than I are pronouncing an opinion.

These, then, are my humble views; and, with your kind permission, I have as good a right as any one else, if I have the temerity, to give them expression. If my former letter can bear any other interpretation, I have learned the elements of the English language in vain, and Dr. Keith's letter may be subversive of the opinions I have adduced.

I am, etc., D. CAMPBELL BLACK.

Glasgow, October 1869.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF OXFORD.

NATURAL SCIENCE SCHOLARSHIP.—An examination for a scholarship on the foundation of Miss Brackenbury, for the encouragement of the study of natural science, will commence on Friday, November 19th. The scholarship is of the value of £70, tenable for three years; and is open to all candidates who have not exceeded eight terms from matriculation. Papers will be set in the following subjects:—1, Mechanical philosophy and physics; 2, Chemistry; 3, Physiology: but candidates will not be expected to offer themselves in more than two of these. There will also be a practical examination in one or more of the above subjects, if the examiners think it expedient.

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were duly admitted members of the College on October 28th.

Dalton, William, Bournemouth, Hants (late of Cheltenham)
Garlick, John William, M.D., 6, Lord Street, Halifax (*olim* Extra-Licentiate)
Shearman, Edward Jas., M.D., Moorgate, Rotherham (*olim* Extra-Licentiate)

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, October 28th, 1869.

Curnow, John, Penzance
Hewby, William Cooke, Ripon, Yorkshire
Kingsford, Percival, Sunbury, Middlesex
Kynaston, Albert Edward, Bellingborough
Milles, George Ridley, St. Margaret's, Kent
Smith, Arthur William, Halifax

The following gentleman also on the same day passed his first professional examination.

Willmore, F. W., Queen's College, Birmingham

MEDICAL VACANCIES.

THE following vacancies are declared:—

BANBURY UNION, Oxfordshire—Medical Officer and Public Vaccinator for the Middleton Cheney District: applications, 10th Nov.; election, 11th Nov.

BLACKBURN INFIRMARY—House-Surgeon.

BRISTOL GENERAL HOSPITAL—Physician: election, 10th.

CAISTON UNION, Lincolnshire—Medical Officer and Public Vaccinator for the Keelby District.

CHOLSEY (Berkshire) NEW PAUPER LUNATIC ASYLUM—Resident Medical Superintendent.

GENERAL INFIRMARY, Chester—Visiting Surgeon.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton—Physician.

LEEDS DISPENSARY—Resident Surgeon.

LIMERICK UNION—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Annacotty Dispensary District: election, 9th Nov. Also, for the Murroe Dispensary District: election, 16th Nov.

LINCOLN COUNTY HOSPITAL—Physician: applications, 20th Nov.; election, 22nd Nov.

LIVERPOOL BOROUGH PRISON—Surgeon: applications, 10th Dec.

LOCK HOSPITAL AND ASYLUM—Additional Surgeon to Out-patients.
 NOTTINGHAM UNION—Medical Officer and Public Vaccinator for District No. 2: application, 20th; election, 23rd.
 POPLAR UNION—Medical Officer and Public Vaccinator for the Bow District.
 RADCLIFFE INFIRMARY, Oxford—House-Surgeon.
 ROSCREA UNION, co. Tipperary—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the sub-District of Ballybritt, in the Roscrea Dispensary District: election, 8th Nov.
 ROYAL KENT DISPENSARY, Greenwich—Resident Medical Officer: applications, 6th Nov.; election, 19th Nov.
 ST. GEORGE AND ST. JAMES DISPENSARY, King Street, Regent Street—Two Physicians: Nov. 13th.
 STOURBRIDGE DISPENSARY—House-Surgeon and Secretary: applications, 11th Nov.; election, 23rd Nov.
 SUSSEX COUNTY HOSPITAL, Brighton—Dispenser: applications, 15th Nov.; election, 22nd Nov.
 SWANSEA INFIRMARY—House-Surgeon: applications, 24th Nov.; election, 1st Dec.
 WESTMINSTER GENERAL DISPENSARY, Gerrard Street, Soho—Surgeon: applications, 22nd Nov.; election, 25th Nov.
 WORCESTER INFIRMARY—House-Surgeon: applications, 10th Dec.; vacancy, 11th January.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*BAKER, John C., M.D., appointed Honorary Assistant-Surgeon to the Ladies' Charity and Lying-in Hospital, Liverpool.
 FISH, J. Crockett, M.B., appointed Physician to the Royal Hospital for Diseases of the Chest, City Road, *vice* R. Thorne Thorne, M.B., resigned.
 PARKER, Robert Wm., Esq., appointed House-Surgeon to the Stratford Dispensary, *vice* Dr. Oswald Baker, resigned.

BIRTHS.

DANIEL.—On October 21st, at Epsom, the wife of W. C. Daniel, M.D., of a son.
 FOTHERBY.—On October 24th, at Trinity Square, E.C., the wife of H. I. Fotherby, M.D., of twin boys.
 HAMILTON.—On October 25th, at Oakthorpe, Windermere, the wife of Archibald Hamilton, M.D., of a daughter.
 JENNER.—On October 25th, at Brook Street, the wife of *Sir William Jenner, Bart., M.D., of a son.
 MUNGLE.—On October 23rd, at Edinburgh, the wife of Robert Mungle, Esq., Surgeon R.N., of a daughter.
 MURCHISON.—On October 20th, at Wimpole Street, the wife of *Charles Murchison, M.D., F.R.S., of a daughter.
 WILLY.—On October 24th, the wife of Ambrose Willy, Esq., Surgeon, Margate, of a son.

MARRIAGES.

LARCOMBE, Samuel S., Esq., Surgeon, of Castle Carey, Somerset, to Louisa, daughter of the late Thomas Y. GREET, Esq., Queensborough, Isle of Sheppey, at Norham, Northumberland, on October 27th.
 RICE, Michael Weldon, M.D., of Sloane Terrace, London, to Agnes Boyd, younger daughter of the late Thomas Jackson GRAHAM, M.D., R.N., of Edinburgh, on October 27th.

DEATHS.

HARRIS.—On October 20th, at Walthamstow, aged 58, Isabella, widow of Henry B. Harris, M.D.
 WATKINS.—On October 24th, aged 75, Elizabeth Mary, wife of Joshua Watkins, Esq., Surgeon, of Chandos Street, Strand.

BEQUESTS.—The late Mr. William H. N. Myers of Leeds has left £200 each to the General Infirmary, Dispensary, House of Recovery, and Hospital for Women and Children, in that town.

DERBYSHIRE GENERAL INFIRMARY.—The Bishop of Rochester will preach the Anniversary Sermon in aid of the funds of this Infirmary, on Thursday next.—The Mayor of Derby (T. B. Forman, Esq.) has, at the termination of his year of office, given a donation of £100 to the Infirmary.

ACTION OF ATROPINE ON THE HEART.—From a series of experiments lately carried out by Dr. F. B. Nunneley, he concludes that the action of atropine on the heart is neither considerable nor energetic, a progressive weakening of its power being the most prominent visible effect. The heart continues to beat for some time after the manifestations of life in the rest of the animal have disappeared; finally, it slowly dies itself, the ventricle being left in a state of relaxation. This occurs at the end of ten, twelve, or several more hours.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—The first ordinary monthly meeting of the session 1869-70 was held at 32, Soho Square, on Monday, November 1st, at 8 p.m.; the President, H. J. Barrett, Esq., in the chair. Dr. Ormerod related a case in which spasms of the sterno-cleido-mastoid muscle were cured by removal of diseased teeth, by Mr. W. A. N. Cattlin. The President exhibited casts of a case of double harelip, and gave particulars as to its treatment. Mr. Mummery read a paper on the Evidences of Dental Caries among Ancient Races of Mankind and existing Savage Tribes. After some remarks from Mr. Flower, the meeting adjourned.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
 TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.
 WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.
 THURSDAY...St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
 FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
 SATURDAY...St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Dr. Sansom, "On a Case of Constriction of the Mitral Orifice, with Cerebral Symptoms simulating those of Typhoid Fever"; Mr. Wm. Adams, "On Hip-Joint Disease".
 TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Heale (Winchester), "On the Physiological *rationale* of Pneumonia and Bronchitis; Dr. Waters (Liverpool), "On the Treatment of Pneumonia".
 WEDNESDAY.—Hunterian Society, 7.30 P.M., Council Meeting. 8 P.M., "Cases of Amussat's Operation", by Messrs. Couper and James Adams.—Royal Microscopical Society.—Meteorological Society.
 FRIDAY.—Royal Astronomical Society.—Clinical Society of London. Dr. Henry Thompson, "Cases of Ascites successfully treated by Copaiva, Quinine, and Iron"; Dr. Liveing, "Cases of Renal Dropsy treated by Copaiva"; Mr. Calender, "Colotomy for the Relief of Cancer of the Rectum."

EXPECTED OPERATIONS AT THE HOSPITALS.

LONDON HOSPITAL, Wednesday, November 10th, 2 P.M. Tumour of Jaw; Trephining of Humerus; Vesico-Vaginal Fistula—by Mr. Maunder.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

WE should feel obliged if any of our associates kindly forwarded prospectuses of provident hospitals or dispensaries with which they may be connected.

OUR notice of the vacant assistant-physicianship at the Brompton Hospital was premature. A physician must first be appointed; and it depends upon the result of this election whether a vacancy for an assistant-physician will occur.

AN ORDINANCE has been issued in the Mauritius for the regulation of the practice of pharmacy and the sale of poisons.

LADY NURSES.

SIR,—I am glad to see that you have favourably noticed the efforts that are being made to induce a superior class of persons to take the position at present occupied by upper nurses in families. There are hundreds of educated women at present dependent on their friends, or struggling for a living as daily governesses, who would be far more happy and comfortable in the nurseries of the rich, exercising all those affections and instincts that constitute the beauty of the female mind. As the head of the nursery, there are no duties that are at all menial. Children would have an educated instructress from their earliest days, and would not acquire vulgar expressions and evil habits, which so often is the case when they are constantly associated with servants.

I can speak with confidence as to the advantages and success of this system, having for the last twelve months had the services of an educated person, a widow, as lady nurse, who has performed her duties most satisfactorily. I hope that my example and success will induce others to adopt the same plan, that ladies seeking remunerative occupation may find duties more in unison with their nature than studying anatomy or the abstract sciences.
 I am, etc.,
 11, Craven Hill Gardens, W., October 1869. J. BRENDON CURGENVEN.

M. ROBERT (*Comptes Rendus*, August 16th) draws attention to the fact that bronze statues placed on stone pedestals protect the stone from the attacks of cryptogams, no doubt through the influence of the salts of copper formed by exposure to rain and weather. The fact is worth remembering in reference to vegetable parasites in animals, against which as yet we believe the salts of copper have been but little used. Possibly, however, they are not superior in efficiency to others already well known.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

AMENDMENT OF THE MEDICAL ACTS.

SIR,—I enclose copy of a letter which I addressed to Her Majesty's Secretary of State for the Home Department, and his reply. My object in asking for an interview at long date, was to enable me to communicate with a number of those who signed the memorial, and by whom I hope to be accompanied when I present it. I now beg that any one desirous of forming part of the deputation will be good enough to communicate with me. On receipt of the Secretary's appointment, I shall forward invitations for a meeting at the Medical Club, an hour before the time which may be fixed for attendance at the Home Office.

Bearing, as the memorial does, the signatures of 9471 members of the medical profession, from all parts of the United Kingdom, it is a document without parallel in our professional history; and one which cannot fail to have great weight in promoting the desired Amendment of the Medical Acts. Personally I attach the utmost importance to the following clauses of the memorial:

"The undersigned are of opinion that the system of medical education should be revised, so as to ensure the possession of a thoroughly scientific and practical acquaintance with medicine and surgery on the part of persons applying for the legal qualifications."

"To this end, it is held to be necessary to substitute for the present system of examination, and for the many forms of license now granted, one high and uniform standard of examination and one legal qualification."

The one faculty system granted, all other desirable reforms must follow. The reconstitution of the Medical Council is essential; but I trust there will be no split on the method of representation of the profession, by the direct or the indirect plan, as the rival schemes have been respectively designated. It is pretty evident that the Government intend introducing a Bill to amend the Medical Acts next session; and, now that so large a majority are agreed on the general principles of the desired reform, I think the safest course is to wait the appearance of the Government measure, and dispassionately consider its provisions.

The task of eliciting the opinion of the whole profession has entailed an outlay in printing and postage of about £400. Towards this sum we have received £161:0:7, from 1782 contributors. I beg that further donations, by cheque, post-office order, or stamps, be forwarded to the Treasurer, Mr. Arthur Oakes, 9, Old Square, Birmingham.

I shall in any case deem it a very honourable duty to appear at the Home Office with a deputation to present the memorial entrusted to me; but I confess I should feel stronger in the responsible position, if I had better evidence than I now possess on which to assure the Secretary of State that the majority of the profession are prepared to do something more than merely sign a memorial for the amendment of the Medical Acts.

Confident that those who have cooperated with me in this matter will not be allowed to be pecuniary losers by their labours in the general interest,

I am, etc.,
BELL FLETCHER, Chairman,
Senior Physician to the General Hospital.

7, Waterloo Street, Birmingham, October 25th, 1869.

"Birmingham, October 14th, 1869.

"To the Right Hon. H. A. Bruce, Her Majesty's Secretary of State for the Home Department.

"Amendment of the Medical Acts.

"Sir,—I have the honour to inform you that I have been entrusted with a petition for presentation to you, signed by nine thousand four hundred and seventy-one (9471) registered medical practitioners throughout the United Kingdom, praying that Her Majesty's Government may introduce a Bill into Parliament for the amendment of the Medical Acts. I shall feel greatly obliged by your naming a day, in the ensuing month of November, when I may have the honour of waiting upon you with a deputation to present the memorial.

"I am, sir, your most obedient servant,

"BELL FLETCHER, Chairman, etc."

"Whitehall, October 19, 1869.

"Sir,—I am directed by Mr. Secretary Bruce to acknowledge the receipt of your letter of the 14th instant, requesting an interview for a deputation to present a memorial from certain registered medical practitioners praying for the introduction into Parliament of a Bill to amend the Medical Acts; and I am to inform you that Mr. Bruce is unable, at present, to fix a day to receive the deputation, but will do so in November, when due notice will be given to you.

"I am, sir, your obedient servant,

"KNATCHBULL HUGESSEN.

"Bell Fletcher, Esq., M.D., 7, Waterloo Street, Birmingham."

QUESTIONABLE.—On the occasion of receiving the freedom of the city of Edinburgh last week, Sir James Simpson adverted to the subject of town *versus* country mortality after surgical operations, throwing into strong relief the increased dangers accruing to patients in large hospitals. The *Daily Review* of Edinburgh, in a leading article, quotes the remarks on this point *in extenso*. Sir James Simpson is, doubtless, thoroughly conscientious in his conviction of the truth of his own statistics; yet it would have been no more than ordinary caution to have withheld a popular exposition of his latest doctrines until they had gained tolerably general professional assent.

THE TREATMENT OF SCABIES IN BELGIUM.—We are indebted to Dr. Oppert for the following information. Most patients with skin diseases in Brussels are sent to a special hospital, the St. Pierre, which contains 597 beds. New bath-rooms were opened there a few years ago, where itch patients undergo a procedure by which they are cured in a few hours. In the basement of one of the blocks, with a separate entrance from the court-yard, is an oblong room for males, with twenty-three wooden baths standing rather close together. There is a smaller similar room for females; and between them a place partitioned off by an iron screen. A high temperature is there maintained by hot pipes and a stove; it is generally of 90 to 95 degrees Fahr. Washed clothes may be dried there, and the patients' clothes subjected to the heat. The latter passes through sheet-iron. The patients have a bath, with carbonate of soda (one pound to each bath), in which they remain for an hour, in order to mollify the skin. Afterwards, a compound is rubbed in, and they are ordered to stand near the hot screen. To obtain the compound, 2 kilogrammes of lime (about 4½ lbs.) and 2 kilogrammes of sulphur are boiled with 3 litres (5½ pints) of water for an hour, and then allowed to cool. One bath usually is sufficient for a cure. Similar bathing arrangements for the treatment of itch are found at Antwerp and Haën.

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

"MR. —'s PROVIDENT MEDICAL CLUB.—Established for providing families of small means with attendance and medicine by a yearly subscription. Rates of Payment: For an adult, man or woman, per quarter, 1½ franc; for a child under 15 years, 1 franc. Families of more than five in number taken at a reduction of the above rates. Payments to be made quarterly in advance. Members will be attended in their accouchements for 10s. 6d. within one mile of the town, and 15s. beyond that distance. Hours of Attendance: From 8 to 10 A.M. and 6 to 8 P.M., at Mr. —'s surgery. Members are requested, if not able to attend personally, to send before 10 A.M. to ensure prompt attendance. Cases of sudden illness will be attended at any hour."

A Guernsey correspondent, who sends us the above, informs us that the issue of such documents has previously been unknown there. There can be no doubt that it is greatly below the dignity of a medical man, and a gross deviation from etiquette. We withhold the offender's name for the present, in the hope that he may reform his manners. The document appended will show him the kind of company into which such conduct brings him.

"The Metropolitan Provident Dispensary.—Medical officers: Surgeon, J. Baker Brown, F.R.C.S. Exam.; Physician, Dr. Gutteridge; Assistant-Surgeon, P. R. D. Gabbett. Open to all, without letters of recommendation, every day from twelve till two, for women and children; and from seven to nine P.M. for men (Sundays excepted). For the benefit of all persons, with limited incomes, in every station of life. Terms: For patients attending at the Dispensary, each visit, 1s.; for patients visited at their own houses—Each visit within half-mile, 2s. 6d.; within one mile, 3s. 6d.; within two miles, 5s.; within three miles, 7s. All surgical operations extra. All payments in advance. Medicines gratis, but patients to find their own bottles. Patients attended at their own houses to send for medicines at their own cost. Midwifery: Within half-mile, 10s. 6d.; within one mile, 15s.; within two miles, £1:1."

MEDICAL TITLES.

SIR,—With reference to your recent articles on status, titles, etc., can you inform me if there is anything in the charter of the College of Surgeons, or the Apothecaries' Act of 1815, to prevent those who hold the diploma of one or both of those bodies from using the title of "Doctor"?

Licentiatees of the College of Physicians (1860) are distinctly excluded from so doing by their own bye-laws; but it would be interesting to know if the great bulk of the profession are free to use a term which, as far as concerns the public, only means one who "attempts to cure."

The doors in Pall Mall were bolted when I qualified for general practice, so, as a disciple of the "third and very meritorious corporation," I subscribe myself,
L. S. A.

A. O. F., M.D.—Percival's *Medical Ethics* will give you the desired information. Consult also Willcock's *Laws Relating to the Medical Profession*. The latter is almost obsolete since the passing of the Medical Act.

MEDICAL EVIDENCE IN LAW COURTS.

SIR,—Lest other house-surgeons should suffer in a similar manner, I send you the particulars of a hard case.

I have lately been twice summoned to Brentford by order of the magistrates to give medical evidence for the prosecution in a case of assault. As the prisoner was kept at the House of Detention for two months, during the time that the prosecutor was in-patient in this hospital with a broken leg, the case was not sent for trial, but settled summarily. On my asking for my fees and expenses, the magistrates informed me they had no power to grant them. An application to the Home Secretary had no better result; so I have been forced to lose two days, and spend five shillings in travelling expenses, in the cause of "justice". Now, sir, how can poor house-surgeons avoid this imposition on their time and pockets? I shall try, if I ever have another similar case, refusing either to attend or give a certificate. In the meantime, I send you this, as a "warning to house-surgeons".

I am, etc.,
CHAS. H. JOUBERT, M.R.C.S.,
House-Surgeon, St. Mary's Hospital.

R. F. H.—Your commendation of our strictures on the *Medical Register* and *Directories* is very gratifying. You will find a former review on the subject in the BRITISH MEDICAL JOURNAL of February 16th, 1867; and owing to that review, the two delinquents then exposed were struck off the *Register*.

ANIMAL VACCINE.

SIR,—Can you inform me where I can obtain some "heifer lymph" for inoculating the heifer? Dr. Blanc, who generously proffered to supply any of his professional brethren who asked for it, I understand, has left town. I am, etc.,
Lower Norwood, October 1869.
ALFRED ARMSTRONG.

SIR,—In the JOURNAL of October 16th, you allude to an occurrence of twins twice within eleven months as "sufficiently curious and rare to be worth notice". Another instance happened not long ago in this city. A poor woman, the wife of a journeyman tailor, was confined with two boys on June 3rd, 1867, and with a boy and girl on April 28th, 1868. The former two and one of the latter are living at the present time; the other died three weeks ago. The poor mother died after her last confinement, in her thirty-third year, having given birth, before the twins, to five other children—all girls—two of whom survive. The whole were brought up by hand, as she had no milk after her first confinement; when she nearly lost her life from puerperal fever.

Apropos of births, I may mention that the mother of a late physician to our Royal Infirmary had thirty-four children, of whom he was the youngest. He was a hale and strong man, and died at the age of eighty a few years ago. Formerly a surgeon in the army, he went through the whole of the Peninsular War, and came out of it with a bullet in his loins, which he retained to his death. This was the occasion of some good-humoured bantering as to his courage before the enemy; but the bullet, whether in the back or front, was an evidence that the non-combatant officer was not afraid to place himself under fire in the discharge of his duty.

I am, etc.,
Bristol, October 1869.
W. F. MORGAN.

DR. RICHARDS (Brick Lane) is thanked for the additional particulars which he has forwarded in respect to the inquest. There do not appear, however, to be any points of sufficient interest to require a second notice of it.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Oct. 27th; The New York Medical Gazette, Oct. 16th; The Parochial Critic, Oct. 27th; The New York Medical Record, Oct. 16th; The Boston Medical and Surgical Journal, Oct. 14th; The Madras Mail, August 25th; The Indian Medical Gazette, Sept. 27th; The Edinburgh Evening Courant, Oct. 27th; The Echo, Oct. 18th; The Suffolk Chronicle, Oct. 23rd; The Eastern Post, Oct. 23rd; The Lincoln Journal, Oct. 26th; The Whitehaven News, Oct. 21st; The South Durham and Cleveland Mercury, Oct. 23rd; The Western Daily Post, Oct. 27th; The Newcastle Daily Chronicle, Nov. 1st.

COMMUNICATIONS. LETTERS, ETC., have been received from:—

Dr. Murchison, London; Dr. Bruce, Crimond; Dr. Ashe, Warrenpoint; Mr. C. H. Joubert, London; Dr. C. H. Leet, Dublin; Dr. J. E. Addison, Leeds; Dr. Ward, Douglas, Isle of Man; Dr. J. D. Heaton, Leeds; Dr. C. B. Fox, Scarborough; Dr. Mackendrick, Edinburgh; Mr. C. Thorn, Norwich; Mr. R. W. Parker, Stratford; Mr. R. Davis, London; Mr. J. Brown, London; Mr. F. Bainbridge, Harrogate; Mr. W. T. Black, Bristol; Mr. F. H. Hodges, Birmingham; Dr. J. Fayrer, Calcutta; Dr. J. FitzPatrick, Lenham; Mr. H. Taylor, Norwich; Dr. C. Gage Brown, London; Mr. Benj. Miller, London; Dr. Marshall, Braemar; Dr. Scanlan, Dover; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. J. Russell Reynolds, London; Dr. B. W. Richardson, London; Dr. G. H. Philipson, Newcastle-upon-Tyne; Dr. Little, Dublin; Dr. Chiene, Edinburgh; Inquirer, Bishop Auckland; Mr. T. R. Jessop, Leeds; Mr. J. F. West, Birmingham; Mr. J. Wood, London; M.D. Lond.; Mr. J. Sampson Gamgee, Birmingham; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Treutler, Kew; The Registrar of the Medical Society of London; Mr. J. N. M'Bride, Cirencester; Dr. Bell Fletcher, Birmingham; Mr. Henry Smith, London; Dr. Robert Liveing, London; Dr. H. Mac Cormac, Belfast; Dr. F. J. Brown, Rochester; Dr. Oppert, London; Mr. B. Squire, London; Dr. F. P. Atkinson, London; Mr. J. H. Gorpall, Fishergate, Preston; Mr. A. Andrews, London; G. W., Wanstead, Essex; Mr. J. B. Curgenvin, London; Mr. Augustin Prichard, Clifton, Bristol; The Hon. Sec. of the Royal Medical and Chirurgical Society; Dr. Arthur Andrews, London; Mr. Simson, London; etc.

BOOKS, ETC., RECEIVED.

Report on the Sanitary Condition and Public Health of Mile End Old Town for the year ending March 27th, 1869. By M. Corner, M.D. London: 1869.
A Manual of Clinical Medicine and Physical Diagnosis. By Thos. Hawkes Tanner, M.D., F.L.S., etc. Second Edition. Revised and Enlarged by Tilbury Fox, M.D. London: 1869.
An Introduction to the Science of Heat. By Temple A. Orme. London: 1869.
A Guide to the Examination of the Urine. By J. Wickham Legg, M.D. Lond. London: 1869.
A Paper on the Sanitary State of Bombay. Read before the Public Medicine Section of the British Medical Association at Leeds, July 30th, 1869.
Remarks on the Climate of the Interior of Ceylon. By Henry Dickman, Colonial Surgeon.
Failure of Sight after Railway and other Injuries of the Spine and Head. By T. Wharton Jones, F.R.S. London: 1869.
Casell's Household Guide. Part I. London: 1869.
Hospitalism and Zymotic Diseases. By Evory Kennedy, M.D., etc. Second Edition. London and Dublin: 1869.
An Elementary Course of Theoretical and Applied Mechanics. By R. Wormell, M.A., etc. London: 1869.
On Polypus in the Nose and Ozena: their successful Treatment by New Methods. By J. L. W. Thudichum, M.D. London: 1869.
Novus Theatetus: being the Introductory Address delivered at St. Thomas's Hospital on October 1st, 1869. By W. H. Stone, F.R.C.P., etc. London: 1869.
As regards Protoplasm in Relation to Professor Huxley's Essay on the Basis of Life. By James Hutchinson Stirling. Edinburgh and London: 1869.
Handbook of Physiology. By W. S. Kirkes, M.D. Seventh Edition. Edited by W. M. Baker, F.R.C.S. London: J. Walton. 1869.
The Student's Guide to Medical Diagnosis. By Samuel Fenwick, M.D. London: Churchill and Sons. 1869.
A Pharmacopoeia for the Use of Practitioners and Students of Veterinary Medicine. By Richard V. Tuson, F.C.S. London: Churchill and Sons. 1869.
A Brief Paper on the Pathology of Insanity. By R. C. Shettle, M.D. Reading and London: 1869.
An Essay on Vaccination. By F. S. Garlick, M.R.C.S., L.S.A. London and Halifax: 1869.
Address on Health. By J. A. Symonds, M.D., F.R.S.E., etc. London: 1869.
Outlines of Chemistry; or Brief Notes of Chemical Facts. By William Odling, M.B., F.R.S. London: 1870.
A Treatise on Spasmodic Cholera. By Roderic O'Connor, Esq. Calcutta: 1869.

Results of Meteorological Observations, for the week ending Saturday, October 30th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.							Minimum ex- posed on grass.	Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	WIND.										RAIN.	
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell.	Amount in inches.			
													N.				N.E.	E.	S.E.	S.	S.W.	W.				N.W.	Calm, etc.	
BATH	30.079	0.441	43.7	40.3	36.3	75	56.3	32.1	24.2	49.9	39.4	105.7	..	4	4.5	1.6	1.7	..	..	..	..	0.4	1.3	2	3.5*	4	0.46
Dr. Barter, F.M.S.																												
BOURNEMOUTH	30.097	0.400	41.7	38.6	34.8	78	59.5	30.7	28.8	49.1	35.7	107.0	29.4	2.4	3.3	5.7	0.3	..	..	..	..	..	1	..	2.5	5	0.31
Dr. Compton, F.M.S.																												
DOVER	29.954	0.591	41.7	39.6	37.0	84	54.5	21.4	33.1	48.7	28.3	..	..	4.7	..	3	0.7	..	..	..	0.3	..	3	..	3.6	4	0.45
Dr. Parsons.																												
DUBLIN	30.235	0.314	44.7	42.0	38.8	80	53.3	37.2	16.1	47.7	41.1	..	31.3	5.7	..	2.9	..	..	..	..	..	1.5	2.6	..	3.0	2	0.24
Dr. J. W. Moore.																												
KEW	30.039	0.462	41.5	39.0	35.9	82	53.5	30.3	23.2	47.4	37.9	97.8	25.4	3.7	2.7	1.7	2	..	..	..	0.3	..	2	1	3.6	2	0.09
Dr. Treutler, F.L.S., etc.																												
LLANDUDNO	30.120	0.430	45.3	42.1	38.4	77	55.2	36.0	19.2	49.9	42.1	..	..	7.4	..	4.7	1	..	..	..	..	0.3	1	..	3.7	4	0.91
Drs. Nicol and Dalton.																												
MALVERN	30.087	0.426	41.5	38.6	35.0	79	56.3	30.2	26.1	48.7	37.8	114.0	24.2	4.1	7.7	2.7	4.3	..	8.6*	4	0.44
Messrs. W. and J. Burrow.																												
SCARBOROUGH	29.884	0.588	40.0	39.0	37.7	92	52.2	28.2	24.0	46.7	35.9	103.0	25.7	6.5	3.4	3.3	..	0.3	..	..	..	..	2.7	0.7	5.8	6	2.24
Dr. Fox, M.R.C.P.																												
SIDMOUTH	30.153	0.410	45.2	40.9	36.0	70	58.8	31.7	27.1	50.7	39.8	..	..	3.1	4.6	5	2	..	..	..	..	..	..	..	1.1	5	0.40
Dr. Mackenzie, F.M.S.																												
VENTNOR, I. OF WIGHT	30.164	0.422	43.4	42.3	41.0	91	56.0	32.7	23.3	48.1	39.1	..	..	3.0	5.4	4	1	..	..	..	..	..	2	..	3.6	4	0.41
J. B. Martin, Esq., M.R.C.S.E.																												
WORTHING	30.039	0.495	42.7	39.9	36.5	79	56.0	28.3	27.7	48.6	38.0	98.4	23.6	3.8	1.5	2.3	0.7	..	..	..	..	0.3	2.3	1.3	1.6	3	0.18
W. J. Harris, Esq., M.R.C.S.E.																												

* Mean hourly velocity in miles.

REMARKS.—The mean pressure of the atmosphere has been, on an average, much the same as that of the week before; but it has been more steady, and therefore the range of pressure has been greatly less. The decrease in temperature noted last week has continued during the present one, the mean temperature being about 3 degs. below that of the previous week, while the minima fell at most stations below 32 degs.; the lowest occurring at Dover = 21.4. The range of temperature has been about the same as last week. Winds have continued to blow from the northerly quarter, those from the north being by far the most prevalent. Their force has been on the whole slightly greater than the week before, but it has been more evenly distributed. Rain has fallen in moderate quantities at all stations excepting Scarborough, where the rainfall exceeded 2 inches. The amount of clouds has been slightly less. The first day of the week was generally fine and mild, but gradually the wind freshened, till on the 27th it blew a heavy gale from the north at Scarborough, which continued till the morning of the 28th, and at other stations with a force varying from 4 to 8 of the scale. At the same time temperature underwent a general and rapid diminution. Snow and hail storms occurred at Scarborough on the 25th, 26th, and 27th, the depth of the drift in some places being between 7 and 8 feet: at Bath, on the 27th, at 10.20 a.m., lasting quarter of an hour, and from 6 to 7 a.m. on the 28th; also about 4 a.m. on the 29th; at Dublin on the 26th and 27th; on the 26th at Llandudno, leaving all the surrounding hills white with snow; at Malvern on the 26th and 27th; at Dover snow fell heavily on the 27th, from 4 to 5 p.m., and again on the 28th from 11 a.m. till 1.30 p.m., melting however by the evening. At Ventnor a slight fall of snow occurred on the evening of the 26th, and another more heavy one between 7 and 8 a.m. of the 27th. At Worthing a slight fall of snow took place in the early morning of the 27th, but only just enough to whiten the grass. At Kew, and in and about the metropolis generally, a slight sprinkling of snow occurred about 3.30 p.m. on the 27th, lasting only 10 minutes. The temperature fell to its lowest point during the night from 27th to 28th. After this a general increase took place in the temperature, and rain fell on the last day of the week at most stations. During the week ending Oct. 23rd, scarlatina caused 14 deaths in Dublin, and measles 10; and both diseases continue to be very prevalent. At Worthing some cases of scarlatina of a mild type are still occurring, but chiefly in the same localities as previously noticed. Otherwise the public health is reported as excellent.

Kew, November 3rd, 1869.

W. J. TREUTLER.

REMARKS

ON

THE USE OF THE INTRAUTERINE DOUCHE AFTER LABOUR, WHERE OFFENSIVE LOCHIA EXIST, AS A RULE OF PRACTICE.*

By J. BRAXTON HICKS, M.D.LOND., F.R.S., F.R.C.P.,
Physician-Accoucheur, and Lecturer on Midwifery, etc., at Guy's Hospital;
Physician to the Royal Maternity Charity; and Examiner in
Midwifery at the University of London.

I NEED scarcely apologise for occupying your attention for a few moments, because the subject I am anxious to allude to is one of deep anxiety to us all; namely, the diminishing of the frequency of puerperal fever.

Amongst the many advances made in obstetric knowledge of late years, there are none more important than the recognition of the contagious nature of some, if not of all, kinds of puerperal fever. I think, also, we have sufficient evidence before us to assume the certainty that some zymotic diseases, as scarlatina, diphtheria, typhus and typhoid, measles, erysipelas, will, if imbibed by the pregnant or puerperal woman, produce symptoms so exactly like the so-called puerperal fever, that, having no means of distinguishing them, we are justified in concluding that an animal poison, whether one or many, is concerned in the production of the symptoms of all the different forms, whether introduced from without or engendered within.

We may divide cases of puerperal fever into three great classes:

1. Those derived, mediately or immediately, from the above named diseases; or *exogenetic*.
2. Those arising from poisonous discharges within the passages; or *endogenetic*.
3. Those in which sudden mental impressions or exposure have affected the blood by check of secretions.

Any two of these may coexist, and increase the severity of the case.

Now, the first class is the most frequent. Probably, in private practice, it forms three-fourths of the cases. In private practice, the most frequent origin is scarlatina; in hospital, erysipelas. But, as we increase our care in not exposing the pregnant and puerperal woman to these diseases, and avoid the herding together of a large number of lying-in women, the less will this class become, and the more prominently will the second class appear—namely, that form which is derived from the decomposition of blood, placenta, etc., within the uterine cavity; and it is to this class that I wish to draw your attention.

We all know that a clot is apt to be retained within the uterus after delivery. Sometimes it gives rise to flooding, and then is generally removed. But perhaps it may not be so large as to cause hæmorrhage; but, the uterus being active, it causes irritation to it, and after-pains are produced (indeed, it is probably the usual cause of this painful affection); or sometimes it remains within, attention not being called to it at first. Sometimes the clot is an old one, formed during pregnancy, adhering firmly to the uterus, so that it cannot be expelled; or it may have been formed during labour, and become adherent; or it may have been formed in the uterus, after the expulsion of placenta, and the uterus have failed to expel it from inertia, though without bleeding occurring. In placenta prævia, peculiarly liable to be succeeded by toxæmia, we find that there are clots adhering about the lower part of the uterus, preventing the free escape of the lochia. By either of these means, a clot may remain *in utero*, and, after a few days, generally the second or third, give rise to offensive discharge. A piece of placenta or membranes may also produce the same result, as is well known. In low states of the system, also, the discharges alone may decompose and cause offensive lochia. However, from whatever source we may find decomposition going on in the uterus, the patient is liable to have some form of blood-poisoning, with or without symptoms of local inflammation.

The case need not go on to a fatal termination, but we may have toxæmic symptoms in varying proportions. I can hardly call to mind a case in which, where puerperal trouble existed which could not be traced to the causes of the first class, but that there has been offensive lochia.

The first symptom, besides the rise of pulse and hot skin, is the short cough and peculiar hepatic breath, restlessness, and perhaps delirium; and then all the well known symptoms. The head possibly may sym-

pathise, producing sometimes, in the excitable brain, the so-called acute puerperal mania. It is a curious fact, that, in all the cases of acute puerperal mania which I have seen, only two have been free from offensive lochia.

But it is very important that we should recognise under the head of this second class not only those cases which rapidly prove fatal, but a variety of conditions, more or less intense, which are all fairly referable to absorption of poisonous matter. Many of those cases which are called *debility* are referable to this cause, where there is a quickened pulse, slight cough, sallow hot skin. You will almost invariably find that there has been offensive discharge from the vagina.

When we consider the large area of the internal surface of the uterus, and recollect the amount of bruising and abrasions of the os uteri, and also of the vagina, which occur during labour, it is not difficult to see that the absorption of deleterious matter would take place with great freedom upon the decomposition of a clot or of the secretions. It is not necessary that there should be large open sinuses (though this would be difficult to occur without hæmorrhage, if they were open enough to absorb); it is merely sufficient that there should be contact with a highly vascular surface, whose absorbents and capillaries are scarcely protected. The effect of absorption of decomposing matter is clearly seen in those cases where suppuration occurs, with decomposition, within an ovarian cyst, where no abrasion has taken place. The symptoms are precisely similar, but seldom so intense. Absorption from an adventitious cyst is also well observed, as in some cases of extrauterine foetation.

Therefore I think it will be admitted that decomposition of clots, etc., and secretions, not infrequently take place; and that, when they do, serious and even fatal symptoms are to be apprehended. If this be so, then it follows that their removal would be the proper thing to do. This would seem a self-evident conclusion; but, if we look to the generality of practice, we find that either this inference for practical purposes has not been drawn; or that, if it have, something has intervened to prevent its being employed. I do not here mean to say that many practitioners have not from time to time done so as a rule; but from the works on midwifery I gather no such recommendation; nor in general have I found medical men considering it a useful or necessary procedure. I shall, however, assume that you will all agree as to the truth of the inference.

What, then, has intervened to prevent us from freeing the uterus from these offensive contents? I can hardly tell, but I fancy it has been for two reasons—first, because of the trouble and annoyance it might cause the patient; second, the fear lest some injury might be produced by washing out the uterus.

Now the first may be reduced to a minimum by care and management. If the patient lie on her side, you need not disturb her; but, placing some small basin or tray (a tooth-tray answers very well) against the lower buttock, you can catch nearly every drop of injected fluid: a towel beneath will save the rest. The clothes should only be turned back to enable us to work properly. The tube best suited is the long elastic one of an enema-syringe, with the opening at the end. After attaching it to the syringe, and carefully expelling the air, pass two fingers gently up to the os uteri; then, guiding the tube by these, pass it into the os, gently onwards to the fundus; as soon as it meets with a check, stop; and then gently throw up the fluid, allowing it to escape as fast as it is injected. This is important, to prevent any accumulation in the uterus; but the os is always so open in these cases, that no apprehension need occur, unless we pass in the fluid too rapidly. The vulva sometimes retains the fluid. I therefore see that there is no retention in the vagina. If all this be done gently, no pain need be caused; and no excitement need arise in the patient's mind if it be considered only an ordinary vaginal cleansing.

Now, as to the fear of injury, I am able to say this much, that I have never seen or heard of a case in which it has done anything of the sort. I have used it extensively myself for some years; and we use it in the Lying-in Charity of Guy's Hospital very frequently, but without any untoward result.

There may be a third cause why, as a rule in practice, the procedure has not become recognised; namely, that it is considered that, when the serious symptoms have fairly commenced, so much mischief has ensued, that the time is past for any chance of benefit; the poison acting as a ferment, increasing as it passes through the system. This is quite erroneous. In the cases in which it has been tried before the typhoid symptoms have set in, the subsidence of all the irritative symptoms has been very marked. Immediately after, the patient expresses herself much more comfortable; and in twenty-four hours the whole character of symptoms has changed for the better; the uterine tenderness and enlargement have diminished; and in another day the principal anxiety has subsided. From what I have noticed, I think that the poison is elimi-

* Read before the Midwifery Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

nated from the blood in about twenty-four hours; so that in the first few days, in the generality of cases, it requires a constant supply of poison to keep the system under its influence to the same point.

The injection which I use generally is warm water at blood-heat, to every half-pint of which is added one drachm of solution of permanganate of potass. I prepare at least a quart, and use it till the lotion returns of its proper colour. Any other disinfectant may be employed; but this acts very nicely, without any risk, and tells when it has completed its work. In any case, it is better to use a weak solution, making up in the quantity of fluid used.

The ordinary syphon-syringe is very convenient, as is also the French enema-apparatus. Both these are worked by one hand.

From what has been remarked above, it may be gathered that I would have it established as a rule of practice, that, whenever offensive discharges occur, which are not removed by ordinary vaginal injections, we should at once wash out the interior of the uterus once or twice a day. But I would further add that I believe, if this were systematically done early in every such case, then we should in a large measure do away with the endogenetic form of puerperal fever; and here I would remark, that even a very offensive state of the interior of the uterus may exist without manifesting itself very noticeably in the room. Upon two occasions I have seen very offensive fragments of placenta removed, and scarcely a suspicion of any putridity existed. Thus, provided we could keep the exogenetic cause from the pregnant and parturient woman, and then remove the endogenetic source from the puerperal one, we should reduce puerperal fever to its lowest point; at which point I should not despair of arriving, if every one would assist to this desirable end.

I shall not detain you with recitation of a number of cases, but shall instance a few which exemplified the benefit of the treatment.

Mrs. B. was taken into Guy's Hospital for induction of premature labour for a small pelvis. It was begun by dilating the os uteri with the elastic bags. The placenta was found presenting. However, upon its being dilated a sufficient size to admit two fingers, the placenta was detached from the cervix; the child turned by the combined external and internal version, and in due time delivered. An hour after delivery of the placenta, the uterus relaxed, and considerable hæmorrhage ensued. This much reduced her. On the third day, the uterus became enlarged and tender, the lochia offensive. She had rapid pulse; furred tongue; and anxiety of countenance. The day following, these symptoms increased; upon which I ordered the uterus to be syringed out with warm water, introduced through a gum catheter. This was done, with very considerable immediate relief to the patient; but the next day the change was very rapidly for the better. The uterus had become markedly reduced in size, and the tenderness nearly gone. Nearly all the irritative fever had subsided, and by next day was quite gone. She rapidly lost every untoward symptom, though the loss of blood and free leucorrhœa from chronic endometritis kept her weak some time. I may add, that the uterine douche was continued for some days.

The next case was somewhat similar, as far as the reason for induction of labour, and its complication with placenta prævia. It was treated in the same way; but the placenta was adherent, and the uterus very inactive, so that the hand had to be introduced to detach it; and much difficulty was experienced in getting it to contract, whereby some loss of blood ensued. However, the uterus at last contracted firmly; and, next day after, pains of much severity came on, lasting for upwards of two days, when suddenly portions of clots came away, with a little fresh blood and offensive discharge. On examining the os, I found some firm clots still adhering just inside the cervix, where the placenta had been situated; these I carefully removed. Next day, the offensive discharge filled the room with the odour. The pulse was 120; skin burning; tongue brown in the centre, with much thirst; a short cough, which had not existed before; and a peculiar odour in the breath, like the hepatic breath. In fact, the whole symptoms were indicating the rapid approach of puerperal fever. I washed out the uterus well with weak lotion of permanganate of potass. The patient felt more comfortable afterwards; but next day, on visiting her, I found her wonderfully better. The above symptoms were, however, all present; the cough was still troublesome, with much expectoration. The injection was repeated. The next day, every anxious symptom had gone, with the exception of the cough, which lasted some days. The offensive uterine discharge lasted only two days. The douche was used three days. The patient recovered fairly, being, of course kept quiet rather beyond the ordinary period.

I was asked to see, in consultation, a primipara who had been delivered a week. She had been ill three or four days. I found the room very offensive, from the discharge from the vagina. The pulse was 120 to 130; temperature 106° F.; tongue brown and dry in the middle; skin dry; respiration quick; considerable delirium; and hurry of manner.

Milk was not secreted, and the lochia was colourless and very offensive. Indeed, the case appeared one hastening rapidly to a fatal termination. I recommended the interior of the uterus to be washed out with warm and weak solution of permanganate of potash twice a day, with quina in pill, and chlorate potash and ammonia. The next day she was better, and gradually improved for five days. The injection was then omitted, and the offensive discharge recurred, with an increase of the symptoms. On repeating the injection, these improved. It was continued till the tenth day, when she objected to the disturbance it caused, and it was omitted altogether. She had for some little time after this an offensive discharge, which finally ceased, and she made a slow but steady recovery. Of course, it is difficult to say how far the douche saved the patient from a fatal termination; but, from what I have seen of the disease, I have every reason to think that it materially aided to her recovery. The cause of the offensive discharge was not apparent.

I have employed the douche in some cases of adherent placenta, after labour and in abortions, as a preventive, where a portion has been agglutinated to the uterus.

As the retention of clots in the uterus is liable to be followed by serious symptoms, our indication is, no doubt, to get the uterus to contract as firmly as we can, so as to expel the mass, which it frequently does next day, and thus saves the patient further risk.

You will, I dare say, have observed that the firm contraction of the uterus is no proof that a clot does not exist within, because it is sometimes retained by the very firmness. Its bulk often indicates its presence, especially if there be a rather obstinate trickling and a firm uterus. It is not my intention to go into this question more than to say that, if we have every reason to think there is a clot in the uterus after labour, it is well to pass one or two fingers through the os, and break it down, as far as they can readily reach. We may then, with a little grasping pressure applied outside, cause its expulsion.

An excellent instance of the advantage of clearing out the uterus in such a case occurred to me not long since. Secondary hæmorrhage occurred a week after delivery in a lady whom I had attended in consultation. She had placenta prævia, with much *post partum* hæmorrhage. The secondary loss was not very severe, but the discharges somewhat offensive. Finding the uterus bulky, I passed my finger through the os, and detected a clot, part of which I removed. It was very offensive. I therefore broke it up as far as I could reach, without passing the hand into the vagina. I then introduced the long tube to the fundus; and, as soon as it reached the fundus of the uterus, about half a pint of most offensive gas escaped. Water, slightly charged with tincture of perchloride of iron, was thrown within till it came away without smell. The remaining clots did not come away till next morning, after which all unpleasant odour ceased. The patient had had rigors before the washing out, but they did not recur. She had afterwards slight phlegmasia dolens and a slight cough. The leg soon recovered, but the cough remained some time. I think we may fairly assume that the evacuation of the offensive contents of the uterus saved this patient from a serious, if not fatal, illness.

FOUR YEARS' EXPERIENCE AS A HEALTH-OFFICER IN BRISTOL.*

By DAVID DAVIES, M.R.C.S., Bristol.

OWING to the prevalence of maculated typhus in Bristol, during the winter of 1864 and 1865, I was appointed without a moment's notice, by the Board of Health of that City, to the anomalous office of Medical Inspector of Health. I believe I am the only specimen of that species of health-officer in the kingdom. That appointment I have held up to the present time. No specified instructions were delivered to me on my appointment; but I was made to understand that I was to find out the cause of the existing evil, and to recommend the best measures to be taken for improving the health of the city. Having received no special training in hygiene, and having no authority to guide me, I had to tumble into my duties in the best way I could. Since then, a system of inspection and hygienic measures has been developed, which, on more than one occasion, has been most severely tried, and on each occasion has proved to be of infinite value. To trace the rise and development of our Bristol plan would unnecessarily occupy the time of this meeting. I will, in as few words as possible, describe it.

The city, for the purpose of inspection, is divided into four districts, each district being under the special superintendence of an able in-

* Read in the Public Medicine Section before the Annual Meeting of the British Medical Association in Leeds, July 1869.

spector, chosen (as a rule hitherto observed) from the best men found among the police of the city. It is the duty of these inspectors to report upon the scavenging, (in summer time) the watering, at all times the nuisances which may be found in their respective districts. In addition to these duties, they are to report to the Medical Inspector every case of infectious disease which they may know or hear of; and to appear at the office twice a day in the Inspector's room, to enter on their journals their daily reports, (their hours of attendance at the office being 11 A.M. and 5 P.M.) The district-inspectors are at the command of the Inspector of Health for hygienic purposes; such as the disinfection of houses, drains and sewers, etc.; but not further. They are not expected to do any menial work; but, in the presence of an epidemic, they have never flinched from danger or labour, and have been ready for action by night as well as by day. In fact, they take a pleasure in their work.

Each district-inspector has under his command, during the summer months, two labourers to white-lime courts and alleys, to let off stopped privies, to disinfect infected houses, and do any other menial work of a hygienic character. During the winter months, each inspector has only one man at his command, as whitewashing is not then carried on; but the single man is employed in letting off privies and disinfecting houses. Each of these labourers is expected to report to his master, the district-inspector, all that he sees and hears, and to take his orders from him. The work done by these men is work properly belonging to the landlords; but to get it done by them would require legal proceedings, and, from the time of serving the first notice to the hearing of the case, and the execution of the magistrate's order, a hundred people may be poisoned by the germs of enteric fever from an overflowing privy or a defective eject.

We have an experienced Superintendent Nuisance-Inspector, whose duties are to inspect lodging-houses and slaughter-houses; to assist in difficult cases of local nuisance; to sign official information of nuisances, when proceedings are unavoidable, and to appear before the magistrates to give evidence. He is also appointed as a smoke-inspector; but I may at once make a clean breast of it, and acknowledge that, through causes over which he has no control, the legislative enactments against smoke have proved in Bristol completely futile.

Next comes my own office. I regret that I am not in the position to call myself a Medical Officer of Health, as my brethren around me are; nevertheless, I have the subdued honour of appearing amongst them as the Medical Inspector of Health for Bristol.

Having received no instructions, I cannot tell what my duties are; but I will endeavour to explain what I consider them to be, and how I have tried to carry them out. I consider it my duty—

To submit every Thursday to the Committee of the Board of Health a report of the work done by me during the week, with a general summary of the state of the public health of the city, and any recommendations for the improvement of it, which I may think proper to make: to give medical evidence in court whenever required, in cases of prosecution: to meet the district inspectors at the office every day at 11 A.M., to hear their reports, and to advise as to what immediate measures may be required for the prevention of disease. If the measures recommended should require my presence, to accompany the inspectors, and see the measures executed.

In case of Asiatic cholera or maculated typhus being reported, to lose no time in visiting the case; to procure isolation or removal of the patient. In the case of cholera, to see that all the ejecta are destroyed by strong chemicals, and all the contaminated clothing by fire; to provide that all water derived from wells or land water be immediately disused, by taking off the pump-handle, and cautioning the people not to use it; and not to leave the premises until these measures are carried out.

In the case of maculated typhus (a most infectious disease among the overcrowded poor) to have the patient removed, if possible, and, if that cannot be done, to have all the other inmates removed, and isolate the house; to cover the floor and staircase with a thick layer of powder, consisting of 85 per cent. of silica and 15 per cent. of carbolic acid; to watch the patient, the family, and their relations for weeks after convalescence; to destroy all infected clothing by fire; to keep all the drains and surfaces in the neighbourhood of a case of cholera or fever well charged with carbolic acid and sulphate of iron. After the removal of the patient, to have the house cleansed and disinfected, under the 22nd Section of the Sanitary Act. To keep a sharp look out after the inmates of a workshop whither a convalescent from typhus has gone to work. (This is a common means of the spread of the disease.)

In the case of enteric fever, to recommend removal of the patient, if possible, if not, to isolate the patient as much as possible, to receive all the ejecta into a chemical (the most convenient being the powder mentioned above, and sold under the name of Calvert's Powder.) To ex-

amine the drinking water of the family, and, if it contain salts derived from sewage in any quantity, to stop the use of it; to charge all the drains communicating with the patient's house with disinfectants.

In the case of scarlet fever, as there are not hospitals for the reception of the first cases of this disease in a court or alley, all that I can do is to disinfect the sewers and drains, and so prevent its spread in that way, which I have reason to believe is not an uncommon one. The measures recommended by my good and kind friend, Dr. William Budd, one of the first sanitary reformers of the day, may, and I believe would, answer among the well-to-do and the well-disciplined classes of the community; but to enforce them among the poorer classes of Bristol would be simply impossible.

With regard to measles and whooping-cough, so frequently fatal among the children of the poor, I have at present no remarks to make, having no means at my command efficient to prevent their spread.

The Board of Health have, at my recommendation, erected a mortuary, for carrying out the 27th Section of the Sanitary Act, 1866. They have also provided a carriage for the conveyance of persons suffering from infectious disease; and they are ready to enforce the penalties incurred for any infringement of the provisions of the 38th Section.

The sewers of the city are under the management of their very able surveyor, one of the most practical civil engineers in the country, without whose abilities and cooperation my labours would have been comparatively useless. The water is also officially and legally under his care. On an official report by him that any house is not properly supplied with good and wholesome water, the Board of Health, on the refusal of the landlord to supply it, after proper notice, order the surveyor to supply the house with water, and recover the expense from the landlord under the Sanitary Act of 1866.

Such is a meagre outline of the plan followed out in Bristol. It is not for me to dwell on our shortcomings; but I will mention one of them. The Board of Health have not adopted bye-laws under the 35th Section of the Sanitary Act. It is to be regretted that this clause is permissive, and not compulsory.

It will be readily perceived that my opinions and operations are based upon the theory of the germinal and specific origin of zymotic disease; and that I have utterly disregarded the pythogenic hypothesis of the origin of fevers and other infectious diseases. This hypothesis I have practically found to act as a dead weight of incalculable inertia on all efforts for sanitary improvement. Whether my views regarded as a theory be correct or not, the plan of operations based upon them has stood us in good stead in our hour of need; for example, during the epidemic cholera of 1832, there died in Bristol of that disease nearly 1000; in 1849, 1979 died. In that year I saw 21 dead bodies carried out of the Bristol Workhouse in one day. In the epidemic of 1854 we lost 430. In the year 1866, with the system of disinfection described above in full operation, our total mortality from Asiatic cholera was only 29, and the majority of these cases had brought the disease with them from other parts. We were surrounded at nearly every point of the compass by places infected with cholera. Wales on the west, Exeter on the south, London on the east, and Liverpool on the north, each sent its quota to try us on twenty-six different points, and we stood the test well.

It has been doubted by the highest sanitary authority in the land, whether we are "out of the wood" yet as regards cholera, because similar measures said to have been adopted at Stettin and Stuttgart failed; but it is stated by the same authority that the disinfectants used at those places affected the drinking water. To this, I can only say that, where the surface of the ground and the drains are thus proved to be in immediate communication with the water, no measures could possibly answer. When this was found to be the case at Pill, in Somersetshire, Dr. Tibbits immediately procured a supply from a distance, by means of water carts. Moreover, I have been informed by Mr. Calvert, of Manchester, that he has it on sound information, that the disinfectant used at Stettin and Stuttgart as carbolic acid contained but little, if any, of that chemical.

I may here state that I have been favoured with the perusal of a private letter from Dr. Harris, the Registrar of Vital Statistics to the Metropolitan Board of New York, in which he expresses his gratitude to Dr. Budd for important information, and states that a plan of disinfection, more or less identical with the one followed out in Bristol, had met with complete success in New York.

By this plan, we completely stamped out the epidemic of typhus of 1865, in less than six months. We have been frequently tried since by the importation of cases of maculated typhus from Ireland and the iron-works of Wales; but this disease can get no footing in Bristol now.

The same remarks, in a modified form, apply to enteric fever, in which disease I frequently find the drinking water to play an important part, through being contaminated with sewage containing enteric germs.

As a summary of my experience on these points, I may state that we have found in Bristol that maculated typhus spreads only by infection; that each case may be traced to another from which it has sprung; and that its spread is not affected by mere cleanliness; but that the destruction of the germs by strong chemicals, of which real carbolic acid is the best, is a sure means of stopping it. We have been able to trace *most* cases of enteric fever to germs of the disease derived from the intestine of another patient; and analogy leads me to believe that all cases of this disease have a similar origin. We have found enteric fever as amenable to hygienic measures as typhus. We have found that terror of nations, Asiatic cholera, to be under the control of measures within the command of every public authority. We have found these three diseases to spread and kill our race entirely through the ignorance and neglect of man.

It follows from the above that *mere* sanitarianism, however desirable, will not, when other measures are neglected, prevent the spread of zymotic disease; that, whilst we are evicting a few pigs or a stray cow which may find their way into our towns, or indignantly removing a heap of dry ashes, a fatal epidemic may be marching, unimpeded, through our crowded population.

My views have been remarkably corroborated by the success of the Government measures for stamping out the cattle-plague, and the small-pox in sheep.

"There is much land yet to be possessed." Who can tell us how to render scarlet fever as amenable to hygienic measures, *practically applicable* to the overcrowded populations of our towns, as Asiatic cholera and typhus have proved to be in Bristol? Who can tell us how to diminish the fatality of measles and whooping cough among the children of the poor, during the cold spring months? Who can tell us how to stop the ravages of that fell destroyer of our race, which fills our work-houses with paupers, by taking away the lives of the bread winners—I mean tubercular phthisis; a disease which, I have special reasons to believe, will shortly be proved to be of a zymotic character, and communicable by germ from man to man? Who will show us how to remove that disgrace of our country and of our religious profession—the slow, but certain murder, by starvation and neglect, of illegitimate children, whose deaths are often registered as caused by summer diarrhoea, marasmus, tubercular meningitis, and other diseases? Who will teach the wives of our working classes how to nurse their husbands and children when struck with disease? Above all, who will teach all classes self-restraint and common sense in matters affecting their own and the public health?

These remarks which, owing to the short time unavoidably allotted to the reading of papers, give only an imperfect account, in fact, only a mere glimpse of the efforts nobly and honourably carried out by the Board of Health of Bristol, to improve a populous place laid out and built during the middle ages, are made in no dictatorial, self-satisfied, or fault-finding spirit. Whether the sanitary theory involved in them be right or not, the result has been good. I may humbly say, that my own opinions on the subject have not been formed by the reading of learned treatises or voluminous authors, but by the patient observing of facts in the courts and alleys of a crowded city, frequently among the groans of the sick and the dying.

If my remarks should be thought worthless, let them be forgotten, with an apology for occupying the time of the meeting; but if, on the other hand, I have brought forward or made prominent a single idea which will assist in solving the great and difficult problem of public health, and which may tend to alleviate the woes of suffering humanity, I shall always look back with satisfaction to this meeting.

APPENDIX.—I make the following suggestions for the improvement of the sanitary laws, founded on observations of their shortcomings on these points.

1. *Registration.*—The registration of deaths in each local authority's district should be under the superintendence of one person, who should be a medical man. His duties should be, to publish a weekly analysis of the deaths in his district; to represent such analysis on a map by different coloured points; such map to be on view in a public office in the district, so that medical men would be able at a glance to see the attitude of disease, and be prepared to meet the pathological constitution of the season. The want of this, we have felt very much in Bristol. By the present arrangements, we can have no analysis of disease, except in an indirect way from the Registrar-General's office. Part of the deaths in Bristol are registered in the Bourton Union, in Somersetshire; another part at Stapleton, in Gloucestershire; another part at Westbury-upon-Trym; and the remainder in Bristol.

The Superintendent Registrar should have power to amend any gross error in the certificate of the cause of death, with the approval of the Registrar-General, so as to bring all deaths within the official nosology. The present registration is grossly erroneous; typhus, enteric fever, and

non-specific febricula, being confusedly returned the one for the other. Specific Asiatic cholera, dysentery, bilious diarrhoea, are in the same confusion. Pneumonia, tubercle, bronchitis, chronic disease of the bronchial tubes, and asthma, are often jumbled together under the head "consumption" or "phthisis". At present, I find the returns of but little use without private inquiry as to the nature of the disease.

2. *Consolidation of all the Sanitary Laws* in one code is required. Clerks to Boards of Health could speak to this point better than any other persons.

3. *The Thirty-Fifth Clause of the Sanitary Act should be made Compulsory*, and not permissive. I have most materially felt the want of bye-laws under this section.

4. *Every District should be brought up to the same High Level.* In Bristol, we have extinguished continued fevers in an epidemic form; but we have cases continually poured in upon us from our neighbours. Last year, we had several cases of enteric fever from a populous part of Bristol, outside our district (Horfield). At Winterbourne, a village seven miles from Bristol, there have been at one time forty cases of enteric fever. At the Bourton Union Workhouse, whither the paupers from one part of Bristol go, there were over one hundred cases of enteric fever last year, from drinking water from an infected well. I could multiply instances of the want of equalisation of sanitary arrangements.

RAILWAY AND OTHER ACCIDENTS: CASES AND OBSERVATIONS.*

By P. C. LITTLE, F.R.C.S.I., Dublin.

ACCIDENTS are becoming more frequent in this age of progress. Those occurring upon railways are distinguished by the severity of the shock which generally accompanies them. The rapidity and momentum of the train, the suddenness of collision or other disaster, the unpreparedness and helplessness of the traveller, concur in producing most appalling results. The nervous system is especially affected—from without, by the intensity of concussion; from within, by the suspension of mental influence. The soldier who faces the storm of bullets recovers sooner from amputation of his shattered limb than the man who undergoes a like operation after railway injury, it is said. In surgical and medico-legal aspects, the element of shock is, therefore, of great importance, and, when properly appreciated, contributes much to correct diagnosis and successful treatment, and to harmony of opinion between medical witnesses.

Within the past few years, many railway and other accident cases have been under my care, the records of some of which I now beg to place before the Association, and trust they will be found not altogether devoid of practical interest.

CASE I. *Concussion: Nervous Debility.*—Aug. 29, 1863. I was in attendance upon D. D., a commercial gentleman, aged 37, for injuries which he had received this day on a railway. An error of the ticket-inspector led to a request that my patient should leave the train, which he declined to obey. Much force was then used by the company's servants to drag him out; but, being a powerful man, and fortified by a sense of right (afterwards affirmed by a jury), he successfully resisted for ten minutes the combined attack. His fellow-passengers then interfered, and he was allowed to proceed on his journey. On his arrival in the City, he visited me, and was suffering from the effects of a violent nervous shock.

He complained of severe pain in the head and vertigo, much sickness of stomach, faintishness, and soreness all over. His face was livid and perspiring, the lips quivering, the eyes suffused, the pupils dilated; the left temple was contused; the limbs were trembling; the speech thick; the skin cold; pulse small, variable, about 90; irregular respiration; inspiration short, gasping; heart's action quick, nervous; diaphragm heaving, epigastrium tender. The body was much bruised, particularly on the sides of the chest, right hip and thigh, and back of the left hand.

I ordered him a stimulating anodyne, and mustard foot-bath; perfect rest in bed, freedom from business anxiety, abstinence, cooling and nourishing drinks. I subsequently resorted to quinine, shower-baths, and other general tonics. Notwithstanding those applications, the symptoms, especially vertigo, persisted for more than a year, when they imperceptibly passed away. The cold shower-bath seemed to have been most serviceable to the patient. The prognosis in this case was not easy. The constant vertigo gave good ground to fear an unfavourable

* Read before the Surgical Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

issue; namely, epilepsy. Dr. Marshall Hall was of opinion that fright, or any sudden mental emotion, would be capable of producing that deplorable malady.

CASE II. Cerebral Concussion: Loss of Memory.—July 28, 1864. I was consulted on the case of T. E., a merchant, aged 45, who, a year and a half previously, had been thrown from his horse and had fallen upon his head. Unconsciousness, vomiting, and relaxation of bowels, followed. The insensibility lasted about three hours. At the vertex the scalp was extensively bruised, but fracture was not discovered. He had since been under surgical treatment in a provincial town.

He almost constantly suffered from acute pain of the head, fits of giddiness, inability to stoop through fear of falling, increasing weakness of the limbs and spine, and loss of control over his movements. His memory had failed him. He found it "impossible to calculate", shunned company, and, when alone, was melancholy. His spirits and strength were daily growing worse; his appetite was bad, sleep disturbed, bowels irregular, urine scanty.

In his previous life he had always been healthy. Since the accident his friends observed that he had become more fleshy, full in features, and absent in mind. He was stooped; the cervical muscles appeared stiff; the countenance was puffy; the eyes had a fixed, unmeaning gaze; the pupils were dilated. He was unsteady and hesitating in gait, unable to walk on a straight line, and staggered if looking down for a little time; he could not make up accounts, but forgot the first figure on his taking up the second; he failed to remember familiar names. His skin was dry and warm; pulse 60, pretty full; heart and lungs normal, respiration slow and oppressed; urine acid, cloudy, and of specific gravity 1.025.

I placed the patient upon a gentle course of mercury, followed by counter-irritants to the vertex, and tonics generally. For the first fortnight his sufferings became aggravated. In the third week the mineral announced its presence in the system, and all the symptoms began to subside. The after-treatment completed recovery in the eighth week. I recently saw him, and was informed that he has since been in excellent health.

The prognosis in this case was doubtful, because of the long continuance and progressive character of the disease. From the history and symptoms, I was of opinion that the concussion resulted in chronic inflammation of cerebral hemispheres and of cerebellum, with some effusion. "How intimately the cerebral convolutions are allied with the mental phenomena of attention, association, and memory", even Willis, nearly two hundred years ago, apprehended; and in our time, we frequently observe how impairment of those faculties follows injury of the cerebral hemispheres, especially of their anterior and superior aspects. In the same way do we, with Flourens and Foville, trace the origin of disturbance in coordination and muscular sense to the cerebellum.

The value of mercury in stimulating the absorbents of the brain in inflammation was here admirably exemplified.

CASE III. Spinal Concussion: Paraplegia.—May 17, 1865. I attended J. T., aged 35, suffering from the effects of a railway accident, which had happened three months previously. He had been sitting in the train, facing the engine, when a collision unseated him, and he fell with great force, the lower part of his spine striking the edge of the seat behind him. He became insensible, and remained so for about a quarter of an hour; his urine and stools passed involuntarily, and the stomach ejected its contents. Since then he had been very ill, had had paralysis of motion and sensation of the lower limbs, and incontinence of the bowels and bladder. He was under treatment in the country, was salivated, and frequently blistered on the back, but felt no improvement.

He now complained of mental and physical weakness, loss of power and of feeling in both legs, pain and soreness of the loins, spine, and back of the head; "pins and needles" in the feet, rigidity of the muscles of the back, giddiness on stooping, capriciousness of the bladder and bowels, pain at stool, priapism, and disagreeable seminal emissions; absence of virile power, impaired vision, cold clamminess of extremities, and loss of flesh.

He stated that before the accident he was robust and muscular; now his general aspect was that of debility and enervation. The features were washy, the eyes staring, the pupils dilated, the conjunctivæ injected; skin cold and perspiring; pulse 64, nervous and feeble. There was much tenderness on percussion over the dorso-lumbar region; he walked in a shuffling way, with two sticks, owing to loss of power of his legs, especially of the right leg; cutaneous sensibility was gone from the knees downwards; there was wasting of the lower extremities, evident from the flaccid state of the muscles, the shrivelled skin, and previous measurement. Before the disaster, the calves of his legs measured fifteen inches; now the right was thirteen and a half, and the left fourteen inches in girth. An ulcer on the right shin had remained unhealed since the accident; the genitals were debilitated, the prepuce inflamed;

the urine dribbled away; it was ammoniacal, with thick mucus, of sp. gr. 1018; the stools escaped involuntarily.

I prescribed quinine and iron, residence at the sea-side, and other general tonic treatment.

June 22. The patient had a sudden change for the worse. After breakfast his stomach (as usual after partaking of food) became sick, and on his way to the water-closet he fell completely paralysed. On being raised up, his stomach again turned; he threw up blood; urine and stools passed unconsciously. He became chill, and felt difficulty of breathing. I was at once summoned, and found him very low. His skin was bathed in cold perspiration; pulse 60, thready; spirits desponding. An attempt to protrude the tongue caused emesis. He was unable to stir in bed. Suitable restoratives revived him in a short time.

June 30. Finding little benefit from the previous treatment, I now resorted to strychnia, in doses of one-twenty-fourth of a grain, which I gradually increased to one-eighth of a grain.

July 5. He had a second attack of threatened general paralysis; nevertheless, I persevered with the alkaloid for about two months, and had then the satisfaction of seeing my patient restored to health and strength. He is to-day a model of manly vigour and spirit. What was the nature of the injury here? Spinal concussion causing immediate suspension of nervous influence over lower half of body, I believed. What more likely? Have we not heard of fatal results following a strong blow on the pit of the stomach? Abercrombie, Boyer, Erichsen, and others, record cases in which concussion produced death without leaving any discernible pathological changes in the nervous system. It does not appear, as many think, that injury of the capillaries in such case is the immediate cause of death; for we see the trifling occasions which disturb the nervous influence in the system, in blushing, blanching, etc., when certainly the capillaries are not injured. And has not death resulted from fear, joy, etc. merely by the suspension of nervous power?

CASE IV. Concussion: Unusual Dislocation of Elbow: Permanent Injury.—March 13, 1868. I was summoned in haste by J. S., aged 37, who had been precipitated from an outside car, the horse having stumbled in crossing an iron bridge. The patient exhibited symptoms of severe shock. He said he had been cast violently forward, fell upon his left side, and became insensible. The left arm, with which he tried to break his fall, sustained the greatest injury. It was in pronation at the time. The upper and inner surface of the left ulna and internal condyle of the humerus first struck the bridge.

On examination, I observed contusions of the left temple, cheek, side of the chest, abdomen, great trochanter, thigh, and leg. Locomotion was very painful and difficult. The inner and under aspects of the left elbow-joint were also contused. The ulnar side of the left palm was scratched and bleeding. With the right hand he supported the left arm, which was in a semi-prone position, and had a peculiar twist near the elbow. The outline of the limb, just below the external condyle of the humerus, was interrupted by a round, hard tumour—the capitulum of the radius. The tendon of the biceps was extremely tense and painful. The olecranon was more prominent posteriorly, and on a plane three-quarters-of-an-inch higher than that of the right arm. The girth of the left joint at the antecubital space was an inch greater than that of the right. There was much effusion, chiefly between the olecranon and the internal condyle, where also there was great tenderness. The limb was almost powerless; attempts at extension were painful; flexion in the semi-prone position was comparatively easy, as far as a right angle, when a hitch rendered further progress that way impossible. He could not touch his forehead with his fingers, nor endure the pain, weight, and helplessness of the whole limb.

The following was my immediate treatment. I exercised strong downward traction of the arm, and extension of the injured joint over my flexed knee; then, by rapid flexion and supination, the dislocation was reduced. So great, however, was the muscular reaction that, on my relaxing control of the limb, the luxation quickly returned. I again reduced it by a persevering effort, and kept it pretty well in position by a rectangular splint to the under surface of the joint, a firm pad in front of the capitulum, and an evenly applied bandage over all. The limb was then slung to the neck by a wide slip of calico, and rest was enjoined. It is unnecessary to detail the subsequent treatment, which consisted in subduing the inflammation, preserving as nearly as possible in their normal relations the constituents of the joint, and preventing ankylosis, which is often a result of injuries of this character. The patient progressed slowly, but satisfactorily. He had little power of the limb for about a year, and even now has not, and probably never will have, the same flexibility and strength in it which he enjoyed before the mishap.

This form of luxation is unusual and very serious, as involving disintegration of the elbow-joint. The annular ligament in such case is neces-

sarily ruptured, leaving the biceps uncontrolled action over the head of the radius, and rendering complete restoration of the joint impossible.

In a medico-legal view this case is interesting, as showing one of the greatest difficulties upon which medical witnesses have often to give an opinion; namely, as to the permanency of injury. For the reasons above stated, I had little doubt in this case upon that point.

CASE V. *Fracture of Rib: Phthisis.*—Aug. 7, 1868. B. G., a steward, aged 30, sought my advice upon injuries resulting from a railway accident which occurred on the 17th of February. The train in which he travelled ran off the track, and he was thrown violently on the left side of his chest against the opposite seat. He lost his sight and partially his other senses for about five minutes. For the week following he was obliged to keep his bed on account of the excruciating pain or "catch in the side", and the difficulty of breathing which he endured. At the same time he had constant cough and expectoration of bloody sputa, and sometimes of lumps of dark blood. As he was living in the country, distant from a medical man, his only remedy was a mustard-poultice now and then applied to the side. For nearly five weeks after he got up, his respiration was so short and distressing that he was unable to ascend a hill, or to stoop to the ground without great suffering. The side was very tender to the touch, and he could not lie upon it. The breathing subsequently improved, but the cough and pain in the side had never ceased, and were growing worse. Before the sad event, he was stout, strong, always healthy and cheerful: his parents were the same. Six weeks after the accident, he noticed his loss of flesh and strength; he had night-sweats, day-perspirations from trifling causes, and failure of appetite and spirits.

He now appeared tall, lank, but well-formed; his manner was melancholy; complexion dark, eye brilliant black, pupils dilated, cheeks hectic and hollow, teeth white and much denuded of gums, skin dry and hot, pulse 88, irritable; chest very lean, bulging of the heart at the left side; intercostal muscles inactive. The ribs were prominent, and shewed evidence of an united fracture of the ninth rib, about two inches external to the costal cartilage; the infraclavicular regions were sunken; percussion was dull over entire lungs; respiration in both was feeble and rough; in the upper third of the left lung, it was cavernous; in the lower third, at the seat of the injury, were indications of old adhesions.

I prescribed for him anodynes, cod-liver oil, and occasional counter-irritants over the lungs. But, at the same time, I intimated my belief that attention to hygienic means would be likely to do more for him than medicine. He went to the sea-side, and, when last I heard of him, the disease had progressed, and indicated a fatal termination at no distant period.

There are some features of practical interest in this case. The accident was not thought grave until consumption appeared, which no doubt was at least excited by the injury to the lung. Whether the accident was the prime cause of that disease, is still an open question. The history of the patient's progenitors excludes the presumption of phthisical predisposition in him; while on the other hand it may be said that, in their case, no such exciting cause was applied. The necessity of early surgical aid and advice in such accidents was deplorably manifested. The unfortunate victim, unadvised, accepted for the primary injury a paltry compensation. Here, also, the necessity of caution in giving our opinion upon such cases is clearly demonstrated.

CASE VI. *Concussion: Injury of Cervical Nerves: Paralysis.*—Feb. 14, 1868. J. F., an artisan, aged 36, consulted me for intense pain, and paralysis of the right upper extremity, caused by an accident about four months previously. A portion of a lofty roof of iron and glass under which he had been working gave way, and a heavy girder, striking him between the base of the right scapula and spine, felled him to the ground. Insensibility, extensive injury of the right side of the trunk, and paralysis of the right arm, resulted. He was placed under surgical care, and for the first fortnight suffered chiefly from extreme weakness, loss of appetite, and rest. Subsequently a pain of a burning and wearying character attacked the arm, and had never since ceased. For it he was salivated, and the limb was very often hypodermically injected with morphia, which for a time afforded relief, but soon produced, as the patient thought, sleeplessness and mental irritation. He was now pale, sad-looking, bent, and turned as if the spinal column were consolidated. The right arm was in a sling, and was besides supported by the left hand, as if a painful burden. The muscles of the injured limb, including the deltoid and pectorals of the same side, were flabby and wasted, the ligaments relaxed, the head of the humerus drooping from the glenoid cavity, the forearm and hand tumid, the latter puffy and oedematous; the finger-joints were red, across the nails clubbed; the temperature was lower, and the pulse more feeble than in the left arm. Paralysis of motion and of cutaneous sensibility of the right arm was complete; deep pressure of its muscles was intolerable, adding to the weight of the

limb, which was most distressing; there was tenderness on pressure over the second, third, and fourth cervical vertebræ. The lungs were sound, respiration weak, the heart's actions normal; the pupils very much contracted; vision was defective since the use of morphia. The relative measurements of arms were:

RIGHT ARM.	Inches.	LEFT ARM.	Inches.
Acromion to olecranon	.....15	Acromion to olecranon	.....13 $\frac{3}{4}$
Middle of arm	.....9 $\frac{1}{4}$	Middle of arm	.....10
Axilla to acromion	.....9 $\frac{3}{4}$	Axilla to acromion	.....12 $\frac{1}{2}$
Bend of elbow	.....11	Bend of elbow	.....9 $\frac{3}{4}$
Middle of forearm	.....8 $\frac{1}{2}$	Middle of forearm	.....8
Wrist	.....6 $\frac{3}{4}$	Wrist	.....6 $\frac{1}{4}$
Internal condyle to styloid	.....10 $\frac{3}{4}$	Internal condyle to styloid	.....10 $\frac{1}{2}$
Around knuckle	.....7 $\frac{1}{2}$	Around knuckle	.....7 $\frac{3}{4}$
Chest above mammæ	.....33 $\frac{1}{2}$	Before accident	.....42

A magneto-electric current passed through the arms slightly affected the deep muscles of the right. The effect was much increased by placing one pole of the battery on the spine, the other in the right hand; the right deltoid and biceps most strongly responded. During the application the pain was intensified; soon afterwards the patient felt great ease for some hours, and more flexibility of the spine. This remedy, with strychnia in small doses, counterirritation to the spine, and attention to hygienic measures, constituted my treatment. After the first month he was enabled, by revived muscular power, to move the right elbow from the side six inches, and to approximate the thumb and index-finger. The wasted muscles were enlarging, as measurement showed, which it would be tedious to detail. There was much jerking in the limb; and his condition in every respect was improved. He continued attendance upon me at irregular intervals for about two months, and on all occasions experienced great relief from the electricity. He then left the city, and I have no further knowledge of his health. He may possibly recover through the action of the strychnia, aided by favourable hygienic circumstances. The primary injury here appears to have been twofold—concussion of the spine and contusion of the posterior cervical nerves; the first causing immediate paralysis of the arm, the second resulting in neuritis of its nerves. The latter complication leaves me less hopeful of the ultimate restoration of the patient.

CASE VII. *Fracture of Fibula, and Dislocation of Tibia.*—Dec. 4, 1868. P. N., aged 30, when walking to-day, stepped upon a worn-out grating; his right foot went through it, and he was thrown down on his right side. "The foot was wrenched; he grew faint, and trembled all over." He now suffered great pain on the external side of the right ankle, especially on resting the foot upon the ground; soreness of the right hip, thigh, and groin. The foot was much swollen around the instep, the inner malleolus was very prominent; the toes and outer side of the foot were everted, and the veins were enlarged at the external ankle. The joint was very hot, and so sensitive that a satisfactory examination was impracticable. I, therefore, ordered a few leeches to be applied to the injured part, and afterwards a bran-poultice. Next day, I discovered fracture of the fibula, about two inches from its lower extremity, and dislocation inwards of the tibia. There was no crepitus, but distinct solution of continuity was felt by grasping the external malleolus and the shaft of the fibula. There was, moreover, abnormal lateral motion of the joint. Having steadied the limb in a box-splint with a foot-board, I prescribed a cold evaporating lotion. The inflammatory conditions had so far subsided on the eighth day, that I was enabled to put up the fracture in a starched bandage. In two days the starch had become dry, and I allowed the patient to sit up. He made a good recovery in about a month. The only undesirable consequence of the injury that remained was a weakness of the joint. How long may that continue? and whether the accident predisposes to dislocation from a less cause? are questions of great magnitude in a medico-legal sense, and may be answered differently, according to the experience of surgeons. My observations during several years incline me to the opinion that severe luxation of the ankle-joint is usually followed by weakness of the structures for a considerable time, and a predisposition to recurrence of the injury. In a case which now and then, for ten years, has come under my care, the accident has many times recurred from trifling occasions; the joint, from repeated inflammation, has become much enlarged, stiff, and somewhat ankylosed. In this case, however, the patient was obliged, by his calling, to use the joint sooner than was advisable.

In the treatment of such fractures, I have found the starched apparatus invaluable, and have set forth my experience of its usefulness in the *Medical Press*.

It appears to me that, in all accident cases, there is especial need of patient investigation of the history of the occurrence, and of the development of symptoms, by which we procure, as it were, a plan of the citadel of our enemy, and so learn the best mode of treatment. The

necessity of perseverance in certain remedies such as mercury, strychnia, counterirritants, etc., is obvious. In a medico-legal aspect, such cases are neither prepossessing nor exceptional. All forensic medicine should be reformed and systematised. The public good, the dignity and interest of our profession, alike require the establishment of some professional authority whose opinion upon medical subjects should be in a sense judicial, and, like a judgment, might be subject to revision. Such an institution would relieve judges and juries from the difficulty of reconciling contradictory medical opinions; counsel would be spared the necessity of resorting to the fallacious and opprobrious argument that "doctors differ"; and we, as brothers of a noble and learned profession, would become more united, and be more respected by mankind.

Mr. President and gentlemen, I now beg to thank you sincerely for your kind attention to my contribution upon the important subject of accidents. The originality of the cases may perhaps clothe with some freshness ideas of the fathers of our art. I shall consider myself honoured and rewarded if my small but willing effort add but one grain to that mighty island of surgical knowledge which, like a coral isle of the ocean, has been accumulating from age to age.

WOUND OF THE HEART BY A NEEDLE: DEATH.

By FREDERICK WRIGHT, Esq., Stamford Bridge.

On Tuesday, August 17th, S. V., a boy five years old, stuck a common sewing needle in the front of his dress. During the dinner hour, when cutting a stick, he drove the needle into his thorax. The boy endeavoured to extract it by pulling the thread, but, unfortunately, broke the needle, and threw away the upper portion which was attached to the thread. He told his mother of the occurrence; she examined his chest and saw a slight mark, but no bleeding. As he complained of no pain, she allowed him to return to school, thinking that the whole of the needle was extracted. In the afternoon he was pale, and sleepy, but remained free from pain. On Wednesday, he complained of pain in the chest, which was relieved on fomentation, and afterwards troubled him only when he coughed.

On Thursday morning he had pain in his chest, neck, and shoulder. His mother again fomented him, and applied a mustard poultice to his chest. After this, he was so much better that he played and looked as cheerful as usual. On Thursday night he walked up stairs, and went to bed. Soon afterwards his mother, hearing him call, ran upstairs, and found the child getting out of bed. She carried him down and sent her husband for me. The boy died in half an hour; he was dead before I arrived.

On Saturday an inquest was held. At the autopsy, I found a slight mark over the cartilage of the fifth rib, and about one and a half inch from the middle of the sternum. On pressure, I could detect a portion of the needle projecting about one-sixteenth of an inch from the surface of the cartilage. On removing about an inch of the cartilage, I found that the needle had passed about three-eighths of an inch beyond it, perforating the pericardium, which was enormously distended with dark fluid blood. On removing this, I found around the heart a firm clot of blood, about one-eighth of an inch thick; this being removed, I found that about a square half inch of the surface of the heart was so much lacerated that only a network, consisting of a few shreds of muscular fibre, remained. This gave way under very slight pressure of the finger. The rupture was very near the apex of the right ventricle. There was not a drop of blood in any of the cavities of the heart.

How was it that the boy, with a needle in such a position, could live about fifty-eight hours, and experience such slight inconvenience? Is it not possible that in the first instance the needle ruptured a small vessel in the heart; and this, bleeding slowly into the pericardium, formed the firm clot which I found around the heart, and protected it from further injury except when the boy was placed in such a position as to allow the heart to fall upon the needle, or the rib to be pressed near the heart? If so, the pain was not relieved by the fomentation, but by the position necessary to that operation. When the boy went to bed on Thursday night, probably he lay upon his left side, and more or less upon his face; if so, the two forces, gravitation of the heart and pressure on the rib, would bring the point of the needle into the closest possible contact with the heart, and hence the sudden cry of pain, the rupture, and gradual filling of the pericardium with blood. I think that the fact of the boy living half an hour afterwards may thus be explained. The rupture not being complete, the blood would have to be gradually squeezed through a network of muscular fibre.

It is to be regretted that surgical aid was not applied for at an earlier date, as the needle could have been removed, and, perhaps, a life saved. The complete absence of blood in any of the cavities of the heart leads,

I think, to the supposition, that the external pressure of the blood in the pericardium had so completely closed the right auricle, as to prevent any more from entering the heart, and, in the absence of this, its natural stimulus, it would cease to act at the moment when the last drop of blood was squeezed through the network into the pericardium or into the pulmonary artery.

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

A TEASPOON THIRTY-SIX HOURS IN THE GULLET.

By R. C. TODD, Esq., Staff-Surgeon Royal Army, Netley.

THE interesting case of the impaction of a tooth-plate in the œsophagus, recorded by Mr. Dearden in the last number of the JOURNAL, reminds me of a case in which I was concerned some years ago in Dublin, and which may be of sufficient interest to publish even at the eleventh hour.

About nine o'clock one evening, as I was on the point of going out to an evening party, a gentleman called upon me and asked me to come and see his wife, who had swallowed a spoon. From the account which he gave of the matter, I was disposed to look upon the case, at first, as one of hysteria; however, to make sure, I took with me the instruments which I thought might be needed, in the event of the story proving true.

I was conveyed to the house in one of those abominable vehicles, now happily extinct, called an Irish "covered kyar", and, on entering the lady's bed-room, I found the patient, calm and collected, seated in an arm-chair beside the fire, with a cup of cocoa on the table "fore-nest" her, as they say in Ireland. She at once motioned to her husband to leave the room, and, having made signs to me to be seated, walked over and locked the door, which, I confess, made me feel a little nervous. She then explained that she had pushed a teaspoon, with suicidal intent, down her throat, and that it had been there for thirty-six hours. She spoke in a whisper, had no pain or choking sensation, and swallowed fluids easily, but did not attempt solids.

On introducing my finger into her mouth and tickling the fauces, the effort at retching raised the spoon against the tip of my finger; and, after three or four attempts, I at last hooked the spoon in the top of the bowl, and out it came.

It was a small-sized teaspoon of Britannia metal, and, fortunately, had been pushed down handle foremost, and with the concavity of the bowl looking backwards. I attended for two or three days subsequently, but no bad symptom followed.

The circumstance was brought to light by the lady having sent for her priest, to whom she confessed the deed, and who insisted on her at once informing her husband.

TOXIC ACTION OF QUININE.

By W. B. HEMMING, Esq.

A CASE similar to that related by Mr. Garraway in the JOURNAL of October 9th, illustrative of the occasional idiosyncratic intolerance of quinine, has very recently occurred to me. It is the first time in twenty-five years' practice that I have seen such effects follow its administration; and, so far as my reading extends, I am not aware that they are mentioned by any writer on therapeutics as among the toxic qualities of that drug.

I prescribed for a lady, advancing in life, who was recovering from a very severe accident, a mixture containing one grain of quinine in each dose. The next morning I received an urgent request to visit her, as she had "passed a sleepless night, and a rash had shown itself all over the body." I found this to be the case. The rash was as vivid as in scarlatina, and attended with intolerable and incessant itching; there was slight puffiness of the face, but no œdema elsewhere; a white tongue, and slight uneasiness in the præcordia. My patient immediately said, "I know this is the quinine, as it occurred twice before, and more severely, when I took it in France, some years ago." A made minute inquiry as to her diet, etc., but could not discover anything to account for the rash. A highly intelligent and cultivated friend who was with her at the time confirmed what had occurred on the former occasions; and she said she had a clear recollection of having seen such an effect mentioned by a French author, accompanied by a theory as to its cause,

but had not the book with her to refer to, and could not recall the name of the author. The rash and irritation were persistent for several days, and then slowly and gradually subsided, followed by universal exfoliation of the cuticle, which now, at the end of three weeks, is not quite completed.

With the exception of fatigue from the sleeplessness, the result of the irritation of the skin, there were no symptoms of constitutional disturbance. My patient took only two doses of the mixture.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

ST. BARTHOLOMEW'S HOSPITAL.

RELAPSING FEVER: REMISSION ON FIFTH DAY: RELAPSE ON THIRTEENTH DAY: SECOND REMISSION ON SEVENTEENTH DAY.

(Under the care of Dr. BLACK.)

WE are indebted to Mr. Arthur Andrews, House-Physician, for the particulars of this case.

James O'Connor, a labourer, aged 20, a well-nourished man, was admitted on October 4th. He stated that, while at work on the 2nd, he was attacked with giddiness and headache. He had rigors during the 2nd and 3rd. He had been in regular work for three months, but had not lived well. He was a teetotaller. On admission, his face was flushed; his tongue thickly furred and brown; pulse 100, full, and bounding. The respirations and chest-sounds were natural; the heart-sounds clear. He had pain and tenderness over the hepatic region; no tenderness over the rest of the abdomen. At 8 P.M., the temperature was 103 deg.; the pulse 108. He had had no sickness. He had great headache, and also pains in all his limbs and his back; and was very restless.

Oct. 5th, 11 A.M. Temperature 103 deg.; pulse 108. He was much the same. He did not sleep, from pain in the head and limbs. The bowels had not been open for two days. He was ordered half an ounce of castor-oil immediately.—8 P.M. Temperature 102 deg.; pulse 96.

Oct. 6th, 11 A.M. Temperature 103.6 deg.; pulse 112. The bowels were well open. He had a few spots on the abdomen—livid, not raised, and not disappearing on pressure. He was much the same otherwise. In the afternoon, he had slight epistaxis; and at 6 P.M. he began to sweat profusely.—8 P.M. His tongue was clean and moist. Temperature 98 deg.; pulse 102, soft, and full. He had lost all pain in the head and limbs.

Oct. 7th, 11 A.M. Pulse 60; temperature 96.6 deg. He expressed himself as feeling well. Tongue clean. The spots on the abdomen were fading.—8 P.M. Pulse 60; temperature 97.2.

He improved rapidly, only being troubled with constipation, which was overcome by castor-oil, given as was necessary. His temperature remained about normal, and his pulse about 60, till the 13th, when, at 8 P.M., his temperature was 99 deg., and pulse 78.

Oct. 14th. He felt well, and got up as usual. At noon, the temperature was 103 deg., and pulse 96. He was sent to bed.—8 P.M. He made no complaint. Temperature 103 deg.; pulse 96.

Oct. 15th. He felt so well that he got up again.—11 A.M. Temperature 101.6; pulse 96.—At 8 P.M., he complained of pain in the limbs and back. The tongue was furred slightly. Pulse 108; temperature 104.6 deg.

Oct. 16th. He did not sleep, from headache. He had great pains in the limbs and joints.—11 A.M. Pulse 96; temperature 104 deg. The tongue was dry, with brown fur, rather tremulous.—8 P.M. Pulse 108; temperature 105.5 deg.

Oct. 17th, 11 A.M. Temperature 103.8; pulse 108.—8 P.M. Temperature 104.2 deg.; pulse 108.

Oct. 18th. He slept a little.—11 A.M. Temperature 103.4.—At 2 P.M., the tongue was moist and clean. He was perspiring about the head. The pulse and temperature were the same.—At 8 P.M., he had sweated profusely, and felt quite easy. Pulse 72, soft, and full. Temperature 97.4. He seemed prostrate.

Oct. 19th. He slept well.—11 A.M. Pulse 60; temperature 97.2 deg. He had no pain, except in the right elbow.—8 P.M. Pulse 60; temperature 97.4 deg.

From this time he has rapidly recovered, and now sits up all day. He has lost all pain in the elbow. His temperature has remained below 98.5 deg. On the 22nd, 23rd, and 24th, the pulse was as low as

48, but has now recovered to about 70. Since he has been up, he has lost his constipation, which was obstinate throughout the duration of the fever. The only treatment was small doses of acetate of ammonia with half a drachm of spirit of nitrous ether three times a day. The absence of vomiting, both during the primary fever and relapse, was marked.

The subjoined table shows the daily variations of pulse and temperature.

	Temp.	Pulse.		Temp.	Pulse.
3rd day—Morning...	103	100	15th day—Evening...	105.5	108
" Evening...	103	108	16th day—Morning...	103.8	108
4th day—Morning...	103	108	" Evening...	104.2	108
" Evening...	102	96	17th day—Morning...	103.4	120
5th day—Morning...	103.6	112	" Evening...	97.4	72
" Evening...	98	102	18th day—Morning...	97.2	60
6th day—Morning...	96.6	60	" Evening...	97.4	60
" Evening...	97.2	60	19th day—Morning...	96.8	60
7th day—Morning...	98.5	60	" Evening...	97.4	60
" Evening...	97.1	54	20th day—Morning...	97	72
8th day—Morning...	98	60	" Evening...	96.5	48
" Evening...	98	60	21st day—Morning...	98	54
9th day—Morning...	97.4	48	" Evening...	96.6	48
" Evening...	97	63	22nd day—Morning...	96.6	48
10th day—Morning...	97.5	54	" Evening...	98.5	52
" Evening...	98	54	23rd day—Morning...	97.8	48
11th day—Morning...	98	60	" Evening...	97.8	60
" Evening...	98	78	24th day—Morning...	97.8	66
12th day—Morning...	99	78	" Evening...	97.8	72
" Evening...	99	78	25th day—Morning...	97.8	72
13th day—Morning...	103	96	" Evening...	97.4	72
" Evening...	103	96	26th day—Morning...	97.8	78
14th day—Morning...	101.6	96	" Evening...	97.8	72
" Evening...	104.6	108	27th day—Morning...	98	60
15th day—Morning...	104	96	" Evening...		60

MIDDLESEX HOSPITAL.

NOTES ON THE TREATMENT OF DISEASES OF THE SKIN.

(Under the care of Dr. ROBERT LIVEING.)

Severe case of Acne Rosacea; enormous Hypertrophy of the Cutaneous Tissues of the Nose; treated by Hebra's method.—A hair-dresser, suffering from "spirit-drinker's nose", and having lost an excellent situation in consequence of this disfigurement, applied for relief in July last. The treatment adopted consisted in dividing the varicose vessels of the part affected, by transverse incisions with a small sharp knife; and, after allowing them to bleed freely for a few minutes, painting the nose with the tincture of the perchloride of iron; this produces contraction of the hypertrophied skin, and tends to obliterate the vessels. About a dozen incisions were made the first time, and a like process was repeated a week later; on both occasions, with very marked benefit. This mode of treatment was then discontinued for a month, and other remedies, such as sulphur ointment, were applied, but with no apparent result. The method by incision was again resumed in September last, and continued up to the present time; the improvement has been very rapid and striking, and to the great satisfaction of the patient, who had previously tried many remedies without avail.

Treatment of Psoriasis by Copaiba and Carbolic Acid.—M. Hardy was the first to direct attention to the use of copaiba in dealing with psoriasis. In ordinary cases, the treatment of this disease by Fowler's solution is so satisfactory, that no one is tempted to use the more unpleasant remedy of copaiba. But, in some obstinate cases, the balsam succeeds where arsenic has failed. Three cases of this kind were treated by Dr. Robert Liveing, during the last summer session. In all three, Fowler's solution had been freely administered for many months, with decided improvement at first, but with subsequent retrogression, and with no improvement whatever for many weeks previous to the discontinuance of the arsenical treatment. In two out of the three cases, the administration of the copaiba draught was followed by rapid disappearance, in about six weeks, of the psoriasis; and, in the third case, it resulted in decided improvement, though not in complete cure.

Seven cases of psoriasis were treated by carbolic acid with more or less success. It was administered either in the form of a pill, made up with extract of liquorice, or in solution; and the doses varied from one to three grains, three times a day. The general conclusion arrived at with regard to the use of this drug as a remedial agent for psoriasis, so far as could be determined from seven cases, was that, though certainly exercising some curative power, it was far inferior in this respect to preparations of arsenic.

KING'S COLLEGE HOSPITAL.

VERY LARGE VESICAL CALCULUS IN A FEMALE: OPERATION:
PERITONITIS: DEATH.

(Under the care of Mr. HENRY SMITH.)

IN the following very interesting case, it is clear that the bladder was injured by forcible attempts to extract the stone—possibly by the introduction of the rough bone-forceps, ill adapted for introduction into so delicate an organ; or perhaps by the sharp and curved hook of the scoop when placed behind the stone, although the operator took the greatest possible care, and was most anxious during the operation not to injure the bladder.

Eliza G., thirty-five years of age, a widow, was admitted on September 2nd, under the care of Mr. Smith, for stone in the bladder. She stated that she had suffered considerable pain over the region of the bladder for ten years, with difficulty in passing urine. She had been treated for disease of the womb and other maladies since the commencement of her illness. When admitted, the stone was felt from the vagina; and, on passing an instrument, a hard body was found, extending into the urethra. On October 3rd, incontinence of urine having come on since admission, she was put under the influence of chloroform, and an attempt made to remove the stone. An incision was prolonged backwards on a grooved staff from behind the anterior third of the urethra about an inch and a quarter, so as to divide the posterior part of the urethra and the neck of the bladder. The stone was then felt by the finger to fill up almost the entire bladder. A lithotrite was introduced without success; and a lithotomy-forceps, which broke down a part of the surface of the stone, composed of phosphates, was found useless for extraction. By means of a pair of sequester-forceps, Mr. Smith succeeded in breaking down the phosphatic shell of the stone; and, by increasing the incision in the neck of the bladder, managed, by the aid of a scoop, to extract the stone. The stone weighed, with the fragments that were collected, five and a half ounces. The nucleus was composed of oxalate of lime, and was about the size of a billiard-ball. She died in collapse on the evening of the 5th. At the autopsy, there was found extensive peritonitis, affecting chiefly the left side. The wound made to abstract the stone did not, however, approach the peritoneum. The bladder was thickened; on each side, the mucous membrane, to the extent of at least half an inch, was separated; and at the apex, and towards the left side, the tissues were in a soddened and sloughing condition. The right ureter was much dilated, and the corresponding kidney was converted almost into a cyst.

QUEEN'S HOSPITAL, BIRMINGHAM.

CASE OF LARGE FEMORAL ANEURISM TREATED SUCCESSFULLY BY
LIGATURE OF THE EXTERNAL ILIAC ARTERY.

By JAMES F. WEST, F.R.C.S. (Exam.), Senior-Surgeon to the
Queen's Hospital, and Professor of Anatomy in Queen's
College, Birmingham.

THE patient, for whom the operation was performed in this case, had a large femoral aneurism; it extended so rapidly, and gave such obvious indications of its tendency to come to the surface and burst, that but little chance was afforded of trying any plan of treatment, either by internal medicines or by the use of compression, either of the external iliac, or of the femoral artery above the tumour.

The extension of the aneurism up to Poupart's ligament, together with its large size, would have rendered the application of a tourniquet, to any part of the femoral artery, an impossibility, while digital compression of that vessel, just as it is passing over the margin of the pubes, was not only very difficult of performance, but could not be borne by the patient, owing to the extreme suffering which it induced.

The only plan of treatment which I thought it possible under the circumstances to adopt, was that of rapidly and completely arresting the current through the sac. The patient having been put under the influence of chloroform, digital compression of the external iliac artery was employed for about 15 minutes, so as to completely arrest the circulation in the aneurism, in the hope that the blood remaining within the sac, being kept free from all movement, might become coagulated and so a cure be effected. Whether the right principle of treatment is to afford the blood an opportunity of depositing its fibrin slowly, so as to form laminated clots, as it ordinarily does, when under the use of moderate compression, a fine slow current of blood is allowed to pass through the sac; or whether the plan of entirely arresting the current through the aneurism, as recommended by Drs. O'Ferrall and Mapother, of Dublin, and as successfully practised by them in four cases (BRITISH MEDICAL JOURNAL, October 5th, 1867, p. 286), is likely to be most beneficial in its results, is still a moot point.

The risk of rupture of the aneurism was in this case so great and so imminent that it did not seem to me justifiable to delay the ligature of the external iliac. There did not appear to be any advantage in this case from the rapid and complete pressure treatment employed for the space of fifteen minutes, nor had the tumour altered in any degree in size or consistence, or in the amount of impulse which it received from the current of blood passing through it at the end of that time. Perhaps a more protracted employment of the plan might have been attended with more marked results. This case, therefore, cannot be said to have given a fair trial of it, but in any other case I may meet with, where time is not of such urgent importance, I am resolved to use it again, and to employ Carte's or Lister's apparatus for that purpose, rather than trust to the painful, laborious, and uncertain plan of digital compression.

The following are some additional notes of the case. Nothing could have been more satisfactory than the progress of this patient, both during and after the operation, and not a single untoward circumstance occurred to hinder his recovery. The ligature separated voluntarily on the seventeenth day, and at the end of a month he was able to leave his bed. The tumour has never had any pulsation in it since the operation; it has gradually diminished in size, becoming at the same time firmer, and more solid in consistence.

The noteworthy points in the history of this case are, that the aneurism occurred in a healthy man of moderate habits; that it came on without his having received any strain or injury; that its discovery was accidental; that it rapidly (in three weeks) increased from the size of a walnut to that of a child's head; that it was unattended by any other evidence of atheroma, either in the heart or arteries; and, lastly, that it manifested at a very early period undoubted evidence of a disposition to inflame and to rupture. The following is an abstract of the case.

Henry Blight, aged thirty-eight, traveller with Wombwell's menagerie, was admitted into the Queen's Hospital, September 26th, 1868. The patient first became aware of the disease three weeks previously, when, having accidentally put his hand over the upper part of the left thigh, he felt a swelling. When first discovered, the swelling was about the size of a walnut; it was painful, and seemed to throb distinctly, and it gradually continued to increase till it reached its present size. He remembered no blow or strain in the situation of the tumour. He stated that, with the exception of a few attacks of rheumatism, he had always enjoyed good health, and that he had been moderately temperate in his habits, drinking, as a rule, beer at his meals, and only occasionally taking spirits. He had had gonorrhoea, but not syphilis; and had never, to his knowledge, taken mercury.

On admission, the patient was a spare man, and seemingly in a tolerably good state of health. A tumour, about the size of an infant's head, occupied the whole of Scarpa's triangle on the left side, extending from Poupart's ligament downwards, and slightly outwards, in the course of the femoral artery; it felt firm to the touch on all sides, but was a little softer at the apex. On placing the hand on the tumour, a distinct heaving impulse could be felt over its entire surface, and, on placing the stethoscope over it, a distinct bruit was audible, most marked in the course of the femoral artery.

The tumour measured seven inches in the longitudinal direction, eleven inches across; and the measurements of the affected limb as compared with the unaffected limb, were as follows:—

RIGHT LIMB.	LEFT LIMB.
Lower third of thigh.....12½ inches.....	15½ inches.
Upper third of thigh.....18 inches.....	21½ inches.
Dorsum of foot	9 inches.....10 inches.
Calf	11 inches.....13 inches.

Pulse 76. Respiration 20. Temperature 99½. The heart, on examination, was found healthy; scarcely any pulsation could be detected in either the anterior or posterior tibial vessels of the left leg.

On September 28th, the skin over the tumour had an erythematous blush, and the patient complained of intense pain within it, for which a bag of ice was applied. A draught containing thirty minims of succus digitalis, and two grains of acetate of lead, was ordered to be taken three times a day.

September 29th.—The ice was ordered to be discontinued, as it increased the pain in the tumour. To-day, I put the patient under the influence of chloroform, and applied digital pressure to the external iliac artery, just as it enters the thigh beneath Poupart's ligament, with the effect of completely arresting the pulsation in the swelling. Pressure was kept up fifteen minutes, and, on removing it, the tumour returned to its normal size, and the pulsation in it was as vigorous as before.

The external iliac artery was tied without difficulty on October 3rd.

The ligature separated on October 20th; and the patient was able to leave his bed perfectly cured at the end of the month.

COMPARATIVE PATHOLOGY.

REPORT ON CASES OF CONTAGION OF THE FOOT-
AND-MOUTH EXANTHEM TO THE
HUMAN SUBJECT.

Communicated by JOHN A. MCBRIDE, Esq., Professor of Veterinary Medicine at the Agricultural College, Cirencester.

THE present epidemic amongst cattle is interesting in no small degree to the medical profession, inasmuch as the disease can be communicated to the human subject from the lower animals by direct inoculation or by diseased milk. I am well aware that this subject has often been, and is at present, a disputed question, amongst medical men; and therefore I have been at some pains to collocate cases proving without doubt that, simultaneously with the outbreak amongst cattle and sheep, the *genus homo* was observed to suffer from the same disease. Cognisance was taken of this fact by Valentini in Hesse as early as 1695;* by Steurlin, in Franconia, in 1707;† by Sagar, in 1764;‡ by Nadhernyi, in Bohemia, in 1827; and by Kolb, in Würtemberg, in 1827. For further information upon this upon this subject, I refer to the second volume of Heusinger's *Recherches de Pathologie Comparée*, page 496; also to an exhaustive summary on the poisonous nature of milk in epizootic aphtha, by Dr. Nauheimer (Giessen, 1860). Most medical men are probably acquainted with the experiments of Jacob,§ Hertwig,|| Villian, and Maun, who drank the warm milk from an aphthous cow, and produced upon their mouths, breasts, and hands a painful vesicular eruption, which did not disappear for ten days. The following is an epitome of some of the cases which have been reported in this country since its first outbreak in 1839.

CASE I. (Reported in the *Veterinarian*.¶)—A young farmer was inoculated by means of the virus coming in contact with a wound on his finger. He had the vesicular eruption upon his mouth and nose; also severe constitutional symptoms.

CASE II.—One of the correspondents of the Royal Agricultural Society** states "that himself and all his family and domestics were attacked on the lips and mouth, in consequence of using the milk of diseased cows."

CASE III.—Mr. Watson, veterinary surgeon, Kelso, reports†† cases at a farm belonging to the Mekerstone Estate, near Kelso. "Epizootic aphtha spread with fearful rapidity through the whole stock, killing eight calves that had been fed on the milk while the disease was at its height. Several of the farm-servants and children were suffering from derangement of the alimentary canal, with symptoms of sickness, pain in the bowels, and considerable diarrhoea. They had partaken of the milk of diseased cows. The disorder ceased when the milk was discontinued."

CASE IV.—Mr. Duncan, veterinary surgeon, Colinsburgh, Fife, states‡‡ that "he has seen a boy suffering severely with all the symptoms of epizootic aphtha, his mouth being so sore as to prevent any food being taken for several days. The lad was ill nearly a fortnight."

CASE V.—J. B. Hislop, F.R.C.S.E., Houston, Renfrewshire, reports:§§ "About the end of August last, Mrs. X., the wife of an extensive farmer, came under my care on account of an eruption of bright red spots one-eighth of an inch in diameter, covered by a thin white desquamation, which was thickly scattered over the feet, legs, thighs, and lower part of the body. On a subsequent visit, I found her husband complaining of sore mouth and throat. Upon examination, I found his lips, lining membrane of his mouth, throat, and tongue, studded with small ulcers, giving off a white slough, which left behind it a cup-shaped cavity. His forehead was also covered by the eruption. On making inquiries, the only cause that could be assigned for this affection was the circumstance that the whole of the cows were suffering from murrain. Mrs. X. informed me that when, in the act of examining one of the cows, which was suffering much from the disease, and while pressing back its lips, he observed two or three of the vesicles on the upper lip to burst, and emit the matter to a considerable distance; and that a portion of this had been received on his hands and cheek. I

therefore came to the conclusion that they had been inoculated by the matter discharged from the mouths of the affected cattle—Mr. X. directly, and Mrs. X. by the use of the milk; and this opinion was strengthened by the fact that others who had been employed about the byre had suffered from similar symptoms, but to a less extent; and also several of the children suffered from sore throat. Mrs. X. and family were in the habit of using the milk freely, fresh from the cows.

CASE VI.—M. Gilmot, veterinarian of the Government at Havelange, reports* two cases. "The first being a little girl, 2½ years of age, who contracted this affection by drinking milk, the mouth only being affected. The second case was a servant, 27 years of age, at the same farm, who contracted the disease by drawing the teats of diseased cows. The serosity of the vesicles on the teats came in contact with the chaps which this girl had on her hands. Both the hands and mouth of this girl were covered by isolated vesicles. In both individuals, the appearance of aphtha was preceded by febrile symptoms, such as dullness and loss of appetite. The disease did not disappear for six days.

CASE VII.—Mr. Richardson, veterinary surgeon, Leighton Buzzard, reports† "a case of epizootic aphtha in man, with general vesicular eruption over the body; it occurred on a farmer who caught the disease from a scratch of the teeth of a sheep he was dressing."

CASE VIII.—Mr. Gadsden, veterinary surgeon, Bracknell, Berkshire, reports‡ "a case of epizootic aphtha in a man attending on diseased animals, who had eruption in and about the mouth, and a considerable time elapsed before the man was convalescent."

CASE IX.—Mr. B. Garner, veterinary surgeon, St. Ives, reports§ "that he has been a sufferer from an attack of epizootic aphtha."

CASE X.—Mr. Charles S. Green, veterinary surgeon, Winchester, reports¶ "he has observed the eruption of epizootic aphtha in children, and sometimes in adults."

CASE XI.—Mr. J. H. Pearce, veterinary surgeon, Whitchurch, reports‡ "that the dairymaids, and other people about the dairy where the disease appeared, became affected with diarrhoea after drinking the milk of the diseased cows."

CASE XII.—Mr. Barker, veterinary surgeon, Horsham St. Faith's, reports§ "cases of violent inflammation of the hand and arm, accompanied with great constitutional derangement, as occurring in man from handling animals suffering with foot-and-mouth disease, in consequence of having a fresh wound on the hand."

CASE XIII.—Mr. H. Emms, veterinary surgeon, Foulsham, reports¶ "I have known two or three cases of persons suffering from a disease resembling foot-and-mouth disease, and from swelling of the hand and arm, from the saliva of diseased animals coming into contact with an abrasion or cut."

CASE XIV.—Mr. Finlay Dun, veterinary surgeon (late Professor of Veterinary Materia Medica in the Edinburgh Veterinary College), Weston Park, Shipton-on-Stour, states‡ "the foot-and-mouth disease is not considered communicable to the human subject, and I have only seen two cases which would induce me to doubt the correctness of this belief. Both occurred last summer: one in a boy of 10; the other, in his father, a man of 60. Both were much amongst cows affected by this complaint, and drank the milk of diseased cows. Vesicles appeared along the roof of the mouth and on the tongue, exactly resembling those seen amongst cattle. There was great discomfort and difficulty in eating, much thirst, and febrile symptoms."

CASE XV.—Mr. Coulson, veterinary surgeon, Stokesley, reports‡ "that he has known two human beings suffer with eczema epizootica."

CASE XVI.—Mr. Holt, veterinary surgeon, Northallerton, reports‡ "he has witnessed inflammation of the mouth and eruptions in human beings, due to using the milk of animals affected with the foot-and-mouth disease."

CASE XVII.—Mr. S. Pratt, veterinary surgeon, Masham, reports‡ "that he had an eruption upon his hands and feet, which he traced to the drinking of milk from an aphthous cow. He has heard of others suffering in the same way, but more severely."

CASE XVIII.—Mr. A. Muir, veterinary surgeon, Dunbar, N.B., reports:§ "I have known men working among, and giving medicine to, cattle suffering from foot-and-mouth disease, suffer from sore mouths and hands, being the same disease to all appearance."

CASE XIX.—Mr. Higgins, meat inspector, Leeds, reports:|| "In the summer of 1862, I received information that a number of persons, adults and young children, were affected with a disease similar to the foot-and-mouth disease in cattle, and that one whole family of five per-

* *Ephem. Nat. Curios. Cent.* i et ii, p. 156.

† M. Sagar, *De aphthis precorinis, anni* 1764.

‡ *Österreich. Med. Jahrb.*, xi, p. 83.

§ *Journal de Médecine Vétérinaire*, pub. à l'Ecole de Lyon, t. ii, 1846.

|| *Medicinische Vereinszeitung*, 1834, No. 48, p. 226.

¶ *Veterinarian*, vol. xiv, p. 152.

** *Report on the Epidemic among Cattle*, by Professor Sewell (*Royal Agricultural Society's Transactions*), p. 119, 1841.

†† *Veterinary Review*, p. 505, 1862.

‡‡ *Veterinary Review*, p. 506, 1862.

§§ *Edinburgh Medical Journal*, February 1862.

* *Annales de Médecine Vétérinaire*, 1862.

† *Veterinary Review*, 1863, pages 269, 271.

‡ The above cases, *Veterinary Review*, 1863, pages 276, 285, 292, 294, 295, and 296.

§ *Veterinary Review*, 1863, page 344.

|| *Veterinary Review*, 1864, page 331.

sons were suffering from that complaint. It was found that a cow-keeper had the foot-and-mouth disease amongst his cows, and that the complaint referred to was among the families of persons who took his milk. I may state that the person who first called my attention to this matter was a butcher of Bramley, and whose family suffered from the disease. Another butcher told me that his child, a little girl, two years old, was suffering from eruptions about the mouth and blistered tongue. On inquiring where he got his milk, I found that he had been in the habit of taking milk from cows brought to the slaughter-houses, and that his child had consumed such milk in a raw state."

CASE XX.—Mr. Evershed, Government Inspector, Guildford, reports :* "In one instance, several members of a farmer's family, had suffered from sore mouth, which they attributed to having drunk the milk ; and, further, it is reported by him in your JOURNAL (Oct. 16th, 1869), that he had seen another case, in which three or four members of the same family had been ill together, with sore mouths, feverishness, and backache, through drinking the milk.

CASE XXI.—Mr. C. Gregory, Surgeon, Pembury, Kent, reports† having seen a farmer who had an eruption upon his hands, tongue, and roof of mouth, and felt his feet tender and sore ; he complained of low spirits and altogether out of sorts. It was produced by his hands coming into contact with the tongues of the diseased cows.

CASE XXII.—I have seen four cases, three of which were members of the same family, who suffered from vesicular eruptions in the mouth, together with great constitutional disturbance. The other case was a butcher, who was inoculated by means of his knife being repeatedly placed between his lips during the dressing of the diseased carcass ; he suffered from severe vesicular eruptions upon his lips, tongue, palate, and extremities, together with febrile symptoms.

MUSEUM NOTES.

ENORMOUS TUMOUR SUCCESSFULLY REMOVED.

IN the Museum of the Richmond Street Hospital, Dublin, are two portraits of the same patient, showing the condition before and after the operation. We cannot better introduce them to our readers than by giving the comments of the enthusiastic museum porter who, with natural pride, exhibited them to us. "And, now, sir, I'll show you—no, it's not that one. Look ! can you find any fault with him ?" (showing me the portrait of a man of middle age, without the slightest deformity that I could detect). "No, I can't." "Well, look here ; that's how he came to Dr. Hutton. It's the best job that ever was done here ! And that's the tumour you see—full of kists. He'd been to London, he had. Nobody dare touch him ; but Dr. Hutton chanced him, and it all popped out like an egg. The skin was so loose after, they had to trim it with scissors like. You see what his age was when he came, and that's it when this was done (the cure-portrait). It was two years after. He stood in the hall, and I did not know him again. He was a roadmender, he was, yer honour ; and as cross as two sticks, that he was."

In this case, an enormous tumour, as large as the man's head, was removed from the neck and side of the face ; it weighed six pounds or more. In the drawing, it looks like an encapsuled adipo-cellular mass. It had supplicated in one spot. Its removal was certainly most bold surgery, and the cure a splendid success. Michael Ryan, the patient, was fifty-four years old on Wednesday, October 8th, when the operation was done ; and fifty-six when his second portrait was made, showing no trace of deformity.

"Here is another ; but that couldn't be done. The nerves and arteries went through it ; and they were obliged to send him away. He went out crying, poor fellow, he did. He was from the north of England—a traveller, yer honour." This third portrait showed an immense tumour encircling the neck and jaws.

RADIUS AND ULNA UNITED TOGETHER.

THE old rule for the treatment of fracture of both bones of the forearm instructed us to put them up in such a position that the patient could spit into his palm. In this position of complete supination, the ulna and radius are at their greatest distance from each other ; and thus, it was thought, the risk of cross union (union of ulna to radius and radius to ulna) was best avoided. There can be no doubt that the supine position is the safest. At the same time, it must be admitted that it is often neglected with impunity. Specimens of cross union are exceed-

ingly rare. We have seen a few in which the two bones were welded together, but usually from cases of compound fracture ; and we should be glad to have references to specimens of simple fracture in which such mal-union has occurred. The following description refers to a specimen in the Army Museum at Netley, in which the two bones are firmly united together ; but, as usual, it is after compound fracture.

(No. 2601.) The left radius and ulna united together by a bridge of bone a little above their middle. The ulna has *not* been broken. The radius was fractured by gun-shot ; and possibly the radial border of the ulna was grazed and denuded of periosteum. The consolidated radius is quite straight ; there is no bend towards the ulna. At all other parts, the ulna and radius are at normal distances from each other. It would appear to have been treated in semipronation ; and it is scarcely likely that supination could have much modified the result. The specimen is evidently from a case in which much inflammation of the forearm followed, as both radius and ulna show much new deposit even at parts distant from the fracture.

BONY UNION AFTER TRANSVERSE FRACTURE OF THE PATELLA.

WE asked last week for references to examples of undoubted bony union after undoubted transverse fracture of the patella. Since then, we have found, amongst our notes of a visit to the Museum of the Royal College of Surgeons, Dublin, the following.

"E. A. (594). A patella united by bone after fracture. The union is firm and osseous, excepting at the middle, where a gap exists." We believe there is no history with this specimen ; but perhaps some of our Dublin readers can give further information.

REVIEWS AND NOTICES.

AN ATTEMPT TO APPLY CHEMICAL PRINCIPLES IN EXPLANATION OF THE ACTION OF REMEDIES AND POISONS. By W. H. BROADBENT, M.D. Pp. 33. London : 1869.

IN the pamphlet before us, Dr. BROADBENT has advanced a theory of therapeutics which is really an amplification of the quaint lines of George Herbert—

"Herbs gladly cure our flesh, because that they
Find their acquaintance there."

The Author's views will be best understood from his own words :

"The two following propositions are taken as postulates :

"1. That there must be some relation between the substance administered and the human organism on which the effects produced depend.

"2. That, so far as the substance is concerned, the basis of the relation can only be its *chemical* properties, using this term in the widest sense." (The italics are ours.)

"From these, certain important corollaries follow :

"1. That the physiological and therapeutical actions of the same substance must be similar in kind.

"2. That the action of food, medicaments, and poisons, in the system, must be capable of explanation on the same principle.

"3. That substances closely allied, chemically, must have an analogous action on the system, or the diversity in their operations should be capable of explanation on chemical principles : in other words, chemical groups ought to form therapeutical groups."

He very justly states, "that the last constitutes an hypothesis which is capable of being brought to the test of experiment. If it can be shown that similarity of chemical properties implies, as a rule, similarity of physiological and therapeutical action, and if the exceptions to the rule are capable of chemical explanation, we shall have made a distinct step in advance. If this cannot be established, we must confess that our knowledge is not sufficiently advanced to open this road for us. In any case, observation and experiment, in a definite direction, cannot fail to yield useful results."

The pamphlet is eminently suggestive, and, we think, in a right direction. It is full of ingenious ideas. Witness the theory of chemical tension (p. 17, etc.), and the interesting experiments on animals with hydrocyanic acid, in which it appears that oxygen, previously inhaled, retarded the fatal result (pp. 22-27) ; and again, then, on the action of nitro-glycerine (p. 29, *et seq.*), and many others, for which the reader must be referred to the pamphlet itself. Even if Dr. Broadbent has failed to some extent, he has at least worked ; and he has, as with the axe of a pioneer, cut out for other workers a new path in the direction of sound therapeutical inquiry.

* BRITISH MEDICAL JOURNAL, Oct. 16, 1869.

† *Lancet*, October 30, 1869.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, NOVEMBER 13TH, 1869.

OVER-POPULATION.

THE cry of "Over-population" is so easy that we shall do well to be on our guard in using it. It may be employed prematurely, or at the wrong time, or in the wrong country. It is the explanation of social difficulties which of all others comes readiest to the secular reformer. It is made to bear the brunt of much which really ought to be credited to want of energy, want of thrift, want of mental ability and the like. Are the means of human well-being scant in quantity?—then reduce or restrict the number amongst whom they are to be shared. What so simple? The village grocer declares that he could make a good living, if it were not that there is another shop on the other side the way which is not wanted. The journal editor also thinks that he could please his readers much better, and with far less harass to himself, if it were not that literature is overstocked, and there are four weeklies where one or two would be plenty. In nine cases out of ten when over-population and over-competition are thus alleged, it comes as the excuse of idleness, and as the proposed remedy for evils which, to the community at large, are no evils at all, but the reverse. Man is an improvable animal, but he is apt to lag in the race of progress unless he be spurred by competition and goaded on by want. Necessity has ever been for him the mother of invention, and to the *res angusta domi* we must credit many of his most useful discoveries. If it were possible to place a nation under conditions which should exempt it from the risk of poverty and privation, such exemption would probably be a sure step toward its demoralisation. The pressure of a full population is certainly in many respects a help to the development of virtue, and the improvement of the species.

Nor is it desirable that we should here forget the fact that a full population has at any rate the obvious advantage of being numerous. If human life is on the whole a source of happiness to those who possess it,—and most of our instincts answer this preliminary question with a strong affirmative,—then the amount of happiness enjoyed by a dense population must greatly exceed that of a thin one. It is not necessary to show that the developed arts of a populous country result in added enjoyment to each individual: if they only maintain it without material diminution, the absolute gain is immense. It is certainly somewhat strange that the school which boasts as its motto "the greatest happiness of the greatest number," should feel itself obliged to take the restriction of numbers as the main means of securing its end. "The greatest happiness of a moderate number" would be its more appropriate blazon.

If, however, we assert that it is necessary to the improvement of man that he should be subjected to the pressure of competition, and that in this direction what is often called over-population is no evil at all, we must still keep in view that excess in this direction is easily possible. Competition, when moderate, stimulates, but when excessive, degrades; and, pushed to the utmost, it paralyses every healthy impulse. The sight of want around him may induce the well-off scientific man to become more industrious, in hope of diminishing it; but, if it rise beyond a certain height, it may cause hopeless lethargy in the place of energy. It is then only within certain limits, that the law of increase of human population can be asserted to be a cause of human progress; but that it is such, to an extent which has been forgotten by many, there can be little doubt.

Those who urge the necessity of the restriction of population are also surely in error, if they hope by such means to remove poverty. Laudable as is their wish, its object is absolutely unattainable, nor perhaps, looked at broadly, is it even desirable. The wise men of Gotham tried to keep a cuckoo through the winter, and to do so put a high fence round the field in which he was. When he flew over the top they exclaimed, "Ah, we didn't make it high enough, he only just got over, if it had been a foot higher we should have kept him!" Now, it is just possible that the attempt to restrain the results of human poverty by keeping down our population, will be just as futile. The cry will be perpetually, we haven't succeeded because we did not do enough. It is, perhaps, almost a necessity, that there should be in all communities rich and poor, and that the latter should suffer their own peculiar evils. If a man should amputate his feet because he could not keep them out of the wet and mud, he would scarcely be counted wise. Society too has its feet, without which it could not progress, and which it is its interest to protect from damage, but by no means to exalt out of their proper work, still less to cut off as a hindrance. Their work, painful and toilsome as it may be, is to them and the rest of the body, an absolutely unavoidable necessity. The social problem is not so much to do away with poverty, as to find out the best way in which the rich and poor may live together to mutual advantage. At any rate, to attempt to get rid of poverty by attempting to prevent the procreation of the poor, is a measure the humanity of which would be doubtful, and the success still more so.

Here, again, however, we must be careful to avoid going from one extreme to another. However clear it may be made, that the restriction of numbers can never prevent poverty, there can yet be not the slightest doubt that the undue increase of numbers may augment the extent of poverty, and intensify its misery to an untold amount. We admitted this in a former article, and we refer to it again, because it is the key-stone of the argument as far as the present condition of our own country is concerned. The practical question for us all is, when is the increase undue? when does it rise beyond that which is healthful, that with which human energies and the discoveries of science can keep pace? Is it necessary that we should here stop again to explain and insist that "leaving the matter to Nature" will not do? We suspect that it is; for there are not a few who, admitting the truth of Malthus' law, still think, in their hearts, that its truth is abstract rather than practical, and that, in point of fact, we need not concern ourselves about it. The population of England has, they admit, increased enormously within the present century; but, the fact that it has doubled in the last fifty years, and risen in round numbers from ten up to twenty millions is, they allege, no proof that it will double again in the next fifty years, and rise from twenty to forty millions. Rather, they continue, experience has shown that the rate of increase does actually diminish very much when population has become dense, and the practical result is that it never becomes excessive. Now we must ask those who hold this line of argument to say out clearly what they mean. There is surely no reason whatever why the ratio of increase in the past should not be maintained the same in the future, if the conditions of the future be as favourable as those of the past. If those conditions should be altered, and should become less favourable, then the result which you complacently anticipate will be obtained, but at a certain cost. A change in the conditions of human life, which should diminish the rate of population-increase, would be simply a change for the worse in a thousand directions. It would imply, as chief features, diminished food, delayed marriage, starvation, and vice. We are supposing, of course, that there is no resort to artificial means, and that trust is put in "natural processes." Other things being equal, the ratio of marriages and the ratio of births in wedlock may be taken as fair criteria of the prosperity of a people. If they diminish, you may be quite sure that the "misery-check" is acting.

To return to the estimate of the present state of our own country in relation to the marriage question. Few can doubt that England is at present, as regards her own area, too full. We fetch our food from

other countries, and we deport cargo after cargo of our surplus inhabitants; and, if we did not do so, many of us must starve. Even with all the help we can get in these directions, we scarcely succeed, and those best informed amongst us are most alarmed at the increase of poverty. It is undoubtedly a time to try the faith of those who believe that monogamy, and prolific monogamy, is the proper state for man; and that, leaving aside its numerous collateral blessings, it is practically the only condition which can save men and women from one form or other of sexual degradation. Yet, despite seeming discouragements, this creed is, we believe, still the one which commends itself not only to our feelings, but to our reason also. If the world is over-populated, it is so only in parts, and those parts small in proportion to the whole. So far from its being generally too full, there are many regions in every respect favourable for human life, where "every man who goes makes room for two more." Even at home, and where the evils of poverty are most felt, we are far from having learnt all the lesson as to the best use of time, labour, and wealth, in order to their economy for the general good. The rich and poor have not, as yet, learnt their mutual relationships. Necessity has taught us much in science; and it may be that the next great lesson which we shall receive is one in morals, and that, in face of the terrible and increasing evils of poverty, we are about to learn that the highest pleasure which can be won from human existence is that of helping others. It is possible that the phrase "luxury of doing good" may be about to acquire its real meaning, and to become the expression of a conviction or instinct on which thousands will habitually act. It is possible, also, that, driven by the urgencies of the age, we may at length learn that there is a difference between sentimentality and power, and that the first essential to benevolence is knowledge. If this should come about—if with love as a motive, and science as a means, the educated parts of the human family should undertake, in real earnest, the solution of the population question, we have no doubt that it will be found quite compatible with the desires of the best.

It is now nearly three-fourths of a century since Malthus wrote, and the conditions under which we exist have greatly changed in the interval. Especially have the means of intercommunication between distant parts of the world been developed. The emigration experiment has been tried on a scale much larger than heretofore, with the result of the establishment of large and prosperous communities, whose existence is alike advantageous to themselves and the country from which they sprang. Malthus spoke slightly of emigration as a means of relief of over-population; and it is clearly liable to the objection that it is only a temporary remedy, and that, should the human race be successful in maintaining permanently its present ratio of increase, it may, some time, over-populate the whole world. Many considerations, however, upon which we cannot now enter, make it quite reasonable that we should leave to the future to find a remedy for this far-distant evil. For the present, and for many generations to come, there can be no question that the world's surface offers inviting homes to any possible number of emigrants which its nurseries can rear. Mr. Mill himself has admitted this, and has appended a remarkable postscript to this effect in a later edition of his work. Of the extent, however, to which it is desirable that emigration should be developed, if we are to regard it as the one real means of saving ourselves from the evils of over-population, few have, perhaps, any conception. Those who dare—and we trust that our profession generally will dare—to say that early marriage is the natural and safe course; that it, and it alone, is likely to save us from that gradual increase of sexual vice, which many of the older nations witnessed; and who wish to add to this the expression of their belief that it is also rationally desirable, must have prepared their minds on several other points. They must be prepared to urge that true patriotism does not consist merely in a cat-like attachment to a so-called "home", but in a desire to emulate the deeds of our ancestors, and a wide-hearted devotion to the interests of their race. They must put aside with contemptuous pity the suggestions of those who tell us of the hardships of emigrant life, and urge them as a reason why we

should remain cooped up at home, in the practice of nameless abominations for the restriction of human life. They must insist that the colonisation question is not one which concerns colonists alone; that it has risen to an importance which demands national recognition and the help and sympathy of every one; and that it is the nation's interest, as well as bounden duty, to protect and foster her colonies. To such questions as "Would you send the best or the worst?" they must be prepared to reply boldly, "The best; we will sow our new ground with our best seed." Should emigration be taken up in this spirit, it may yet save England from the other alternatives to which we have referred. We admit that great self-denial at home will be required; otherwise it is impossible. We need not only an altered plan of the campaign; we want better soldiers—an improved style of man. We want men who can resist the love of luxury—men inured to industry and thrift—men who will think before they act, and then shape their acts according to their thoughts. The choice offered us is, however, no ordinary one. A neighbour-country has made hers, and has decided to prefer the repressal of population and the cultivation of home luxury to the development of self-denial and the expansion of the race in other lands. Many persons think that she has obtained a success, and that we had better follow her example. Those who hold to other and purer hopes must bestir themselves; otherwise, to a certainty, the wave will be over us. If the robust Christianity of the present day can do this for us; if she can exchange idleness for industry, and love of luxury for thrift; if she can give us social heroes who will lead us in our new progress, and inspire with the needful energy those who will constitute the rank and file, she may yet save us. But she must not mistake her task. If the highest religious virtue is still to be made compatible with ignorance of the natural laws under which we live, and carelessness as to their results—with the love of personal indulgence in this world, and the cultivation of individual hopes in the next, rather than of rigid self-denial for the benefit of future generations—then failure will result. The laws of which we speak are no theories constructed in the study: they are as unswerving as those of gravitation, and tend as definitely to fore-known results. The law under which the human family increases in numbers may be either a blessing or a curse. A blessing it undoubtedly is to all, when met with courage, forethought, and self-denial; a curse of the most fearful kind, when it encounters only apathetic helplessness. In the one case, it tends to develop virtue; in the other, to extinguish it.

Our interest and duty in this matter as medical men seems tolerably clear. On proper occasions, and to those capable of understanding them, we should make the facts of the case known, as we see them. If this knowledge can be made the means of inducing adequate effort, all may be well; but, if otherwise, we shall most certainly be compelled before long again to listen to discussions as to the best means of restricting population, which neither denunciation nor ridicule will be able to put down.

POOR-LAW REFORM.

THERE is, perhaps, no better indication of the activity of the present generation than the continual agitation for the reform of our institutions. Some of these demands are, doubtless, unreasonable, yet others are not only desirable, but urgently needed. Of these, the reform of our Poor-law system may justly claim a prominent place.

The increase of pauperism, the chronic discontent of the Poor-law medical service, and the recent exposure of numerous and grave abuses in the management of our workhouses, may safely be taken as evidence of something unsound in the law or its administration.

The interest manifested by the public in this question points to the possibility of some reform being attempted at no distant day. The growth of pauperism, and the consequent misery of thousands of our fellow-men, cannot long be endured without some effort—if perchance it be within the wisdom of man to devise such—to correct these evils.

With the general question of Poor-law reform, and the means whereby

the condition of the poor is to be improved, we, as members of the medical profession, have no special concern. On those important branches of the subject, however, which bear on the interests of the sick poor, we feel it to be the duty of the profession to speak boldly and with authority.

But we must bear in mind that, if we wish to be heard and to influence these discussions, we must be mindful to speak in the interests of the people, and not solely in those of our own profession. The two are, we believe, identical; but it is possible to place the merely selfish or personal interest too prominently, and thereby endanger our cause. We must never forget that the welfare of the people, as a whole, is the first concern of the Legislature, and that merely professional grievances, however severe they may be, must hold but a secondary place. We may rest assured that no suggestions we may offer will ever become law, unless we can, in the first instance, with tolerable certainty, establish the fact that their adoption will be for the general welfare of the community. Once let this be clearly made out, and we may feel sure the necessary changes will speedily follow.

We have ventured on these observations for the purpose of indicating the spirit in which we think the discussion of these topics ought to be pursued. No question of medical politics is of more importance; none exercises so powerful an influence on the interests of the profession; hence the necessity of a right basis for its discussion.

Whether we consider the number of men engaged in the Poor-law medical service, or the interests of the sick poor, it is clearly a vital question to us as members of the medical profession, and one the consideration of which ought to be taken up by the whole body, and not left, as it hitherto has been, to those who belong to the service, and who for this very reason labour under great disadvantage in seeking to promote needful reforms. Hence we would urge that some effort should be made to unite the whole profession in the discussion of the question, and in the demand for reform, when its nature shall have been clearly laid down.

Let us briefly indicate the direction in which reform is needed. But before any satisfactory effort can be made to improve our present system, it must be clearly shown what the existing evils are—how and in what direction they press injuriously upon the sick poor. Is the medical relief and treatment of the sick satisfactory? If not, how not, and why? We believe the whole system of contracts for the treatment of the poor and the supply of medicines to be in urgent need of revision. But before we can reform this, it will be necessary to show how it is so, and that the remedies we propose are capable of effecting an improvement without disturbing the principles on which our Poor-law system is based. We believe that one remedy for these abuses would be the establishment, in some form throughout the country, of a dispensary system. Before we can obtain this, we must show in what it will correct the evils of the present system, and how it can be made available for agricultural districts and small village unions. Again, we must show how these dispensaries can be made to work best. Ought they to be in the hands of men already engaged in private practice or not? These and many other difficulties are apt to be overlooked by those whose experience is derived from large towns; but they have considerable weight with the authorities charged with the administration of the Poor-law, for the due maintenance of which in a state of efficiency, uniformity of action is a very important element.

There are other incidents in the present system of medical relief open to grave abuse, none more so than the method by which orders are obtained. The indiscriminate manner in which these orders are granted, and their intimate association with other forms of relief, tends to pauperise large numbers of our honest poor. How can this evil be avoided? Is it possible so long as the two forms of relief are granted by the same officers and sought for in the same way? Much might be done, and done economically, to improve the diet and nursing of the

sick poor, by the establishment of stores for the supply of cooked food, and the adoption of district nursing. A more harmonious action might be established between the management of the in- and out-door sick, to the great benefit of many cases of acute disease. These and many others are questions legitimately within our province; in their discussion, two principles must never be forgotten, viz., the relief of the sick poor, without thereby increasing the ranks of pauperism, and their relief at as small a cost to the ratepayer as is consistent with efficiency. Medical relief, under the authority of the Poor-law ought to be efficient, but it must not be extravagant.

Above all, and without which the wisest suggestions must be useless, there needs reform in the constitution of the Poor-law Board—it must be induced to recognise the vast amount of sickness daily dependent on the wisdom of its management, as to whether it shall receive suitable treatment or not; it is not sufficient that they appoint officers, and issue codes of regulations; it ought to see into the detailed working of the system. Sickness is the most fertile cause of pauperism, the beginning of many a long series of dependencies, and therefore in the interest of the community needing to be met with vigour, and with a more far-sighted policy than is ever likely to come within the wisdom of boards of guardians.

There is the same, if not greater, need for constant inspection and supervision of the management of the out-door poor, that there is for those in workhouses. This alone, if efficient and intelligent, would accomplish much improvement. We want a central authority, able and willing to devise sound regulations, and to see that they are carried out—an authority that will recognise in the medical service a body of fellow-workers in the cause of humanity.

We have ventured on these suggestions from an anxious desire to see speedily accomplished some reform of the present system. We offer them as suggestions only. We think that hitherto the discussion of these topics has had too exclusively a professional aspect, and has not been sufficiently regarded from the public point of view. We must never forget that the whole question, in its ultimate bearings, is essentially a ratepayers' question; and that we must, if we wish to succeed, be able to prove that, in the end, the advice we offer will be not only for the good of the poor, but, in the main, economical.

THE REGISTRATION OF DISEASE.

THE deputation from the conjoint Committee of the Medical Society of London, the St. Andrew's Medical Graduates' Association, the Association of Metropolitan Medical Officers of Health, and the Association of Poor-law Medical Officers, which waited on the President of the Poor-law Board on Tuesday, on the subject of the registration of disease, had a reception which was unexpectedly favourable. They met a minister who showed himself not only courteous, as ministers always are, but ready to hear every fact and argument—prepared, in some measure, for the argument—and obviously anxious to forward the course which the members of the deputation had at heart.

The first question which may occur to some of our readers is, Why, in the first instance, the President of the Poor-law Board was appealed to for the establishment of a national system of registration of disease? To this question the answer is sufficiently easy. The deputation holds that, at the present moment, the President has at his entire command a most extended and efficient system of registration. Under his control there are, at the present time, between three and four thousand competent medical men who, week by week, record for the information of the boards of guardians of the several Poor-law districts, all the cases of disease affecting the poorer classes of the people. These reports form, it is affirmed, an admirable and secure basis of registration.

The deputation further pointed out to the minister that, by a modification of the present form of return, the facts of registration can be written without calling upon the Poor-law medical officer for any ad-

ditional labour. Hence they appealed to the Poor-law Board as a preliminary step; they wanted to know if the Board would help the measure by promising its influence in obtaining what are now the lost papers, and utilising them.

As we have said, the deputation met with support from Mr. Goschen of an unequivocal character; and we think it nearly certain that if the other necessary arrangements can be carried out, the part which the Poor-law department can take will be taken. But the battle has only commenced, though it has commenced well, and the leaders of the movement must not rest on what they have gained. They must now move—and we hear they are ready for the task—to get established a central department for the registration of disease in London—a department furnished with powers as effective as those enjoyed by the department of the Registrar-General of Births, Deaths, and Marriages.

Dr. Philipson's paper, published in the last number of the JOURNAL, may be profitably studied by those who take an interest in the subject under discussion. The British Medical Association may, and, we may venture to say, will, lend powerful aid towards carrying out the great and national object which it is desired to fulfil.

MR. SYME.

It will, we are sure, be a matter of extreme gratification to Mr. Syme to peruse the report of the meeting held on Wednesday last with the object of perpetuating his memory in the University with which he has been so long connected, and around which he has shed so much lustre. The warm manner in which many of the most distinguished men in the profession came forward, and with one accord testified to the greatness of the man they were about to honour, not only as a surgeon, but as a friend, requires from us no comment.

MR. THOMAS LESSLIE GREGSON, Surgeon, has been elected Sheriff of Newcastle-upon-Tyne for the ensuing year.

Dr. J. D. HOOKER has been appointed to be a Companion of the Bath.

AN influential meeting has been held in the Leeds Town Hall, with a view to the establishment of a "Yorkshire College of Science". A committee was appointed to consider the matter.

THE death of a child aged 5 is reported from Holtby, near Catterick, owing to "irritation of the bowels from eating beech-nuts". The mother left home at midday to work, and, on her return, she found the child dead in bed.

DR. JOHN PATTERSON has received the Royal licence and authority to accept and wear the insignia of the Imperial Order of the Medjidie of the fifth class, conferred on him by the Sultan for sanitary services in Egypt.

THE LONDON UNION SOCIETY.

THE first ordinary meeting of this society will be held in the Medical Library, University College, on Wednesday, at 7.30 P.M., when the subject of debate will be, "Ought the bishops to have seats in the House of Lords?"

THE PAYING WING OF THE HOSPITAL FOR WOMEN, SOHO SQUARE. THIS wing, a description of which was given in the JOURNAL some time ago, was lately opened for the reception of patients, and already a large number of the beds are occupied. The rooms are well furnished; and, although some of them are not very cheerful, still they will answer their purpose very well. The accommodation for nurses and housemaids has not been properly attended to by the architect. The rules for admission now in force, but which are temporary, are mostly good, and, if strictly adhered to, ought, we think, to prevent ineligible persons from receiving the benefits of the hospital. The scale of charges varies from £1 : 1 to £2 : 12 : 6 per week, which includes, with one or two trifling

exceptions, everything, medical attendance and all. Before saying one word of commendation for this new undertaking, we must first have the distinct assurance from the authorities that the medical men shall not be expected to give their services to paying patients gratuitously. It has been the impression throughout London that the Soho Square Hospital is one of the chief offenders in the abuse of charity; that it gives relief to persons in very comfortable, if not in affluent, circumstances; and that little effort is made to check this abuse, although, from the nature of the cases (many of them requiring home-visits), it might be more easily done than at most hospitals. In saying this, however, we by no means wish to single out the Soho Square Hospital, and specially expose as its many others, and indeed all hospitals in London, are more or less to blame in the matter; and besides, from the ignorance too frequently displayed by medical men in the department of medicine to which we specially allude, there is here more than ordinary room for excuse. But we have reason in the present instance to believe that, if not checked, in the end this paying wing (likely to prove a great blessing, if properly managed) may simply be the commencement of a system which shall more and more open our charities to abuse, and empty the pockets of the profession. We were glad to hear that the subject of remunerating the medical officers is now under discussion amongst the governors; and we shall watch with interest the result of their deliberations. We have little fear but that, if the case be put properly before them, and the members of the staff insist, both for their own sakes and that of the profession, that some fair arrangement of the kind be carried into effect, they will adopt the proper and just course.

CHOLERA IN INDIA.

A COMMISSION, consisting of Colonel Young, R.E., Mr. Palmer, C.E., and the Sanitary Commissioner of the Punjab, has been appointed to inquire into the causes of the outbreak of cholera at Umritsur.—Up to October 3rd, there had been cases of cholera in most of the native regiments at Peshawur. Dr. Bell, of the 36th Regiment, has fallen a victim while in the discharge of his duties. It is said that the 36th Regiment has lost above 120 men, and the 104th Regiment 75, besides a number of women and children.

A WHOLESOME EXAMPLE.

AT the Clerkenwell police-court, Mr. and Mrs. Thomas Genge were summoned, under the Contagious Diseases Act, for letting two rooms in which some children had been ill with scarlet fever to another family without having the rooms disinfected. It was proved that about half an hour after the first family removed out of the room, the second, which consisted of ten persons, were allowed to take possession of them. Mr. Barker fined the defendants 20s., and 20s. costs, or, in default, fourteen days' imprisonment.

QUEEN'S COLLEGE, BIRMINGHAM.

THE Report of this College, lately issued, states that the number of students attending lectures in the Theological Department during the session has been from twenty to twenty-three; in the Medical Department, during the winter session, eighty-eight; in the summer session, sixty. Forty-two medical students had presented themselves for examination at the licensing boards. There is a desire in some quarters to revive the Engineering Department; but the College is in debt, and the Council have prepared an appeal to the public, which has, up to this time, brought in about £500. The *Birmingham Daily Gazette* suggests the establishment of evening classes for teaching physics, mechanics, drawing, and other subjects of vital interest to engineers; these classes, it observes, would be self-supporting, and would interest the public in the welfare of the institution. It is to be hoped that whatever efforts are made to improve the financial condition of the College may meet with success. It would be a matter for deep regret if the Queen's College, the Medical Department of which occupies a high place among provincial medical schools, should, for failure of timely support, be impeded or arrested in its useful course.

MEDICAL MAYORS.

AMONG the newly elected mayors are the following members of the medical profession: Dr. Rolston, Devonport; Dr. George Moore, Hartlepool; and Mr. Ley, South Molton.

DINNERS FOR THE POOR.

WE hear, on the best authority, that an effort will shortly be made by several benevolent gentlemen to provide a very large number of dinners weekly at a very low rate, in order to meet the prevalent destitution. The Australian preserved meat is, we understand, to be introduced largely into the bill of fare. Knowing how much even one good dinner a week will do in preserving poor children from disease and death, we cannot but wish success to the movement. The details will appear in the *Times*.

CONVEYANCE OF CATTLE BY RAIL.

WE are glad to find that the subject of adequately feeding and watering cattle during long railway journeys has at length been put to experimental test. Some cattle have been transported from Edinburgh in Reid's cattle-truck; they were under unfavourable conditions, for they had already travelled a hundred miles in the ordinary cattle-trucks. The total cost of the food consumed on the journey from Edinburgh was sixteen shillings, and it is stated that the animals sold for "several pounds a head more than any other from the same district."

PUBLIC VACCINATION.

THE Luton Board of Guardians recently decided to take no further legal proceedings against persons who had neglected to have their children vaccinated. In consequence of this decision, Dr. Stevens, Inspector of Vaccination under the Privy Council, attended the last meeting of the Board of Guardians, urged upon them the necessity of vaccination, and advised them to reconsider their previous determination. Some discussion ensued, in the course of which one of the guardians said there had been only one case of small-pox in the town—that of a young man who had been twice vaccinated, and had the small-pox for all that, but had, happily, recovered. He (the guardian) had been vaccinated, but, notwithstanding, had the small-pox. It was eventually determined to take the subject into consideration at the next meeting.

THE EDINBURGH UNIVERSITY CLUB.

THIS Club dined in St. James's Hall on Wednesday evening, after the meeting held to promote the testimonial to Mr. Syme. There was a large attendance—as many as forty-two members, eighteen ordinary guests, and Professor Owen and Dr. Burrows as club-guests. The pleasure of the evening was enhanced by a few capital songs. At the Council meeting held immediately before dinner, Dr. Murchison in the Chair, Dr. Meredith, Bengal Medical Service, and Professor Rutherford of King's College, were elected members of the Club. Letters were read from the Duke of Argyll, President; Lord Elcho; Professor Huxley; the Presidents of the Royal Society, the Royal College of Physicians, and the Royal College of Surgeons; Mr. Justice Hannen, etc., expressing with regret their inability to be present at the dinner.

DEATH FROM DRINKING CHLOROFORM.

A MAN named Shakey, aged 50, an inmate of the General Hospital, Jersey, has died in consequence of drinking chloroform. The head nurse, Joseph Hoare, deposed at the inquest that, as he was carrying a tray with some instruments in his hand, and a bottle of chloroform under his arm, the deceased called out to know "whether the bottle contained gin". Hoare told him that it contained "stuff to send people to sleep", and gave him the bottle to smell at. Shakey took out the stopper, and, instead of smelling at it, began to drink some. Hoare seized the bottle again, after Shakey had taken about a tablespoonful. No immediate effect followed; but, when Hoare returned, in about half an hour, the deceased looked drowsy; but, when spoken to, he regained his customary appearance, and is said to have looked quite cheerful. He soon, however, was noticed to be asleep. He was roused

up again, and some ammonia given him. He went to sleep again, though the doses were repeated. Salt and water were tried, and then castor-oil. Notwithstanding all the nurse's efforts, however, Shakey died about three hours after swallowing the chloroform. Dr. Godfray said there was no doubt that the small quantity of chloroform had proved fatal. He had read recently of the case of a person drinking half a pint without death ensuing. Shakey was very feeble, and suffering from an incurable disease.

DEATH FROM CHLOROFORM AT OXFORD.

A DEATH from chloroform of a commoner of Lincoln College, Oxford, occurred on the 9th. The deceased had to undergo a slight but painful operation. He had taken chloroform on a former occasion. The following is the evidence given by Mr. Hitchings, the surgeon concerned:

"Two drachms of chloroform were given on wool in a handkerchief. Deceased soon passed into the first stage of excitement, standing up after the chloroform had been administered. Mr. Hitchcock held him, and in another half-minute he dropped to the ground insensible. Deceased was laid in a reclining position in the chair he had been sitting in, when his breathing and pulse were natural, although quickened, as might have been expected. Witness then performed the operation, which could not in the ordinary way have caused death, although very painful. The chloroform was not again applied, although Mr. Hitchcock held it near deceased, whose pulse suddenly subsided, and extreme pallor came over him. Witness gave him some sherry, and tried other means to rouse him, which had no effect. He then became alarmed, and sent for Dr. Jackson, but, on the arrival of that gentleman, deceased had expired."

Mr. Hitchings had with him only Mr. Hitchcock, a chemist. The autopsy by Mr. Briscoe shewed a weak heart loaded with fat, and the right chambers full of blood. Although it is much better that in all cases of operation under chloroform the operator should have with him a qualified assistant, yet the neglect of this precaution is so common that no blame can be considered to attach to it. The cardiac syncope which caused death, was possibly helped by the circumstance that the patient was not in the recumbent position.

MEDICAL POLITICS AT THE MEDICAL CLUB.

THE Committee of the Medical Club have determined on holding a series of *réunions*, for the purpose of discussing, in a social way, the principal topics in connection with medical reform which are likely to occupy the attention of Parliament. On each occasion, the proceedings are to commence with a dinner; and no formal resolutions are to be taken on the matters brought forward. The first of these meetings was held at the house of the club on the evening of Thursday, November 4. Dr. Bell Fletcher of Birmingham was in the chair, and about sixteen members and visitors were present. After dinner, Dr. Fletcher opened business by referring to the memorial which was some time ago drawn up by some members of the profession in Birmingham, and which has now received 10,000 signatures. In the course of his remarks, he said that the forthcoming parliamentary session was likely to be one of great importance to the medical profession; and that, if certain general principles were carried out by Parliament, the profession would, in a few years, become consolidated. With regard to the existing corporations, there was no desire to attempt to abolish them: but it was hoped that they would act in accordance with the general professional feeling. If the members of the profession united firmly for their own support, with merit as the pass-word, the public must gain advantage thereby. Dr. Lory Marsh, honorary secretary of the club, explained briefly the circumstances of the institution of the meetings, the first of which was being held. The idea had, it appeared, originated with Dr. Prosser James. Dr. James, Dr. Joseph Seaton, Dr. John Chapman, Dr. O'Connor, and Mr. John Gray, M.P., spoke on medical reform. The general opinion appeared to be in favour of entrance to the profession by one examination in all branches; subsequent grades in the different colleges, etc., being left to the choice of those already qualified to practise medicine in all its departments.

FOOT-AND-MOUTH EXANTHEM CONTAGIOUS TO MAN.

THERE is a paragraph in the last number of the *Edinburgh Medical Journal* on the foot-and-mouth exanthem in which two cases of supposed communication of the disease to man are referred to. These cases (by Dr. Hislop) were recorded in the same journal for 1863, and they illustrate well the possibility of error in the over-zealous pursuit of comparative pathology. A farmer and his wife were found to be suffering from an eruption of papules "which gradually became bright red, then threw off thin silvery-like scales;" the man had "small ulcers giving off a white slough" in his throat tongue, and lips, and the woman had "slight inflammation of the fauces." We are expressly told that the eruption was not vesicular. Dr. Hislop does not tell us how long the disease had lasted in these patients when he first saw them. Lastly, the eruptions "gradually but steadily declined" under the internal use of iodide of potassium and bichloride of mercury! The man's cows were all suffering from the foot-and-mouth exanthem at the time. It seems clear that, whatever the disease may have been in these cases, it certainly was *not* derived from the cows. We are in want of more extended and accurate information on the diseased states which seem unquestionably to arise in man from contact with this malady, and especially as to whether the human disease is really an exanthem or only a local vesication. We should like to have seen fuller details of the farmer, his wife and daughter, who are stated in the *Veterinarian* for the present month to have suffered from the disease. It would be interesting to know whether the inflamed udder mentioned by Dr. Fagan last week, as the source of pus in some milk which caused stomatitis, had followed an attack of the foot-and-mouth exanthem.

THE RATING OF HOSPITALS.

ON Saturday last, the chairman of the weekly board, and the governors, of the Sheffield Public Hospital, were summoned by the overseers for the payment of a poor-rate, amounting to £9 10s. Objections were made, first, that the summons had not been signed by a magistrate; and secondly, that the two magistrates on the bench, being both governors of the Hospital, were defendants in the case, and could have no jurisdiction. Dr. J. C. Hall observed that the magistrates at Leeds and Birmingham would not sign a Poor-law summons against the medical charities of the town; and that the guardians of the poor at Sheffield subscribed ten guineas annually to the hospital; so that to tax the hospital for poor-rates was like taking with one hand what was given with the other. He remarked further, that the chairman of the District Rate Committee had expressed a strong opinion that the overseers only wanted reasonable pretext for excusing such institutions from the payment of rates. Mr. Jessop, one of the magistrates, thought certainly that hospitals ought to be exempt. Ultimately, the summons was dismissed, as being informal; and it was arranged that Dr. Hall should explain more fully to the overseers the grounds on which charitable institutions should be exempt from the payment of rates.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE half-yearly general meeting was held on October 27th, at the rooms of the Society in Berners Street. The Chair was taken by the President, Dr. Burrows. A short statement was read by the Secretary, from which it appeared that ten members had been elected since the last general meeting, and five additional widows and twenty-one children had made application for relief. The actual receipts from January 1st to June 30th had been £1,608; the expenditure, £1,379:10. The grants made to the widows and children amounted to £1,250:10 for the past year; the expenses were £129. There are at present fifty-six widows and forty-three children receiving assistance, in sums varying up to £50 *per annum* for each widow, according to her need; and up to £25 *per annum* for each of the children. The President, after acknowledging a vote of thanks to himself and the Court of Directors, expressed his regret at the small attendance of members at the general

meetings. Although it was in itself a proof of the confidence placed in the officers, still he much wished the members would show more interest in the affairs of the Society, by appearing in greater numbers at the half-yearly meetings.

A CURIOUS MEDICO-LEGAL CASE.

A CASE has been brought before the Civil Tribunal of Alais (Department of the Gard) by a man named Darbousse, who married, in December 1866, a person bearing the names of Anne Justine Jumas, said to be a female. Immediately after the marriage, M. Darbousse discovered that he had been deceived as to the sex of the person; but he did not bring an action for dissolving the marriage until the present year. It was stated that the person to whom the plaintiff had been married did not possess the distinctive organs of a female—neither breasts, ovary, uterus, nor vagina; that the pelvis was of the male rather than of the female type; and that, even at the age of twenty-seven, there had been no appearance of catamenia, nor any periodic abdominal and lumbar pains. The tribunal ordered an examination to be made by the chief midwife of the Maternity at Montpellier, in conjunction with Dr. Fabre of Alais; reserving final judgment until the report of such examination should be received.

THE ST. PANCRAS GUARDIANS AND INQUESTS.

DURING the last few days, several inquests have been held by Dr. Lankester on bodies of patients who had died in the St. Pancras Infirmary. Full reports of these have appeared in the *Times* and other papers. We may, therefore, be spared giving the particulars in detail. The question raised in the first case on Monday by the friends, apparently at the instigation of others, was the necessity or not of holding an inquest on the body of a man who had been admitted into the Infirmary on the evening preceding death, suffering from consumption; more especially as Mr. Barnes, the out-door medical officer, had given a certificate of the cause of death. Dr. Ellis, the resident medical officer, stated that Mr. Barnes had not seen the patient for several days; that the man's death had been accelerated by the state of the Infirmary; and that an inquest was, therefore, demanded by the circumstances of the case. The conduct of Mr. Barnes was, we think, perfectly inexcusable. If the resident medical officer, under whose charge the patient had last been, refused a certificate of death, Mr. Barnes was not warranted in giving it. It surely rested, then, with the coroner to decide whether Dr. Ellis had exceeded his duty or not. In the present instance, we offer no opinion; but the jury, on evidence given, among others, by Mr. Solly and Mr. Brudenell Carter, corroborated Dr. Ellis's opinion that the man's death was accelerated, as he had stated, from the unwholesome atmosphere of the ward in which he was placed. In several other cases which came before the coroner on Wednesday, the jury returned verdicts giving it as their opinion that the state of the wards had accelerated death.

LAUDARI A NON LAUDATIS.

THE following remarkable document was on the 1st instant presented as a testimonial to Dr. Edmunds, by his fellow-guardians of the poor of St. Pancras.

"The testimonial" (we read in the *Clerkenwell News*) "richly engrossed on vellum, and framed, was as follows.—Saint Pancras, Middlesex. At a weekly meeting of the guardians of the poor of this parish, held in the board-room of the vestry at the Vestry Hall, on Monday, the 27th day of September, 1869, present, Thomas Ross, Esq., in the chair, and eleven other guardians, it was moved by Dr. W. J. Collins, seconded by Mr. Watkins, and resolved, 'That our best thanks are due and are hereby tendered to Dr. Edmunds for the untiring zeal, tact, and ability displayed in furnishing the several reports which have from time to time been presented to this Board from the Visiting Committee, which reports are, in our opinion, a full and complete answer to the foul aspersions cast upon the newly elected guardians by Mr. W. H. Wyatt, and also to the clumsy, frivolous, and untruthful charges brought against us by Dr. Markham, Poor-law Medical Inspector, whose conduct towards Mr. Harley, one of his own profession, we denounce as cowardly, unprofessional, and deserv-

ing of the severest condemnation of the Poor-law Board.' As witness, the common seal of the said guardians."

Even in their testimonials, as it would appear, the guardians must be true to their character. They must be abusive. A very similar expression of their sentiments as regards Mr. Wyatt and Dr. Markham was, we understand, some weeks ago passed as a resolution by these unfortunate guardians, and a copy of it was forwarded to the Poor-law Board. On that occasion we learn that in reply the guardians received a well-merited rebuke from the Poor-law Board for their impertinence. They were told that Dr. Markham would have greatly neglected his duty had he failed to report as he did report. As a return for this rebuke, the guardians have again gone to the charge, and have given vent to their feelings in a production which they have had "embossed richly on vellum, and framed", as an elegant warning to be hung up on Dr. Edmunds' walls, *in terrorem* of future Poor-law inspectors.

ENCOURAGEMENT OF UNQUALIFIED PRACTITIONERS IN MAURITIUS. THE Governor of Mauritius, in a recent ordinance "to prevent the illegal practice of medicine and surgery," has reserved to himself the right of authorising *any* persons to give advice and treatment for certain diseases—dysentery, for example—in the management of which they may have acquired considerable empirical success. His Excellency doubtless wishes to obtain the greatest good for the greatest number. We hope he will not find more harm than good to come from such a regulation.

SCOTLAND.

DR. THOMAS REID, Surgeon to the Glasgow Eye Institution, has been appointed to the lectureship on Diseases of the Eye in the University of Glasgow.

SMALL-POX AT GREENOCK.

THE *Greenock Advertiser* states that small-pox has become very prevalent in the lower districts, and that no fewer than seven patients suffering from the disease were removed by the local authority and sent to the Infirmary. If this be correct, it surely does not point to the intelligent enforcement of the Vaccination Act by the local authorities.

MEDICAL BURSARIES AT ABERDEEN.

EVERY one is now agreed as to the advantage—nay, necessity—of a sound preliminary education before entering upon the more purely professional subjects of study. To encourage young men to make this preparation for medical work in the schools, such preparatory training should not only be cheap, but there ought, also, to be special inducements to undertake it. If the proposed changes in the "bursary", that is studentship competitions, were made at Aberdeen, and a little more latitude allowed in the first two years' course of study, we should have the desideratum at which we aim. The "bursaries" there are valuable and numerous, being thirty-three, at an average of £16 each, in addition to twenty-five presentation "bursaries." This may not seem high to some, but in Aberdeen living is cheap. A man possessed of a fair knowledge of Latin and Greek, in addition to English and arithmetic, and who had, with a view to his ultimate studies, mastered the elements of natural history, natural philosophy, and, what he would also find most invaluable, French or German, would have more than an ordinary chance of carrying off one of these studentships. It would pay his University fees, and save him a balance. Suppose, then, he has been so fortunate, and that he will be allowed to take natural history, chemistry, and natural philosophy, along with mathematics, logic, and English, instead of more Greek and Latin; then, at the end of two years, with botany and the elements of histology for the first summer session, and the bones and practical chemistry for the second, he will be fully equipped and ready for entering upon the study of anatomy or the regular technical portion of his training for the responsible work of a practitioner.

REGISTRATION OF DISEASE.

DEPUTATION TO THE PRESIDENT OF THE POOR-LAW BOARD.

A DEPUTATION waited upon the Right Hon. G. J. Goschen, M.P., President of the Poor-law Board, on Tuesday, to lay before him a comprehensive plan for the registration of disease throughout England and Wales. The deputation was a conjoint committee of the St. Andrew's Medical Graduates' Association, the Medical Society of London, the Metropolitan Association of Medical Officers of Health, and the Poor-Law Medical Officers' Association; it consisted of Dr. Richardson, F.R.S., Mr. P. Marshall, and Dr. Rogers, the Presidents of the Societies; Drs. Sedgwick, Sansom, Vinen, and Dudfield, the Secretaries of the Committee; Dr. Aldis, Dr. Stephenson, Mr. Gray, Mr. Vinall, Dr. Woodward, Mr. Glaisher, F.R.S., Dr. Day, Dr. Broadbent, Dr. Ballard, and Mr. Liddle. The object of the deputation was explained by Dr. Richardson. It was shown that the mortality returns afforded no reliable indication of the relative frequency of disease, in consequence of the varying mortality of different epidemics, and of the very different mortality of different diseases; and that a registration of disease, as distinguished from a registration of deaths, could alone furnish, when supplemented by the meteorological and geological records at present in the possession of the authorities, a sufficient basis for the adoption of measures for the prevention of disease. Most diseases, it was urged, especially diseases depending on preventable causes, struck hardest the poorer classes of the community; and a record of the diseases attacking them would be a very sufficient gauge of the proportionate frequency and of the actual character of the diseases affecting the entire population. Such a record now existed, but at present it was not utilised for this great national purpose. The returns furnished to the boards of guardians of the poor contained all the information required; and a proposal for a modification of the schedule at present in use, whereby the guardians could retain such part as they needed for local purposes, and could transmit the other part to a central office in London for classification and periodical publication, was described. The number of stations from which returns would thus be obtained was between three and four thousand, and would include annually not less than three millions of cases of disease. It was stated that the knowledge thus obtained would abundantly illustrate the course, causes, and character of disease generally, and the most effective means for diminishing its amount, to the great and lasting good of the community.

Dr. JOSEPH ROGERS explained a partial system of registration of disease which obtained in Ireland, and which was based on the returns supplied to the Poor-Law commissioners by the dispensary physicians. Restricted as it was in comparison with the extended scheme now proposed, it had been of great service.—Dr. ALDIS, on behalf of the medical officers of health, expressed his opinion that the scheme, if carried out, would be of the greatest public benefit, by enabling the health officers to ascertain, with the strictest accuracy, the presence and character of disease in the districts under their charge.—Mr. LIDDLE said that he spoke with the double experience of a medical officer of health and a Poor-law medical officer, and he was convinced that the scheme was as practicable as it would be useful. Death-lists needed to be supplemented by disease-lists, in order that sanitary measures might have a firm basis.—Mr. GLAISHER would assure Mr. Goschen, from an experience of twenty years, that it would be quite possible to combine the meteorological reports with the disease-register.—Dr. DUDFIELD said that the subject had been very carefully considered by the council of the Poor-law Medical Officers' Association, who were satisfied that the scheme would be effectually carried out without entailing additional labour on the Poor-law medical officers, and, in his opinion, the subject was of great national importance.—Mr. GOSCHEN said, at the outset, that in spirit he was heartily with the deputation in its sense of the national value of these returns, and of the advantage of utilising them. He pointed out the necessity, in putting such a scheme into action, that care should be taken not to impose additional duties on Poor-law officers, and that the nomenclature of disease used should be uniform. He inquired of the deputation whether, in the event of the plan being adopted, it would be better that the classification and publication of the returns should be undertaken by the Poor-law Board, or by some office dealing with like matters, such as the Registrar-General's department.—The feeling of the deputation was in favour of the latter plan, in order to leave open the ultimate extension of registration of disease to other classes of the community.—Mr. GOSCHEN was, on the whole, of the same opinion; and, without pledging himself strictly to details, approved generally of the suggestions which had been brought before him.—Dr. RICHARDSON thanked Mr. Goschen for the very satisfactory interview accorded. The deputation then withdrew.

THE ST. PANCRAS INFIRMARY.

WERE we to write a full and faithful account of the abuses and shortcomings which thrust themselves upon our notice one night last week while visiting St. Pancras Infirmary, we fear we would be unable to stop until we had pulled the whole place to pieces, and had brought the twelve new guardians—better known in local circles under the anomalous *nom de guerre* of the “Twelve Apostles”—in a body so far to interest themselves in the well-being of their sick brothers as to visit the ruins. Delighted as we would be to carry out such a reform, we are forced, reluctantly, to leave it for the present, and merely allude in as brief a manner as possible to the state of the wards at our visit, as it was chiefly to ascertain the truth or falsity of the statements made as to the insufficiency of the Infirmary accommodation that we were at the trouble to make inquiries.

The Infirmary was built for the purposes of a school in 1846, but has in late years been used as a hospital, without any of the necessary material alterations. At present it affords accommodation for 167 patients; but Dr. Edward Smith, in his report to the House of Commons, states that 145 are as many as the building ought to hold. There are 11 wards. The wards contain a varying number of beds, from 10 to 32. Above the fireplace in each ward the traditional number of beds is painted on the wall. The old guardians diminished the number, with the view of benefiting the sick and complying with the wishes of the Poor-law Board. It has, however, been the object of the new guardians to replace these beds. The bedding and furniture admit of much improvement and increase. In some cases, the bedding is sufficiently clean and good; in others, quite the reverse. It consists of one or two thin single blankets, a wretched mattress, and a coverlet. The beds are much too narrow, and the mattresses mostly a foot short. In one of the wards we saw a man dying of consumption, and gasping for breath: one of the medical officers ordered an additional pillow to prop him up; this, however, was furnished from beneath the head of another patient.

At the time of our visit, the wards were abominably close and ill-ventilated. The means of ventilation are clumsy and insufficient, but these even were not fully taken advantage of. The entrance of air into the wards seemed to be chiefly through the water-closets, rendering the atmosphere, as may be imagined, far from sweet. This state of things was particularly apparent in the female helpers' ward, to which we shall again allude. If adequate means were afforded for properly ventilating the wards, or even if the present means were efficiently made use of, a greater outlay on bedding would be found necessary, as the present supply is not sufficient. By the present arrangement, however, the guardians consider it cheaper to depend on the heat generated by the patients themselves, and pack them accordingly.

Almost all the wards were overcrowded. In the several wards there were sixteen patients sleeping on the floor, in baths, and on benches. The female medical ward, supposed to contain 24 beds, was full, and, in addition, one woman was sleeping on the floor and a second in a bath. In the female lock ward (12 beds) there were two patients on the floor, one in a bath, and another on benches. In the female surgical ward (32 beds) one slept on the floor. In the male medical ward (31 beds) nine patients lay on the floor. In the male surgical ward (28 beds) one patient lay on the floor. The male lock and the female itch wards were not quite full.

During the week ending Saturday October 30th, there were as many as 60 patients sleeping in this manner in the wards, and during last week no fewer than 95, and this, be it remembered, when clean patients were being sent into the itch and lock wards. The resident medical officer, in his weekly report to the Board of Guardians, mentioned the overcrowded state of the wards; but his report was ordered to “lie on the table without being read.” We may remark in passing, that at the same meeting, the master stated that he required 2,000 eggs for the use of the sick and others during the ensuing week, but the guardians reduced the quantity to 1,500; and it was but a few weeks ago that the sick were for two days without beer, the necessary allowance having been refused by the guardians. The cubic space allowed for each patient is about 600 feet, whereas the minimum recommended by the Poor-law Board is 850 feet; and that afforded in most modern hospitals, and considered by many as almost essential to good recovery, is 1,200 to 1,400 feet. The unhealthy state of the wards in the St. Pancras Infirmary may, therefore, be imagined.

The accommodation afforded to each ward for the purposes of a lavatory, which is also used as the scullery, is exceedingly limited, and assumes the form, in some of the wards, of what we can scarcely call more than a box with a tap and sink. The water-closet is in the same box, separated by a partition.

In the male surgical ward, and, for aught we know, in the other wards, the chief amusement appears to be rat-hunting. We were informed by several of the patients that an old man, suffering from chronic rheumatism and bad eyes, and who had just gone out, used to pass the greater part of the night in the scullery-box at this employment, alternately knocking the intruders on the head and going to sleep, waking up again with renewed vigour. The excitement amongst the patients ran very high for several nights, the old man having been unusually successful, as many as fourteen rats falling victims to his skill. Although such a state of things ought, of course, not to exist, still we confess to a feeling more than approaching regret at having alluded to the matter, as we feel certain that this little piece of pleasurable excitement, and because it is a pleasure, will be taken away by the benevolent guardians of St. Pancras—provided, always, they can get it done cheaply.

One of the sights of the Infirmary (and we can, in justice to the guardians, say that many of them are by no means easily surpassed) was the helpers' ward. This is a room 17 feet by 20, and 10 feet high, in constant use night and day, numbered for nine beds, which are far too many, but used for the accommodation of twelve helpers, thus affording less than 300 cubic feet of air to each occupant. The beds are almost as closely packed as possible round the room. The stench in this ward was simply abominable, the ventilation being entirely through the water-closet. In this room, four to eight women sleep by day, and at night as many as twelve, some of whom have, as they expressed it, to “turn into the hot beds”. There is no change of bedding for the different occupants; and, indeed, were we to judge by the filthy state of the sheets and what were intended for pillows, we would decline to hazard any opinion within twelve months as to the date when they last saw water. We observed a sewage-pipe which ran along the centre of the wall, and from which the sewage did not trickle down, as it had, we were assured by the occupants, until very recently, been wont to do. It is but fair to state, however, that the inmates of this room do not avail themselves of the means of ventilation afforded, such as they are; for although, from the method of ventilating the closet, the air from it would necessarily be blown into the ward, still the evils can be lessened by opening the ventilators in the skylight with which the ward is furnished.

There is no ward for doubtful cases of fever, which have to be put amongst the other patients until the disease has developed itself, thus exposing, in the close wards, the other patients to infection.

There is but one paid night-nurse for the whole wards. She is assisted by three unpaid night-nurses, who are generally convalescent patients, and who have no knowledge whatever of proper nursing. The night-nurses' room on the basement is damp and unhealthy.

Such are a few peeps into the state of the St. Pancras Infirmary; and we could multiply them, to the discredit of the new guardians, to any extent. The visitor is every where made aware of the unfitness of the place as a residence, as it now stands—much more as an Infirmary. It remains for the Poor-law Board to put a stop to the existing abuses, which are rightly the cause of so much indignation. To effect this they seem determined; for on Monday a letter was received by the guardians from the Poor-law Board, stating that the Board had resolved to annex the parish to the Central London Sick Asylum District, and to use the new Infirmary at Highgate as the sick-asylum for the district.

THE PREVENTION OF SCARLATINA.

THE medical officer of the Privy Council has just issued a paper of advice and instruction regarding the means of preventing the spread of scarlatina. It is, he points out, extremely important, wherever there is prevalence or threatening of scarlatina, or of any other epidemic disease, to endeavour to ensure a freshness of atmosphere, dryness of soil, and absence of dirt. District inspections should be frequently and carefully made by the nuisance authority; and, where necessary, proceedings for the abatement of nuisances should be pressed with all practicable despatch. He then notices the contagiousness of the disease; calling attention to the fact that infection is conveyed especially in the particles shed from the body in the process of desquamation, which may for a long time adhere to articles of clothing used by the patient or his attendants, or to various things used in the room.

Mr. Simon advises, as precautionary measures, among others: removal of the patient from among the healthy to a hospital, if he cannot be isolated at home: removal from the room of all unnecessary things to which dust and fluff are likely to be attached: thorough ventilation: constant use of some disinfectant fluid to the discharges and utensils of the sick, as well as to the handkerchiefs, etc., which he has used, and, ultimately, to his bedding. The attendants should be

persons who have already had the disease. The anointing of the body with oil or grease is believed to impede the dispersion of contagious dust. On convalescence, warm baths, with abundance of soap, should be used for three or four days, till no roughness of the skin remains. After this process, and with clean clothes, the patient may be deemed safe. Intercourse from houses where there is scarlatina should be prevented as much as possible. The body, in death from scarlatina, should be buried early; and should not be kept in a room used by healthy persons. A room in which there has been scarlatina should be thoroughly disinfected and cleansed before being again used by the healthy.

Mr. Simon calls attention to the penalties recoverable under the Sanitary Act (1866), for using public conveyances while labouring under infectious diseases, without giving notice of the condition; for not disinfecting a public conveyance after it has been used by a person so suffering; for transferring to other persons, without disinfection, clothing, etc., that has been exposed to infection; and for letting houses or rooms occupied by persons suffering from contagious disorders, without disinfection. He points out the powers given to local authorities for the cleansing and disinfection of houses, etc.; for the provision of hospitals and of carriages for sick; and of places for receiving dead bodies.

Of disinfectants, Mr. Simon mentions two classes: one represented by chlorine and its compounds, and the other, by carbolic and sulphurous acids. These do not well combine; and the local authority should declare which of the two is to be adopted. For the disinfection of clothes, bedding, and large household articles, the most convenient process consists in employing high degrees of heat.

THE TESTIMONIAL TO MR. SYME.

A MEETING was held in St. James's Hall Buildings, London, on Wednesday afternoon, to initiate a testimonial to Mr. Syme. There was a large and very influential attendance. Dr. Lyon Playfair, C.B., M.P., occupied the chair; and amongst those present were Sir Roderick Murchison, K.C.B., Sir Henry Thompson, Dr. Sharpey, Sec.R.S., Mr. James Paget, F.R.S., Dr. Charles Murchison, F.R.S., Dr. Cobbold, F.R.S., Dr. Gibson, Inspector-General of Hospitals, Dr. W. O. Mackenzie, Deputy Inspector-General of Hospitals, Dr. Walter Dickson, R.N., Mr. Annandale of Edinburgh, Dr. Leckie, Dr. Carr of Blackheath, Dr. Marshall of Clifton, Dr. Pullar, Dr. John Murray, etc.

Dr. PLAYFAIR said that he had been requested to take the chair, though he scarcely knew what his qualifications were for such a distinguished position. If it were friendship for Mr. Syme, it must be shared in by all; but if it were that he was one of that gentleman's pupils, then he was sure the feeling was shared in by very many of those over whom he had the honour to preside. Mr. Syme, when only nineteen years old, was entrusted by Mr. Liston with the charge of his anatomical room at Edinburgh, where he officiated as demonstrator. Afterwards he had the complete charge of the room, and then, under his auspices, was commenced that system of lectures which was the means speedily of drawing attention to his great powers as teacher. With his characteristic energy and dauntless spirit, Mr. Syme opened the famous little hospital at Minto House, where clinical instruction was given. He was appointed to the chair of clinical surgery in the University in 1833. It would be unnecessary for him to describe to an audience of medical men the many contributions which Mr. Syme had made to science, but there were some few so important that he could not help adverting to them. Mr. Syme's early paper on inflammation, his writings on the action of the periosteum in the reparation of bone, the constitutional treatment of senile gangrene, and the treatment by blistering of callous ulcers, would be well remembered. The mode of amputation which bore his name had rendered him famous everywhere. He introduced into Great Britain the operation for excision of the elbow; and his labours with regard to diseases of the rectum, and formidable cases of aneurism, testified to his unbounded skill. He could not properly describe the many and varied achievements which Mr. Syme had performed, and he would therefore speak of him in the relation in which he knew him—namely, as a colleague and a friend. Under an occult and blunt manner, there was always a real kindness and a sympathy shown by him at the bedside of a suffering patient. His diagnosis was almost intuitive. His quick and sound judgment, his courage and skill, and his celerity in operations, were qualities which all present appreciated. As a teacher, many recollected his excellences; he found it impossible to mate him with any other instructor in the terseness and clearness of his expositions, the fertility of his illustrations, or those many other qualities which stamped him as a man of genius. There were few men who had made faster and warmer friends. It was true that he

gave them as few words as he shed unnecessary drops of blood during his surgical operations; but blind must they all be if they did not see his depth of mind, his warmth of heart, and his kindly affection towards them.

Dr. SHARPEY moved the first resolution, as one of Mr. Syme's oldest friends. He referred to the universal feeling of sympathy, not only in the profession, but amongst the public at large, on hearing of the illness of Mr. Syme. He was glad to be able to say that Mr. Syme's illness had not interfered with his mental clearness and intelligence, and that he was still exercising his acute intellect for the benefit of his fellow-men. Mr. Syme's three great objects in life had been fulfilled—namely, that he should obtain a distinguished position as a surgeon by honourable means in the eyes of his brethren; that he might, in his day, take a leading part in improving the science of surgery; and that he might be successful in training a succession of earnest and intelligent pupils in the sound principles of his profession. It was Mr. Syme's great delight to be in the midst of his pupils. Dr. Sharpey considered it a salutary thing to bring prominently before the students of Edinburgh the merits and greatness of so distinguished a man, and believed that the present testimonial would be an incentive to future generations. He then proposed the following resolution:—"That this meeting, assembled to promote a testimonial in honour of Professor Syme, on his retirement from the Chair of Clinical Surgery in the University of Edinburgh, rejoice in his restoration to health, and in the prospect of his being able to advance surgery by further contributions from his experience."

Sir R. MURCHISON, Bart., in seconding the resolution, felt, after the admirable remarks of the chairman and Dr. Sharpey, that not a word more need be said; but he could not refrain from observing the very great respect which was evinced towards Mr. Syme at the meeting of the Social Science Association in Edinburgh. He believed that no words of his could adequately do him justice.

The resolution was carried unanimously.

Mr. PAGET said that he stood in some measure alone, as he had not been under the personal influence of Mr. Syme, except in the sense of being a pupil of his as he hoped to be of every other good and great man, and whose example all would do well to follow. Next to his friends, his rivals are those who owe him most. If he could say anything in addition to what had been already said as to the merits of Mr. Syme, it must be in the capacity of a member of a rival school. He believed there had been nothing more influential for good to the London schools than the consciousness that Mr. Syme was one of those who had to be met in rivalry. He doubted whether there had been any conflict more fruitful of good even to the world than the conflict between the English and Scottish races, which, he rejoiced to say, had always been attended by fair ambition and guarded by a sense of mutual respect. He could not speak of all the good works which Mr. Syme had performed; his value was felt by every surgeon in the world; and the kindness of temper, the earnest zeal with which he infected his pupils, could never be forgotten. If he were to speak for the whole of the London schools, he should say that Mr. Syme was a man whom all desired to imitate, and whose memory they wished to perpetuate in the place where his works had mostly been performed—if, indeed, his works could have any limit of place at all—namely, in the University of Edinburgh. The testimonial, he was sure, would carry with it its fruits for a hundred years, and thousands would say that the men of this time honoured the man, not for his capacity alone, but because he was true and honest, and an earnest worker in science. Such a man was Mr. Syme—a man who did good where good was hard to do, and who, by his teaching and example, had made the generations that followed him better than those which he had left behind. Mr. Paget then proposed the second resolution:—"That, considering Mr. Syme's great eminence as a clinical teacher, and his many and great contributions to surgical science and practice, it is desirable, on the occasion of his resigning the chair of Clinical Surgery in the University of Edinburgh, after a tenure of thirty-six years, to perpetuate his name in connection with the Edinburgh School of Medicine by a suitable memorial."

Sir HENRY THOMPSON seconded the resolution. He spoke of Mr. Syme's extreme kindness and frankness to him while visiting Edinburgh. Although an Englishman, he was proud, when abroad, to claim Mr. Syme as British.

This resolution was carried unanimously.

Dr. MURCHISON, the Honorary Secretary, then gave a short outline of the origin of the testimonial, which, he said, had commenced in his house in July. Finding that the proposal met with general approval, he suggested that a general meeting should be postponed until the beginning of the session. The form of the testimonial had been approved of by almost every one. He had sent a circular to all members of the profession and others in Scotland, and had received four hundred to

five hundred letters from gentlemen sympathising with the object. Amongst these, he read letters from Dr. Andrew Clark of London and Professor Muirhead of Edinburgh, and the following from Mr. Carlyle.

"Chelsea, 9th November, 1869.

"Dear Sir,—It gives me real pleasure to hear of a testimonial to Mr. Syme. To my judgment, there have been few in our days that were as well deserved. Your plan, or scheme of a result, is likewise altogether to my mind. I will at once subscribe my poor £10 to it, and I wish you all manner of speed. Unhappily, I cannot attend to-morrow, nor be of the committee, nor at all concern myself with management, even in name.

"I remain, yours sincerely,

"Dr. Murchison, etc."

"T. CARLYLE.

Subscriptions amounting to £735 had been already received, and support had been promised from all quarters. He then proposed the third resolution: "That the form of the testimonial be—1. A Fellowship for the promotion of surgery in the University of Edinburgh, to be called 'The Syme Surgical Fellowship'; and 2. A marble bust to be placed in the University library, or in the hall of the New Royal Infirmary."

Mr. ANNANDALE, of Edinburgh, in a few appropriate and feeling words, seconded the resolution, which was carried unanimously.

Further resolutions were passed appointing 350 gentlemen as a General Committee, and an Executive Committee for London, with a subcommittee in Edinburgh, to carry out the objects of the testimonial, with Dr. Murchison as Honorary Secretary. Powers were given to the Executive Committee to appoint local committees abroad as they thought proper.

A vote of thanks to the chairman was then proposed by Dr. LECKIE, and seconded by Dr. MURCHISON.

Dr. LYON PLAYFAIR, in reply, congratulated the meeting, not only on its tone and temper, but upon the eloquence of its speakers, and expressed a hope that one gentleman who had addressed them would ere long sit beside him as a member of the House of Commons, for the purpose of protecting the interests of the medical profession generally.

RELAPSING FEVER IN LONDON.

AN important document, on the present reappearance of Relapsing Fever in London, has just been issued by the Medical Department of the Privy Council. Mr. Simon traces the origin and course of the disease; gives Dr. Warburton Begbie's description of its symptoms; and notices Dr. Murchison's statement that "it has been a common observation that an outbreak of relapsing fever has been followed by an increased prevalence of typhus, and that there are grounds for apprehending that, during the ensuing winter, the poor of London may be visited not only by an epidemic of relapsing fever, but by an increase of typhus." Mr. Simon concludes by giving the following points to be borne in view by local authorities.

1. The greatest personal predisposition to relapsing fever is given by states of poverty and privation—so much so, that the disease is often known by the name of famine-fever. Where destitution has not existed, or has been adequately relieved, relapsing fever is not likely to be epidemic. 2. Relapsing fever is in a very high degree communicable from sick to healthy. The more confined the atmosphere in which sick and healthy are together, the more certain is the disease to be communicated. 3. An attack of relapsing fever is greatly less dangerous to life than an attack of typhus. But where relapsing fever has attacked, and when all its acute symptoms are past, the sufferers remain for a while extremely weak, requiring that food and restoratives should be liberally supplied them; in default of which, the feebleness left by the disease may often be of indefinite duration. This is the more important because, where relapsing fever becomes epidemic, typhus often accompanies or follows it; and persons whom the relapsing fever has weakened, not unfrequently fall victims of typhus. 4. Relapsing fever is eminently a disease which cannot safely be treated in the houses of the poor; for in them, crowded and ill-ventilated as they generally are, and with inmates often insufficiently nourished, there must be every likelihood that the infection will spread. It is essential that, under such circumstances, the sick should at once be removed from amid the healthy. Ample hospital accommodation is, therefore, an indispensable condition for limiting the extension of the disease. After noticing the duties—some of Poor-law relief, others of general sanitary administration—which have to be discharged by local authorities, in the several parts of London, Mr. Simon makes the following important remarks:—"It is essential for the local authorities of London to know that at the present time the London Fever Hospital is full; that henceforth neither it nor any of the general hospitals of London can be looked to as capable of giving assistance in any degree adequate

to the probable growth of the epidemic; and, consequently, that districts where the disease exists will be very seriously endangered if special hospital accommodation for their sick be not at once provided."

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Queen's Hotel, Birmingham, on Friday, the 3rd day of December, 1869, at 3 o'clock P.M. *precisely*.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.

13, Newhall Street, Birmingham, November 9th, 1869.

GLOUCESTERSHIRE BRANCH.

THE second annual meeting of this Branch will take place on Tuesday, November 16th, at four o'clock; and, by the courtesy of the Governors of the Gloucester Infirmary, it will be held therein.

ALFRED FLEISCHMANN, *Honorary Secretary*.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE next meeting of the above Branch is appointed to be held at the Ophthalmic Hospital, Maidstone, on Tuesday, November 16th, at 4.30 P.M.; Dr. S. MONCKTON in the Chair.

Dinner will be provided at the Star Hotel at 6.30 P.M.

Papers promised.—Case of Ovariectomy; Case of Death under Chloroform; Ophthalmic Demonstrations.

FREDERICK JAMES BROWN, M.D., *Hon. Secretary*.

Rochester, November 1st, 1869.

SOUTH-EASTERN BRANCH: EAST KENT DISTRICT MEDICAL MEETINGS.

THE next meeting of the above Branch will be held at the Fountain Hotel, Canterbury, on Thursday, November 18th.

Gentlemen wishing to read papers, are requested to communicate with the Honorary Secretary without delay.

ROBERT L. BOWLES, *Honorary Secretary*.

Folkestone, November 2nd, 1869.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

CHRIST'S COLLEGE offers Scholarships and Exhibitions (in number from one to four, and in value from £30 to £70 a year, according to the number and merits of the candidates) for natural science. The examination will be held on April 5th, 1870, and will be open to any one, whether a member of Christ's College or not, provided his name is not on the boards of any other college in Cambridge, and provided he is not of sufficient standing for B.A. It will be open, therefore, to all undergraduates of Oxford, to non-collegiate students of Cambridge, as well as to all students who are not members of either University. The candidate may select for himself the subjects of examination, and must send his name, etc., in to the master before March 29th. Further information may be obtained from the Rev. W. Gunson, tutor of the College.

UNWHOLESOME FISH, weighing altogether 21 tons 15 cwt., was seized during the last month at or near Billingsgate Market, by the officials appointed by the Fishmongers' Company.

THE SUNDERLAND MEDICO-CHIRURGICAL SOCIETY has been dissolved, and a new society formed under the same name, but with a different constitution. The officers are, *President*, John Davis, Esq.; *Vice-Presidents*, George B. Morgan, Esq., Charles Nattrass, M.D., and Henry J. Yeld, M.D.; *Secretary and Treasurer*, George S. Brady, Esq.

THE CHESHAM INFIRMARY was opened a few days since. The Bishop of Oxford preached a sermon at Christ Church, Waterside, after which he proceeded to the Infirmary, and formally opened it in the presence of several of the nobility, clergy, and gentry of the neighbourhood. The cost of the building (£850) was raised by subscription, towards which Lord Chesham gave £200 in addition to the site. £26 was collected after the sermon.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in anatomy and physiology, at a meeting of the Court of Examiners, on Nov. 9th; and, when eligible, will be admitted to the pass examination:—

Messrs. William Bell, C. A. E. Sheaf, and R. L. Tait (Students of the Edinburgh School); C. E. Whittington and Nelson Kiddle (of Guy's Hospital); Henry Williams and Richard Mason (of St. Thomas's Hospital); H. P. Deacor and B. J. Shaw (of St. Bartholomew's Hospital); G. H. How (of King's College); Joseph Thompson (of the Charing Cross Hospital); J. E. Brooks (of the Birmingham School); William Renton (of the Leeds School); Girdharlal Ratanlal Daphtary (of Bombay); W. L. Mayer (of the London Hospital); G. H. Whitaker (of Glasgow and University College); Robert Cory (of Cambridge and St. Thomas's Hospital); J. J. Macan (of Cambridge and St. Bartholomew's Hospital); Edward Skinner (of Sheffield and University College).

It is stated that eleven candidates out of the thirty examined failed to acquit themselves to the satisfaction of the Court of Examiners, and were consequently referred to their anatomical and physiological studies for three months. The pass examination for the diploma of membership of the College commenced yesterday, and will be continued throughout the ensuing week, owing to the great number of candidates.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH: DOUBLE QUALIFICATION.—The following gentlemen passed their *first professional* examinations during the recent sittings of the examiners:

Bell, Henry, Groomsport	Yeld, Horace Parr, Carlisle
Browne, W. R., Tasmania	Paterson, J. D., Glasgow
Lindsay, Francis Woodley, Cork	

The following gentlemen passed their final examinations, and were admitted L.R.C.P. Edinburgh and L.R.C.S. Edinburgh.

Bridford, John Sawyer, London	Leland, John S., co. Roscommon
Dundee, John, co. Antrim	M'Donnell, Martin A., Roscommon
Flood, Alexander Wm., Devonport	M'Manus, George F. A., Virginia
Gregory, William, East Indies	Mills, D. E., Tenterden, Kent
Keith, W. Gregory, Colombo, Ceylon	Saville, John George, Woolwich
Kelsey, William, Haxey	Shirres, David, Aberdeen

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentleman passed his *first professional* examinations during the October sittings of the examiners.

Bonthron, Christopher Campbell, Buchhaven

The following gentlemen passed their final examinations, and were admitted Licentiates of the College.

Cameron, John, New Pittslo	Lang, Alexander Morrison, Kirkintilloch
Finnie, John Thom, Peterhead	Merrick, Alexander S., Cork
Hogg, James, Liverpool	Tomkins, Arthur Wellesley, Cork
Kelly, Bernard, Banagher	

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, November 4th, 1869.

Bennett, Frederick Charles, The Close, Salisbury
Leigh, John Thomas, St. Ives, Huntingdonshire
Robinson, Charles Augustus, Kingston, Jamaica

The following gentlemen also on the same day passed their first professional examination.

Birt, George Corney, Guy's Hospital
Pugh, Edgar Joseph, University College

As an Assistant in compounding and dispensing medicines.

Burnes, Henry Foster, North Mace Rectory, Cork

MEDICAL VACANCIES.

THE following vacancies are declared:—

BRIGHTON AND HOVE DISPENSARY—Resident House-Surgeon: applications, 30th November; election, 7th December.

CHARING CROSS HOSPITAL—Physician-Accoucheur: applications, 30th.

CHOLSEY (Berkshire) NEW PAUPER LUNATIC ASYLUM—Resident Medical Superintendent: applications, 16th Dec.

HOLYHEAD UNION—Medical Officer for the Workhouse: applications, 29th; election, 30th.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton—Physician.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street—House-Surgeon: applications, 16th.

ISLE OF WIGHT UNION—Medical Officer for the Godshill District.

LEEDS DISPENSARY—Senior Resident Surgeon: applications, 17th.

LIMERICK UNION—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Murroe Dispensary District: election, 16th.

LINCOLN COUNTY HOSPITAL—Physician: applications, 20th Nov.; election, 22nd Nov.

LIVERPOOL—Admiralty Surgeon and Agent for.

LIVERPOOL BOROUGH PRISON—Surgeon: applications, 10th Dec.

MERTHYR TYDVIL UNION—Medical Officer for the Merthyr Town District.

NOTTINGHAM UNION—Medical Officer and Public Vaccinator for District No. 2: applications, 20th; election, 23rd.

PONTEFRAC T UNION, Yorkshire—Medical Officer for District No. 2.

POPLAR UNION—Medical Officer and Public Vaccinator for the Bow District.

RADCLIFFE INFIRMARY, Oxford—House-Surgeon.

ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Resident Medical and Surgical Officer: applications, 30th.

ST. MARYLEBONE GENERAL DISPENSARY, Welbeck Street—Physician.

ST. PANCRAS AND NORTHERN DISPENSARY—Resident Medical Officer: vacancy, 25th December.

SUSSEX COUNTY HOSPITAL, Brighton—Dispenser: applications, 15th; election, 22nd.

SWANSEA INFIRMARY—House-Surgeon: applications, 24th Nov.; election, 1st Dec.

TRURO UNION—Public Vaccination for the Districts of St. Just and Veryan: applications, 16th Nov.

UNIVERSITY COLLEGE HOSPITAL—Assistant-Physician.

WESTBOURNE DISPENSARY AND MATERNITY, Queen's Road, Bayswater—Resident Dispenser: applications, 15th.

WESTMINSTER GENERAL DISPENSARY, Gerrard Street, Soho—Surgeon: applications, 22nd; election, 25th.

WORCESTER INFIRMARY—House-Surgeon: applications, 10th Dec.; vacancy, 11th January.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

*BURTON, J. E., L.R.C.P. Lond., has been appointed Honorary Assistant Medical Officer to the Ladies' Charity and Lying-in Hospital, Liverpool.

*MOORE, C. H., Esq., appointed Surgeon to the Hospital for Women.

*MOXEY, D. A., M.D., appointed Honorary Physician to the St. Pancras and Northern Dispensary.

*WALLACE, J., M.D., appointed Honorary Assistant-Physician to the Liverpool Lying-in Hospital and Ladies' Charity.

BIRTHS.

BULL.—On October 30th, at Hereford, the wife of *H. G. Bull, M.D., of a daughter.

EASTES.—On November 5th, at Albion Place, Hyde Park Square, the wife of George Eastes, M.B., of a son.

MACFADIN.—On October 13th, at Dublin, the wife of F. H. Macfadin, Esq., Surgeon 83rd Regiment, of a son.

MCNAB.—On November 1st, at Preston, the wife of R. McNab, M.D., Staff-Surgeon, of a daughter.

MASTERS.—On November 6th, at Thrapstone, Northamptonshire, the wife of *William Hooper Masters, Esq., Surgeon, of a daughter.

OLIVER.—On October 28th, at Broughton-in-Furness, Lancashire, the wife of John B. Oliver, Esq., Surgeon, of a daughter.

RHODES.—On November 5th, at Great Horton, Bradford, the wife of *F. Rhodes, M.D., of a daughter.

RUSSELL.—On November 10th, at Accrington, the wife of *W. S. Russell, Esq., Surgeon, of a daughter.

SALTER.—On November 4th, at Malmesbury, the wife of G. Salter, L.R.C.P. Ed., of a son.

TAYLOR.—On October 21st, at Chester, the wife of W. Taylor, Esq., Staff-Assistant-Surgeon, Moorfield, Ayrshire, of a son.

MARRIAGES.

ADDISON, Richard, Esq., of Cumberland Terrace, Regent's Park, to Ellen, eldest daughter of *William BARTLETT, Esq., of Ladbroke Lodge, Notting Hill, on November 3rd.

AYRES, Philip B. C., Esq., Surgeon, to Emily Maud, only daughter of Captain Edward MCKENZIE, R.N., at Calcutta, on September 2nd.

BRODIE, David, M.D., of Edinburgh, to Jessie Morrison, only surviving daughter of Archibald MCFARLANE, Esq., late of Edinburgh, at All Souls, Langham Place, on October 31st.

*CLOVER, Joseph T., Esq., Surgeon, of Cavendish Place, to Mary Anne, elder daughter of the Rev. T. G. HALL, of Kingshurst, Paignton, Devon, at St. Margaret's, Westminster, on November 2nd.

ELTON, Henry Nathaniel, Esq., Surgeon-Major Bengal Army, to Mary Anne, eldest daughter of the late T. Macwood ELTON, Esq., of Portsdown Road, at Maida Vale, on November 2nd.

JONES, Podmore W. H., M.D., of Harley Street, to Clara, youngest daughter of the late James WYBURN, Esq., of Bayswater, at St. George's, Hanover Square, on October 30th.

*TERRY, John Jenkin, Esq., Surgeon, of Wittersham, Kent, to Sarah, widow of the late W. R. CHAPMAN, M.D., of Hastings, at Woodchurch, Kent.

DEATHS.

CHIPPENDALE, Walter, M.D., at Tunbridge, aged 37, on November 6th.

COOPER, J. P., Esq., Surgeon, of Harley Place, Bow Road, aged 41, on Oct. 30th.

FOSTER.—On November 3rd, at Page Heath, Bickley, Kent, aged 28, Georgina Gregory, wife of *Michael Foster, M.D.

LESTER, Charles Sloane, M.D., Surgeon R.N., at Blackheath, on November 1st.

MILLER.—On November 5th, at Southsea, aged 49, Catherine Harriett, wife of J. W. M. Miller, M.D.

TESTIMONIAL.—Mr. T. H. Colley, House-Surgeon to the Yarmouth Hospital for fourteen years, has just been presented, on his resignation of the office, with a purse containing 250 guineas, and a handsome gold watch and appendages.

FOUL AIR IN ROOMS.—In a paper on the Accumulation of Foul Air in Ill-ventilated Rooms, by Dr. Murray Thomson, which appears in the *Indian Medical Gazette* for October 1st, it is stated that the general conclusion seems to be that the foul air of a densely inhabited room, very badly ventilated, does not seem to accumulate at any one level more than another.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Mr. Marshall, "On a Case of Vesicular Mole, with specimen"; Dr. Henry Dick, "On a New Knife for Surgical Operation"; Dr. Hawksley, "On the Stethosphygmograph for aiding the Physiological and Pathological Investigation of the Functions of Respiration and Circulation"; Mr. Teevan, "A Case of Lithotomy".—Entomological Society.

TUESDAY.—Pathological Society of London, 8 P.M. Mr. J. D. Hill, "Diaphragmatic Hernia"; Mr. Barwell, "Ventral Hernia"; Mr. Nunn, "Dislocative Rheumatism"; Mr. Nunn, "Fibrous Tumour over Tibia and Olecranon"; Dr. Cayley, "Fibrous Tumour of Ovary"; Dr. Legg, "Cherry-stones retained in Ileum"; etc.—Anthropological Society of London.

THURSDAY.—Harveian Society of London, 8 P.M. Mr. F. J. Gant, "On the Treatment of Fracture of the Patella, with four cases."—Royal Society.—Chemical Society.—Linnæan Society.

SATURDAY.—Association of Medical Officers of Health.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

H. GARDNER is thanked for the information sent, which will be used.

ONE WHO WAS THERE.—Your letter shall appear next week.

SALOP.—Hunt *On Stammering* is the book most likely to serve your purpose. Since Dr. Hunt's death, his establishment at Hastings is carried on by his widow and brother-in-law. Kingsley's work is also worth reading. The larger one of Munro is a good scientific treatise on voice, etc., but does not contain much information likely to assist you in the cure. We believe that much may be done by careful training, and that the late Dr. Hunt was often very successful.

THE NEW HOSPITAL IN NEW YORK.—In the notice of this hospital in last week's JOURNAL, the dimensions of the area of one of the seven buildings of which the hospital is to consist were by oversight given as those of the hospital itself.

CHESTER GENERAL INFIRMARY.

SIR,—Will you kindly correct a mistake which appears under "Medical Vacancies" in the JOURNAL of the 6th inst. The office of Visiting Surgeon to this institution is certainly not vacant. I am, etc.,

Chester, Nov. 10, 1869. WILL. HAINING, M.D., House-Surgeon.

DR. HARDIE and Dr. PIGG (Manchester) are thanked for their strictures and suggestions; which shall, if possible, be borne in mind.

A QUESTION OF CLUB PRACTICE.—A case was tried in Liverpool on November 6th, before two justices, in which the plaintiff, a member of a friendly society, was certified by Dr. Wallace to have secondary syphilis, and, that being considered by the society as a preventable disease brought on by his own misconduct, benefit was refused. The plaintiff brought forward Dr. Bennett, who said that he had attended him for fever and ague, but that he had not examined him for syphilis, and would not swear that he had not syphilis, though he saw no symptoms of that disease. The society wished the difference of medical opinion to be referred to a third medical authority; but the justices decided that the plaintiff had the disease when he entered the society, and that as their medical officer had passed him, and he had been admitted into the membership of the society, the society was responsible. A verdict was, therefore, given, with expenses, for the plaintiff. Would the society have admitted him if they had known that he was syphilitic? and, seeing plaintiff kept back that information, who was primarily at fault, he or the society?

DR. H. MACCORMAC (Belfast).—The discussion on Consumption in Iceland must be considered at an end. It is a very interesting subject; but the exponents of the facts on both sides have now been fully heard, and our space is too valuable to continue it further.

DR. BEST (Louth).—We shall be glad to receive the case for publication.

THE LIVING SKELETON.—We should be glad to know the address of the lad who is being exhibited under this name. We have been informed that he is an example of universal scleriosis cutis.

R. M. B. COLL.—There will be a preliminary examination at the College of Surgeons on December 15th. You must apply on or before November 24th. It is stated that this will, in all probability, be the last examination in arts at the College.

PEDICULI AND SKIN-ERUPTIONS.

SIR,—In your last number you publish some "statistical notes" of Mr. Hutchinson's respecting "the connection between pediculi and eruptions on the scalp or skin generally", which (as you say) "strongly support the opinions of Hebra, which have been ably advocated by Squire and others in our own country." This is a flattering imputation that I am far from deserving, and do not by any means court. When I published my investigations respecting the connection between lice and skin-disease, I had never read a single line of Professor Hebra's writings; so that I felt scarcely praised when I read last week, that I had not only advocated, but had ably advocated, the opinions of Hebra. Far from having done this, I had waited (for my German only just suffices me for travelling purposes) for the then forthcoming translation of Hebra's work; and when, long after my investigations had been finished, I read his account of prurigo, I felt a sense of relief at finding I had not been anticipated, in what I think to be my best clinical work, by that careful observer.

I am very sorry to be styled an able advocate of views that I am so strongly opposed to as those held by Professor Hebra on the subject of prurigo. If any one will compare the account of prurigo given in my book on diseases of the skin with the account of it in Professor Hebra's book, he will have no difficulty in seeing how flatly we contradict one another on the most important points, and he will see that, although Mr. Hutchinson's observations go far (and coming from so able an observer they are strong proofs) to support the truth of my discovery, they equally, if they are allowed to be accurate, show how very wide of the mark Professor Hebra must be.

I will quote two or three statements from my book, and the same number from Professor Hebra's, which will, I think, justify me in saying that if I have unwittingly advocated Hebra's views, I, at all events, have not done it in a very able style. Mr. Hutchinson's observations, as you say, go to support the opinion that "prurigo senilis" depends on the presence of pediculi on the body; and this you think is advocacy of Hebra's opinions. In the English translation of Hebra's work, published in 1858, at page 268, Hebra says (summing up) "we may lastly assert that prurigo is neither contagious nor produced by any kind of epizoa." At page 200 of my book, published in January 1868, I say of the "eruption produced by the pediculus corporis" as follows: "The eruption produced by this parasite has already been described by me, under the heading of Prurigo, by the title of prurigo senilis." So that, if you had said Mr. Hutchinson takes Squire's side against Hebra, you would have more accurately described the position.

In my series of papers on Animal (Parasite) Diseases (*Medical Times and Gazette*, May 1868), I say very clearly, that "whatever views may be taken of its causation, prurigo is undoubtedly contagious." This also is in direct contradiction of Hebra's statement just quoted. At page 256 of his book, Hebra says, of the itching, that "this sensation is supposed to depend on some as yet unknown cause (probably disordered innervation of the skin) as in prurigo senilis"; whereas I have, in my writings, made out the itching to depend primarily on the irritation caused by lice crawling over the skin. At page 260, Hebra says "it is much to be regretted that in none of the ordinary works on dermatology is the stress laid on the incurability of prurigo which the facts of the case demand." Now, in the series of papers above referred to (*Medical Times and Gazette*, June 1868), I say, at page 601, that I have found stavesacre an efficient remedy for prurigo. Hebra (page 268) says "as to seasons, we must remark that prurigo is usually aggravated during winter, and remarkably alleviated in summer, especially when the thermometer stands high"; whereas I state, at page 49 of my book, that "I have noticed that the complaint is always much worse in summer than in winter." Hebra (page 257) removes any doubt as to what manner of disease he is describing under the name of prurigo, by giving substantially the same description of it that I have given in pages 48 and 49 of my book, so that we are both referring to the same disease. These quotations from our respective books are sufficient for instituting a comparison between Hebra's views and my own.

The allusion made to my writings in your JOURNAL is evidently prompted by a generous desire to do me full justice for my supposed advocacy of Hebra's views. But if I were tacitly to accept your well-meant praise, it would be at the cost of resigning my pretensions to the greater merit of having myself originated the views you refer to.

The gratification I feel at finding my observations confirmed by so very respectable an authority as Mr. Hutchinson is rather damped by finding them, at the same time, attributed to another observer. If they are trustworthy, the merit of originating, as well as that of confirming, them belongs entirely to this country; for I believe I am correct in stating that they have not as yet been entertained by any continental writer. And I think they are worth my claiming. If so common and so distressing disease, as prurigo senilis undoubtedly is, and one so mysterious in its pathology, and so utterly incurable as it is generally believed to be, can be shown to have a simple and definite cause, and to be readily curable by an easy process, a step of some importance has been gained in the somewhat mysterious region of cutaneous pathology and therapeutics. I have every reason to feel assured that the discovery, if I may call it by so grand a name, is most unreservedly my own. Certain I am, at all events, that, in the researches which led me to my conclusions, I derived no assistance, direct or indirect, from any authority, whether British or foreign. I am, etc.,

BALMANNO SQUIRE.
9, Weymouth Street, October 28th, 1869.

*** So far as we can see into this matter, our reporter was quite right in the expression he used, and Mr. Squire is somewhat in error on three points.

1. Hebra, most undoubtedly, teaches that the eruptions popularly known as prurigo senilis are usually caused by the presence of lice. He prefers, however, to use less conventional names. Mr. Squire informs us that he cannot read German; but it fortunately happens that in this case Latin will suffice, and we, therefore, refer him to Plates VIII, IX, and XI, in Hebra's Atlas, which are, under other names, examples of "prurigo senilis", and which are inscribed respectively: "Excoriationes ex præsentia pediculorum vestimentorum"; "Excoriationes et pustulæ, scalptu provocatæ, e præsentia pediculorum vestimentorum"; "Melasma seu pityriasis nigra, scalptu et pediculis vestimentorum provocata."

2. The disease to which Hebra now restricts the name prurigo is believed by him to be totally distinct from the so-called "prurigo senilis". It is probably of

great rarity in England. So far from being chiefly a senile ailment, Hebra asserts that it always begins in childhood. This is the malady to which alone Mr. Squire's quotations refer.

3. As to priority of discovery, if Mr. Squire means to claim that he was the first to recognise that lice are the frequent cause of intolerable itching of the skin (prurigo), he is manifestly mistaken, for the older surgeons knew it well enough. Witness the name phthiriasis and the chapters of Daniel Turner upon it. Of the moderns, we may note that Rayer (Plate xii, figs. 14-17) has actually delineated a louse by the side of his portrait of prurigo. The connection between the two has also been publicly taught by Hebra for twenty years or more, and we have been assured that it was long ago a common doctrine at University College. If Mr. Squire claims to have discovered not that lice are a common cause of prurigo, but that they are the one sole and invariable cause of all forms of that malady, then we think that his claim to originality is just, and that it will not be contested by any dermatologist.

OXALATE OF CERIUM IN PREGNANCY-SICKNESS.

SIR,—As regards the doubts you express concerning the results given by Dr. Waing-Curran of the treatment of the sickness of pregnancy by oxalate of cerium, on account of his having used bromide of potassium with bark and ammonia along with it, allow me to state that I have for some years been in the habit of using oxalate of cerium for the sickness of pregnancy without any further treatment, giving it in powder, in five-grain doses, three times daily, and that I have never found it fail to give immediate relief even in the worst cases; and that generally after the third or even the second dose.

I am, etc.,

Warrenpoint, October 1869.

ISAAC ASHE, M.B., T.C.D.

YEW-BERRIES NOT POISONOUS.—Professor Clos, of Toulouse, has recently investigated the toxic properties of the berries of the yew, and concludes that they are perfectly harmless; as is now well known, it is the leaves and shoots of the yew which are poisonous. It is commonly believed that the pulpy portion is harmless, and the kernel poisonous.

SIR,—A. and B. propose to a life office an assurance on the life of C., whose personal interests are not, to his knowledge, involved in the policy; and to whom the names of A. and B. are not revealed. C. answers that Z. is his private medical attendant; and, at the request of the office, Z. reports. The life is accepted, Z.'s report being the only one required; but the office declines to pay Z.'s fee on the ground that he was "mentioned" by C. as his private medical attendant; and that it "only pays its own referees". It also refuses to furnish Z. with the names of the proposers, A. and B.

With respect to the fee in this case, is there any legal liability; and, if so, to whom does it attach?

Bishop Auckland, October 1869.

I am, etc.,

INQUIRER.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Nov. 3rd; The New York Medical Gazette, Oct. 3rd; The Parochial Critic, Nov. 3rd; The New York Medical Record, Oct. 23rd; The Boston Medical and Surgical Journal, Oct. 21st; The Madras Mail, Sept. 1st; The Indian Medical Gazette, Oct. 4th; The Birmingham Daily Gazette, Nov. 8th; The Liverpool Daily Post, Oct. 27th; The South Durham and Cleveland Mercury, Oct. 30th; The Bristol Daily Post, Nov. 3rd; The South Durham Herald, Oct. 23rd.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Sir James Y. Simpson, Bart., Edinburgh; Dr. Kidd, London; Mr. G. Lawson, London; Dr. Weddell, Preston; Mr. Nash, Taunton; Dr. Bruce, Crimond; Mr. C. E. Richards, London; Dr. T. W. Thursfield, Leamington; Mr. J. A. Tulk, Isleworth; Dr. J. Hardie, Manchester; Mr. R. Murphy, Dublin; Mr. E. Garraway, Faversham; Dr. E. J. Cooke, Worksop; A Member, Manchester; Salop; Dr. Williams, London; Dr. B. W. Richardson, London; Dr. Duckworth, London; The Secretary of the Society for the Relief of Widows and Orphans of Medical Men; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. Hayden, Dublin; Dr. Paton, Bowmanville, Canada West; Mr. David Davies, Bristol; Dr. T. D. Griffiths, Swansea; Mr. J. Gardner, Chippenham; Mr. J. N. M'Bride, Cirencester; Mr. W. Hope, Dublin; Dr. James Russell, Birmingham; Mr. J. E. Burton, Liverpool; Dr. J. Wallace, Liverpool; Mr. C. G. Wheelhouse, Leeds; Dr. Arthur Ransome, Bowden, Manchester; Dr. J. C. Hall, Sheffield; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Treutler, Kew; The Registrar of the Medical Society of London; Mr. R. M. Miller, Wolverhampton; Dr. Playfair, London; Dr. Jessop, Cheltenham; Dr. Leonard, Manchester; Mr. C. Pegge, Manchester; Mr. J. S. Simpson, Alnwick; Dr. A. P. Stewart, London; Mr. W. R. Gowers, London; Mr. J. Couper, London; Mr. W. H. Masters, Thrapstone; Mr. Richard Rendle, London; Dr. Bowles, Folkestone; Dr. J. C. Fish, London; The Secretary of the Ethnological Society of London; Dr. Letheby, London; The Hon. Secretary of the Western Medical and Surgical Society; Dr. Mapother, Dublin; Dr. J. A. Campbell, Carlisle; Dr. Brunton, London; Dr. Baker, Liverpool; Mr. Sanderson, Manchester; Messrs. Calvert and Co., Bradford; Dr. Best, Louth; Dr. McCall Anderson, Glasgow; Dr. Taylor, Liverpool; Mr. T. Watkin Williams, Birmingham; Dr. Mac Cormac, Dublin; Mr. W. Bush, Bath; Mr. Moore, London; Dr. L. W. Sedgwick, London; Dr. G. H. Philipson, Newcastle-on-Tyne; Mr. E. Lee, London; Dr. Moxey; Mr. W. M. Torrens, London; etc.

Results of Meteorological Observations, for the week ending Saturday, November 6th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.							Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	WIND.										RAIN.		
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.			Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell.	Amount in inches.
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm, etc.				
BATH	29.953	0.889	49.8	47.1	44.2	82	59.5	37.7	21.3	56.1	44.8	101.0	..	6	1	..	..	..	..	..	2	0.7	2	2.3	6.5*	5	0.06
Dr. Barter, F.M.S.																												
BOURNEMOUTH	30.006	0.790	49.7	47.5	45.1	85	56.5	36.4	20.1	55.5	44.9	98.0	30.9	5.1	3.4	..	..	..	..	..	0.3	4.3	2	0.3	2.6	3	0.12
Dr. Compton, F.M.S.																												
DOVER	29.870	0.833	47.3	45.3	43.1	86	53.6	32.1	21.5	51.3	36.1	..	..	6	..	..	0.3	..	..	..	0.3	2	4.3	..	3.2	6	0.46
Dr. Parsons.																												
DUBLIN	29.970	1.027	49.1	47.0	44.7	85	56.0	39.6	16.4	52.6	45.4	..	35.4	7	..	..	..	..	..	0.5	0.8	3.9	1.8	..	4.1	5	0.49
Dr. J. W. Moore.																												
KEW	29.937	0.927	48.1	43.0	37.4	66	56.0	41.1	14.9	54.2	44.3	91.0	34.5	7.1	4.3	0.3	..	..	..	..	1.3	1.7	3.7	..	4.4	2	0.27
Dr. Treutler, F.L.S., etc.																												
LLANDUDNO	29.877	1.070	49.1	46.5	43.7	82	54.4	42.4	12.0	52.3	46.6	..	..	8	..	..	..	..	..	..	..	5	2	..	3	7	1.20
Drs. Nicol and Dalton.																												
MALVERN	29.929	0.913	48.5	45.9	43.1	82	57.2	39.5	17.7	54.0	43.8	106.5	33.4	6.2	6.4	0.7	..	..	..	..	..	1.3	4.3	0.6	9.2*	3	0.31
Messrs. W. and J. Burrow.																												
NORWICH (BETHEL STREET)	29.883	0.880	45.9	44.0	41.8	86	57.0	38.0	19.0	51.3	41.4	..	37.0	..	..	..	..	..	..	..	..	2	5	..	11.6	?	0.42
C. M. Gibson, Esq.																												
SCARBOROUGH	29.672	1.042	45.0	42.2	38.9	79	54.7	36.7	18.0	49.1	36.8	104.3	28.9	5.7	8	1.3	..	..	..	..	..	2.3	3.3	..	5.5	2	0.67
Dr. Fox, M.R.C.P.																												
SIDMOUTH	29.995	0.828	51.1	48.6	46.0	83	57.8	34.5	23.3	56.5	46.0	..	..	5.4	6.4	3	..	..	..	..	..	..	4	..	1.4	4	0.27
Dr. Mackenzie, F.M.S.																												
VENTNOR, I. OF WIGHT	29.992	0.792	50.6	48.3	45.9	85	56.0	41.0	15.0	54.3	46.3	..	..	3	5.6	0.7	..	..	..	..	0.3	0.3	5.7	..	4.3	2	0.22
J. B. Martin, Esq., M.R.C.S.E.																												
WORTHING	29.968	0.834	47.6	45.8	43.8	88	56.7	39.9	16.8	54.2	44.7	95.0	34.4	6.7	1.5	..	..	..	..	..	1.1	1.7	2.3	1.7	1.3	2	0.31
W. J. Harris, Esq., M.R.C.S.E.																												

* Mean hourly velocity in miles.

REMARKS.—The mean pressure of the atmosphere for the week has been rather below that of the week before, while the range has been considerably greater, pressure having been very unsteady and subject to rapid and extensive variations. Mean temperature has been from 5 degs. to 8 degs. higher, and the range has been rather less. The highest temperature of the week was observed at Bath and the lowest at Dover, while the greatest range occurred at Sidmouth. Winds have ranged between the south-west and north, those from the north-west being by far the most prevalent; their mean force has been moderate or fresh; it was greatest at Scarborough. The amount of clouds has been considerable, and greater than in the week before; the greatest amount was observed at Llandudno. The weather of the week has been generally disturbed and unsettled, with short intervals of fine weather. Heavy gales from the north-west and west occurred on the 2nd and 3rd at Dublin, Llandudno, and Malvern. Also, on the 4th, from north-west at Dublin; on the 2nd, from south-west at Bath; and, on the 6th, from Dover. Temperature has been very variable, being warm and moist with south-west winds, and cold and dry with north-west winds. Rain has fallen at all stations, but in no great quantity, the heaviest fall occurring at Llandudno. At Bournemouth, on the 6th, about 6.55 p.m., a very brilliant meteor was seen falling vertically in the south-west, leaving behind it a radiance which is said to have been visible for nearly 15 minutes afterwards. The same meteor was observed at Sidmouth, and also at Penzance. Very high tides are reported from Dover on the 5th and 6th, and from Bath on the 5th. In Dublin scarlatina appears to be on the decrease; bronchitis caused 23 deaths during the week ending October 30th; and pulmonary complaint, are generally prevalent. At Worthing no fresh cases of scarlatina have occurred. Otherwise, the public health is reported as excellent. In the last report from Bournemouth (ending October 30th) the mean of all minima was erroneously given as 35.7; it should have been 38.5; and, consequently, from the difference in mean daily ranges the mean temperature of air should be 42.2 degs.; of evaporation, 39.1 degs.; of dew-point, 35.3 degs.; and the degree of humidity, 77 degs.

Kew, November 10th, 1869.

W. J. TREUTLER.

NOTES

ON

ALPINE SUMMER QUARTERS FOR INVALIDS IN 1869.

By CHARLES J. B. WILLIAMS, M.D., F.R.S.

ON the 2nd of August, I started with two of my daughters to spend my holiday among the mountains of Switzerland, Italy, and the Tyrol, as has been my custom for several years—on this occasion, not with the less zest because, in the preceding autumn, the substitute of a tour in Cornwall and Devon proved much inferior in its effect on strength and health. In fact, leaving town in the extreme heat of the August of 1868, we found Penzance and the Land's End so cold and damp, that toothache drove me back to London for the aid of the dentist; and, although a second visit to Devonshire supplied abundant objects of interest and occupation, yet the keen air of Dartmoor brought on a severe attack of eczema solare, which I had never had before, even after any amount of exposure to the sun and air of snow-mountains and glaciers in Switzerland.

No sooner were we seated in the train at Victoria Station, than a well-known London *confrère* joined us, with the words, "To the Engadine, I suppose, like every one else?" "Well, we mean to take the Engadine in our way; but I should be very sorry to make the Engadine the only object of our tour." But we had not got far on our journey, before we found that it was the grand object of the greater number of English travellers going to Switzerland. Numbers of friends encountered *en route* were all setting in the current for the Engadine—many to join relatives already there, whose marvellous improvement on the change from London to a high Swiss valley was summed up in this, that they could hardly get enough to eat. One of our fellow-travellers was wisely providing somewhat for this want, by taking with him a *live turtle*—an object of unceasing curiosity to many passengers and railway officials, who had never before seen such an animal.

I confess that I had little sympathy with this rage for the Engadine. About seven years ago, I paid it a visit, in company with two of my sons, in the month of August; and, so long as the weather was fine, we enjoyed the pure bracing air, and were much struck with the peculiar savageness and grandeur, if not beauty, of much of the scenery. We went up the Prättigau to Davos Amplatz; explored the Strela Pass, the Dischmatal, and the Schwartzhorn; then down the Landwasser Valley to Alveneu and Bergun; crossed the Albula in a berg-wagon (it was not then open to ordinary carriages), and took the best quarters we could get at Pontresina. Thus arrived in this promised land, we made good use of our time. One day, we tramped some miles on the great Morteratsch glacier. Another day, we climbed the Piz Languard. Another excursion was made to St. Moritz, with its pretty lake: but the kurhaus on its swampy border gave a shuddering impression of coldness and damp. It was then unenlarged by the recent more comfortable edifice, and unadorned by its present gay garden and fountains. In these three days of fine weather, there was much enjoyment; although the sun seemed hotter by day, and the air more chilling at night, than in other parts of Switzerland. But then came a change to what is proverbially said to be the more common weather of the Engadine in summer.* First came rain; next day, snow; and at night, frost; and *this in the month of August*. As there was no inducement to make excursions into snow and cloud (except for a few minutes, to keep ourselves warm), the disappointed travellers were shut up, miserable enough, in the *salle à manger*. An attempt was made to light the stove; but it ended in smoke, of which we had already too much from the unrestrained devotees of the pernicious weed. Then provisions ran short, and the viands of the *table d'hôte* were little more than *bouilli et compôte de pruneaux*. So, feeling somewhat in danger of double starvation, and not being disposed to prolong this experiment of hibernation in a summer month, we ordered a carriage to take us out of these winter-quarters. The transition was marvellous. In two hours, we were at the top of the Engadine, leaving Sils and the upper lake in a snow-storm. In two hours more of rapid descent down the beautiful Maloja, we found ourselves at Vicosoprano, eating grapes and peaches in sunshine and summer; and, as we posted on from Chiavenna to Lake Como, except a shower or two, we had such a bright blue Italian

sky, that we could hardly credit our sense of the past, till, looking back, we could see the lofty mountains, which we had left, still wrapt in the dark cold clouds. Oh, how we pitied those still remaining in that Arctic region!

Probably this was an extreme case; but it was my first experience of the Engadine, and sufficient to make me less eager to join the multitude thronging to that, as the happiest and healthiest of valleys. We therefore lingered on our way to enjoy scenery far more beautiful than any to be met with in the Engadine. Our first halt was at Wesen, on the Lake Wallenstadt, with its lofty mountain banks, the rugged wildness of the northern forming so striking a contrast with the rich woods and pastures of the southern shore, yet all sweetly mirrored into harmonious softness in the trembling waters of the azure lake. The weather changing, and spoiling these attractions, we were glad to move to the more comfortable quarters of the Glarnerhof at Glarus, one of the best hotels in Switzerland. From this, excursions may be made in almost every direction—up the Klonthal, with its pretty lake reflecting the rocky precipices of the huge Glarnisch, which towers almost perpendicularly up to its snow-ridged summit, 10,000 feet above; the Linthal, remarkable for the diversity of its mountainous sides—some dazzling in the richness of their verdure; some darkening with threatening masses of overhanging rock, rising to the greatest height at the Pantenbrücke, the end of the valley, where the stupendous Selbsandft raises its dark brown mass in a perpendicular of 9,000 feet, overtopped by the snowy Todi. This long valley is further beautified by a variety of lofty waterfalls, and enlivened, if not beautified, by numerous large manufacturing establishments—proofs of thriving industrial enterprise. Half-way up this valley, too, are the baths of Stachelberg, much frequented by the Swiss and Germans. The water is sulphurous and alkaline, and is said to be very effectual in rheumatism and diseases of the skin. The supply of the spring is scanty, and hardly equal to the demand on it. It is foreign to my purpose to describe the Klausen Pass, which leads to Altdorf; the Sernfthal, which leads to Eln; and other interesting points connected with the Valley of Stachelberg. This valley is more beautiful than bracing, being, at Stachelberg, only 2,178 feet above the sea.

Our next halting-place was Thusis, at the foot of that wonderful triumph of engineering art, the Via Mala. Thusis is healthily placed—not so much from its absolute height (2,448 feet), as from its being high and dry above the rich Domleschgertal, and overtopped only on one side by the pine-clad rocks of the Via Mala. The small Hotel there is also very comfortable. Travellers going to the Engadine, who wish to see the Via Mala, may well halt here, and afterwards join the Julier or Albula routes by the new road just opened through the Schyn-pass to Tiefenkasten, which is by no means a good place to stop at. At Tiefenkasten, we took the diligence over the Julier, to make a second trial of the Engadine. All that I had heard of the crowded state of St. Moritz and Pontresina determined me to try Samaden, where I knew the Bernina Hotel was sure to provide well in the way of food. Even here, although they have upwards of one hundred beds, and I had written a week before, we were obliged to be content with bedrooms in the village for two days. However, nothing could be more courteous than the conduct of the landlord, M. Franconi; and we were most comfortably lodged and fed afterwards, at prices quite moderate, considering the demand of the season. And let me say here, once for all, that the complaints which were continually reaching our ears, of the short commons at some of the establishments at St. Moritz, by no means applied to the Bernina at Samaden. In fact, we were assured that a good many visitors used to come from St. Moritz to the Bernina Hotel for the sole purpose of getting a good dinner.

The weather, which had been wet the whole preceding day, and was showery on our passage over the Julier, became fine on the descent; and we entered the Engadine in bright sunshine. Still there was a scattering of fresh snow far below the usual snow-line; and, as we drove through Silvaplana, Campfer, and St. Moritz, we observed ladies wearing warm cloaks and even furs—a very sensible proceeding, but telling its tale of the climate in the middle of August. The weather continued generally fine during our week's stay at Samaden; but there were several falls of rain towards evening, succeeded by the appearance of fresh snow on the mountains on the following morning; and, on four out of the seven nights, the grass of the valley of Samaden and of Upper Pontresina was white and crisp with frost in the early morning. Of course, all this vanished with the first approach of the sun's rays: in fact, so hot were they, that veils, white handkerchiefs, and umbrellas were brought into full requisition to avoid their scorching effect on the skin; and, even with these protections, few of the more zealous excursionists entirely escaped the branding and skinning of the face and neck, so familiar to holiday mountaineers. To many, these face-burnings were trifles; and, by giving a ruddy glow to a hitherto pallid

* "Neuf mois d'hiver, et trois mois de mauvais temps—voilà l'an de l'Engadine."

cheek, encouraged the impression that they were signs of new health and vigour. No doubt, to many, the bracing air of the high Engadine is reviving and invigorating, and especially to those who have long suffered from the oppressive and relaxing air of the lower valleys and plains. These feel new life and energy in the cool bracing air, and their appetite and strength rapidly improve under its influence. With others, again, the effect is quite different: they are chilled, without being braced; and scorched by the sun, without being permanently warmed. They feel a certain degree of excitement in the air; but it causes fever, instead of strength; and its injurious operation is manifest in restless nights, and in failing, instead of improving, appetite for food. Our party, unfortunately, belonged to this latter class; and, consequently, the week which we spent in the Engadine was by no means a pleasant one; and we were not disposed to try a longer experiment of acclimatisation. We met with several others who made the same complaints. No doubt, the excursions in this neighbourhood are full of the beauty and interest attaching to the highest Alpine scenery. For example, Val Roseg is extremely picturesque and diversified in its pine-grown heights, forming an ever varying framework to the dazzling glaciers and snow-peaks at its upper end. Considering that the woods consisted chiefly of two trees only, the larch and the Alpine cedar, with only here and there a Scotch pine, there was a surprising absence of monotony; the grandeur of the rocky masses, and the brilliancy of the flowers and lichens, making up for the want of variety in the foliage. As usual in sunny days, the ascent was very hot, except where the way was shaded by the welcome trees; but the descent was from west to east, in the face of a cold wind, which became so cutting towards sunset, on our descent to the valley of Samaden, that we returned miserably chilled, in spite of all our wraps and the jolting of the rough berg-wagon, the only vehicle used for the roads.

From these illustrations of the summer climate of the upper Engadine, it is pretty clear that it ought not to be recommended indiscriminately to all classes of invalids; and those that are likely to benefit by its exciting and bracing influences ought to be cautioned and prepared against its extremes, which are especially trying on first arrival. It appears to be the common experience of those who most benefit by the climate, that the powers of circulation and respiration so improve as to be able to bear the changes of cold and heat, which were found very trying at first; and this kind of acclimatisation may be extended to the colder season; so that those who have gone in the summer gain the power of so well enduring increasing cold as to be able to pass through the almost Arctic winter of these heights without suffering or inconvenience.

[To be concluded.]

ON PROCIDENTIA UTERI.*

By CHARLES GIBSON, M.D.,

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As a preliminary to the practical observations which are embodied in this paper, it will be advantageous to set forth, briefly, the relative anatomy of the uterus, and the etiological influences which are in operation in the production of procidentia of this organ.

In a well-formed healthy woman, the uterus is placed in the middle line of the pelvis, and extends from its brim into its cavity to the extent of three inches, or thereabouts. It is poised upon the vagina as upon a stem, while it is suspended by its round and lateral ligaments, and by the Fallopian tubes, from the sides of the pelvis, and by its anterior and posterior ligamentous folds of peritoneum from the rectum and from the urinary bladder. In addition, it receives support from the levatores ani muscles, from the subperitoneal fasciæ and cellular tissue, and from the vessels and nerves by which its own and the surrounding tissues are permeated. It receives support again intermediately by the vagina, from the floor of the pelvis, from the perinæum, and from the vulval tissues. Lastly, it receives support from the urinary bladder in front, from the rectum behind, and from the bony pelvis around.

Let us now note that the uterus is surrounded by small intestines, and that the urinary bladder, to which it is attached, is a viscus which is ever changing its position, and alternately pressing upon, and receding from, the uterus. Let us note, again, that the contents of the abdomen and pelvis are subjected to varying pressure (in addition to that of superincumbent weight) from the diaphragm, ribs, and abdominal walls, by dress, by laughing, coughing, etc., and by locomotor and other exertion. And now let us observe the extraordinary obliquity which holds in the position of the pelvis, and hence of the uterus itself.

Finally, let us observe that the cylindrical stem—the vagina—by which it is supported is so singularly oblique to the uterus, that this organ is inserted, as it were, into the summit of the vagina through its anterior wall; and, in the interest of the latter observation, let us remark the varying conditions of the vagina itself, by the recurring engorgement and changing tonicity of which it is the subject.

In considering the etiology of procidentia uteri, it is noteworthy that the abdomen of the sufferer is often pendulous, and that its contents are often bulky; but that neither the pendulous condition nor the bulky contents of the abdomen can be recognised as necessary antecedents. Then the procident uterus itself is often enlarged, as by *post partum* subinvolution, by repeated child-bearing, by occasional or persistent engorgement, by hypertrophy of its parts (particularly of its cervix), by the presence of tumours, etc., and by pregnancy. But the uterus rarely descends far, in consequence of pregnancy, if there have been no descent before; and mere increase of size or weight, as by tumours, engorgements, subinvolution, etc., is not necessarily, although very frequently, associated with descent of the organ. Yielding of the ligaments is constantly observed; and yet it is remarkable how easily the procident uterus returns towards its normal position when the body of the patient is placed horizontally. The intestines thus recede from the pelvis, and the pressure of the mass is removed, or very greatly reduced. But it deserves note that the uterus habitually occupies a low position when the play of the ribs is restricted—hence additional work for the diaphragm, and hence downward pressure of the viscera of the abdomen upon those of the pelvis. The descent of the diaphragm in its action upon the pelvic organs is opposed, in healthy subjects, by elastic abdominal walls, as it is by the oblique position of the pelvis itself; but in the big, pendulous belly, the walls give little opposition. Then relaxation and enfeeblement, or other injury to the supports of the uterus at the floor and at the sides of the pelvis, are commonly observed in procidentia uteri, as are expansion of the calibre of the vagina and infirmity of its walls; and any cause of great, frequent, or prolonged tenesmus, as engorgement of hæmorrhoidal vessels, irritable bladder, etc., must be operative as a cause of procidentia uteri.

While the descent of the uterus is in the direction of the axis of the brim of the pelvis, the effects of the displacement are not usually severe; and in its progress in the direction of the axis of the pelvic outlet to a point beyond the vulval orifice, it is remarkable how frequently the procidentia is sustained without great injury to the health of the patient. On the other hand, it deserves recognition that slight displacement sometimes produces large effects, while the consequences of the procidentia, in its most complete development, are occasionally most disastrous, by local disturbance and discharges, and by constitutional suffering. In complete procidentia, the uterus is usually found hypertrophied: rectocele, or some prolapse of the rectum, is a common accompaniment, while prolapse of the bladder is almost constantly and necessarily present.

While the course of the descending organ is in the line of the axis of the inlet of the pelvis, I submit that no surgical operation, at present recognised, is required for its relief or its cure, under ordinary circumstances; but when the descent is in the line of the axis of the outlet, and when, particularly, the uterus has reached or passed the vulva, the question may justly arise as to whether some surgical operation may not be performed for the relief of the sufferer. The slightest forms of the malady, like the most complete, are frequently associated with leucorrhœa and with portal congestion; and, these conditions being unchecked, efforts at removal of the procidentia, however judicious these may otherwise be, often fail; but the leucorrhœa or the portal engorgement being removed, the simplest means of treatment will often succeed. For the latter condition, after judicious regimen, the agency of podophyllin, duly protected; of chloride of ammonium, with or without hydrochloric acid; or the latter drug in some bitter infusion with mild aperients, deserves the highest commendation. For the former, the removal of the congestion or relaxation upon which it usually depends, by sustained rest in the horizontal position, and by soothing and astringent applications to the disordered mucous membrane, is the thing indicated. When the chest is oppressed with stays or other articles of dress, and the respiration is chiefly diaphragmatic and abdominal, it will be necessary to remove, as far as possible, the compressing causes, and to free the abdominal viscera from the unnatural pressure to which they have been subjected. The simple pressure of heavy abdominal contents upon the pelvic organs will be best relieved by horizontal rest and aperients; and, when the condition is associated with relaxed abdominal walls and a pendulous abdomen, a well-adjusted bandage, or elastic abdominal support, with an upward pressure, will be an appropriate means of relief: nevertheless, judicious well-regulated exercise will be useful here, as will be, in a high degree, the habitual employment of the cold bath. With all this, a dietary should be adopted which is at once in small compass and nutritious. In the

* Read before the Northern Branch.

curative treatment of all forms of procidentia uteri, sexual congress must necessarily be on rare occasions, or altogether avoided.

It becomes necessary, sometimes, to remove the hypertrophied condition of the uterus, in order that the patient may be relieved from the procidentia. When the hypertrophy is the expression of *post partum* subinvolution, or of chronic vascular engorgement, the effects of ergot are sometimes most valuable, especially when supplemented by horizontal rest, abdominal frictions over the uterus, cold sponging of the surface, cold injections into the vagina and rectum, sedatives, unirritating nutritious food, and sexual abstinence. Here, too, and probably in other forms of hypertrophy, beneficial effects may be obtained by the use of bromide and iodide of potassium, iodide and chloride of iron, chloride of ammonium, and perhaps mercury. When the hypertrophy is cervical, removal of a portion of the superabundant structure will, from time to time, be necessary: but it deserves consideration here, that elongation of the cervix is often more apparent than real; that the elongation may be supravaginal; and that amputations have been performed by which the vaginal attachments have been more or less completely severed.

In a large majority of cases, the thing needed for the relief or cure of the procidentia is enhanced tonicity of the vaginal tissues—a recuperation of former conditions, and perhaps even something more to compensate for increase of superincumbent weight and pressure. This enhanced tonicity of the vagina demands, and indeed effects, removal of chronic engorgements of its vessels, of inordinate glandular activity, and of the mechanical irritation of the procident organ. Here, again, the viscus requires rest, and local and general sedatives, astringents, and tonics. But the process of recovery is generally slow; and the requirements of the patients often include occasional exercise, at least. It is here especially that the judicious employment of vaginal pessaries is commendable. They are sometimes positively curative, by saving the vagina from a greater irritation, and by habituating the uterus to the occupation of a better position than could be obtained without them. But their indiscriminate use is a terrible evil. In the great majority of cases of procidentia uteri, the first step in the descent is directly associated with relaxation and descent of the *anterior wall* of the vagina above the highest point of its attachment to the urethra; and we may readily perceive how much this condition is aided or determined by the oblique position of the uterus, by the changing position of the urinary bladder, and by the superincumbent weight. The recognition of these facts has suggested to the fertile mind of Dr. Marion Sims the propriety of removing patches of mucous membrane from this region, and of drawing together and uniting the raw edges of the wounds. The operation has been performed, and the calibre of the vagina has been successfully narrowed. Dr. Graily Hewitt believes that the *posterior wall* of the vagina is the first to give way, and recommends the performance upon it of an operation identical with that recommended by Sims. My observation corresponds with that of Sims; but Dr. Hewitt's operation is, doubtless, quite as capable as that of Sims of reducing the calibre of the vagina. Both operations appear to me superfluous and uncalled for—unnecessary when the descent is not great; unequal to the requirements of the case when it is great. But numerous other plastic operations have been suggested and performed. Meade suggested the formation of an artificial hymen. Fricke removed from the edges of the labium of each side "a portion of its substance of two fingers' breadth, the incisions being begun about an inch below the superior commissure on either side, and uniting in an arched form half an inch behind the frenulum." The edges of the wounds were united by sutures. M. Malgaigne modified Fricke's operation, by carrying his incisions much deeper, and by removing mucous membrane from the orifice of the vagina to a considerable extent. This modified operation, or one almost identical with it, has been frequently performed by Mr. B. Brown, with remarkable results, without knowledge of Fricke's plan, and, consequently, of Malgaigne's or Jobert's modification. These operations, then, have often been performed; and, if the immediate effects of them only are considered, with the happiest consequences. I had myself achieved a remarkable success by this operation, when I was startled by the announcement of Mr. Baker Brown's cases. Others (as the able late master of the Rotunda Hospital, Dublin, Dr. Denham,) have obtained very gratifying success; and doubtless, if the original causes of the descent could be avoided, surgical operations would yield most brilliant results; the more especially, if performed after the age of sexual activity. Unhappily, the permanency of the results obtained will generally be most uncertain; the distending power of the formerly procident uterus will generally again effect dilatation of the contracted tissues, and the procidentia will again manifest itself. My personal experience is adverse to the general adoption of these operations; and I venture to submit that they are not by any means free from danger, and that they are rarely or never necessary.

What, then, can be done for the sufferers from procidentia uteri? Very much: indeed, it is hardly possible to suppose a case admitting of reduction wherein instant and permanent relief may not be obtained. Even in very bad cases, a well-adapted pessary will sometimes retain the uterus within the vagina. I desire, however, particularly to point out that, in cases in which the vulval tissues are in good order, and wherein the uterus can be returned, whatever may be the extent or duration of the malady, the proper application of this *procidentia truss* will afford the patient immediate relief; and, what is more, the relief will be sustained while the truss remains in its position.* In applying the instrument, the patient is placed in the supine position, with the hips elevated; the uterus is returned to its place within the vagina as nearly as may be; the genital fissure below the urinary meatus is closed by drawing together the labia, and the descending digital process of the truss is carried down the labium of each side, nearly to the posterior commissure, a pad being interposed, if necessary. In this manner the labia are retained in contact, and an equable support is afforded through them to the uterus within. But the uterus may be retained comfortably in a still higher position by the introduction of a suitable pessary—a small semi-solid India-rubber ball answering the purpose admirably—before the procidentia truss is adapted. Although the India-rubber pessary has commended itself especially to me, it is quite certain that other pessaries can be advantageously substituted—particularly modifications of Hodge's pessary, which may remain long in position without discomfort, and which may permit readily the use of vaginal injections, and also marital intercourse. The application of these pessaries, moreover, recognises a good principle in the employment of uterine supports; viz., that of supporting the organ by the intermediate agency of the vagina, and not by direct pressure upon the uterus itself. These pessaries, however, have this disadvantage:—they cannot be removed and replaced by the patient herself.

Sometimes, when the procidentia is of old standing, the vulval tissues cover the genital aperture imperfectly, and the truss cannot be satisfactorily adapted, although, by the interposition of a well-adjusted and suitable pad, the uterus may easily be retained within the vulva by its agency. In these cases, however, the operation of removing the skin and mucous membrane from the margins of the labia, to the extent of an inch or two from the perinæum, and the apposition and union of the denuded surfaces, would form a proper antecedent to the employment of the procidentia truss; and if, in apposing the cut surfaces, the tension of the skin should be great, it might be relieved by carrying an incision through the skin, an inch or less from, and parallel with, the genital fissure; the latter wound being made to heal by granulation.

The procidentia truss then, alone, or aided by some simple form of vaginal pessary, is equal to the relief of most sufferers from procidentia uteri. It supersedes—in a great majority of cases at least—all cutting operations, and renders unnecessary the employment of those baneful stem internal supports, which are insecurely retained in their position by bands and straps of various kinds. When once made to fit the patient—the only difficulty in the employment of the instrument—it is easily readjusted, while it affords a comforting and satisfying support, without interfering with the functions of menstruation, micturition, or defæcation.

SUPPOSED FRACTURE OF THE BASE OF THE SKULL, OWING TO A FALL:

DIAGNOSIS RESTING SOLELY ON HÆMORRHAGE, FOLLOWED BY COPIOUS DISCHARGE OF SEROUS FLUID FROM THE EAR.

By DENIS M'VEAGH, L.K.Q.C.P., L.F.P.S.,
Surgeon to the Coventry Dispensary.

THE main features of interest in this case are, that there was no external wound or contusion whatever, neither were there any subsequent cerebral symptoms commensurate with so presumably serious a lesion. I trust its publication will not be devoid of interest to my professional brethren, as, from the dogmatic teaching and opinions of some of the most distinguished surgeons—both British and foreign—we are led to regard the escape of serous fluid from the ear as distinctive of fracture

* The procidentia truss consists, like the common hernia truss, of a band of elastic metal, which completely encircles the pelvis; and, as it approaches the median line of the body in front, bends down slightly on each side to the pubic bone, leaving a space of an inch or a little more over the symphysis pubis; a digital process thence descends upon each labium, gradually becoming nearer to its fellow, and terminates half an inch or thereabouts in front of the posterior commissure. The elastic force of the instrument is expended upon the digital processes, which have an action upwards, backwards, and towards each other.

of the base, and almost of necessity fatal. Robert and Laugier, amongst French surgeons, give us their experience in very decided terms in the *Archives Générales* (vide translation in "Ranking," vols. 2 and 3). Mr. Erichsen, in his *Science and Art of Surgery*, vol. i, page 372, acknowledges the discharge of serous fluid from the ear to be "pathognomic of fracture of the base of the skull . . . the most certain sign of this injury that we possess." He does not, however, endorse the sweeping assertions of the French professors; for he tells us that "at least three cases have occurred at the University College Hospital, in which the patients, adults, recovered, although many ounces of serous fluid were discharged from the ear." Sir William Wilde, in his excellent work on *Aural Surgery*, alludes to it as "an invariably fatal symptom;" while in a note, page 328, he gives us the experience of his own father, who was a pupil of the celebrated surgeon Dease of Dublin, to this effect: "Blood flowing from the ears, though a bad, was not a fatal symptom; but the 'welling up' of serum or clear fluid was always fatal." True, we find cases of recovery recorded in the face of all this. Amongst others, I may mention one related by Mr. Ody in the BRITISH MEDICAL JOURNAL of July 14th, 1860; all, however, presented external marks of injury. Believing my case to be *unique*, I commend it especially to the labourers in the field of cerebral surgical pathology.

I shall only give notes for the first seven days, after which there appear no points of sufficient interest to warrant insertion here.

April 18th, 1867. I was sent for at 1 P.M. to see Mr. —, aged 28, unmarried, rather stout, and of sanguineo-bilious habit. I had attended him two years previously in a severe attack of small-pox, but do not remember any attendant otitis, nor had he any subsequent pain or otorrhœa. I found him lying in bed, but not undressed. He was quite conscious, yet looked very dull, like a person who had been sleeping off a debauch. Pulse 80, feeble; the tongue was rather brown in the middle, but neither dry nor tremulous; pupils natural; no injection of the conjunctivæ. On sitting up at my request (which he did very eagerly), he grew pale and was immediately sick, bringing up by dint of violent straining what seemed to be pure bile. Noticing his pillow, shirt-front, and pocket-handkerchief to be much stained, I proceeded to examine his head, but the most careful manipulation failed to detect either cut, bruise, or abrasion; there was, however, a reddish fluid flowing from the left ear. On questioning his housekeeper, I got the following history. "At about 11 o'clock last night, I heard Mr. — go to the street-door to let out two gentlemen visitors. Not hearing him return to the parlour, I went to see if he had gone out, when I found him lying in the hall, just within the door; I raised him with much difficulty, and got him as far as the parlour-door, when we both fell, owing to his weight. I again lifted him, and succeeded in bringing him into the room, and laid him on the hearthrug; I then called the servant boy, and sent him for Mr. L. (one of the friends who had just left). I now found that he had been, and was still, bleeding from the ear, and that his hat was crushed a bit and soaked with blood. He was able to answer when spoken to; he said he had a giddy fit just before he fell. He had been drinking, but very moderately; he was not at all drunk; he had complained of giddiness once or twice before. Mr. L. suggested that we should loose his necktie, put a pillow under his head, and let him go to sleep. We did so, and he slept till seven in the morning, when we lifted him on to a sofa. At eight o'clock he got up, and, with assistance, walked upstairs (three stories) to his bedroom, when he lay down in bed. He was now sick for the first time, and I noticed bloody water running out of his ear; it must have been coming since the bleeding stopped. He may have lost about a wineglassful of blood, but he wetted two or three large handkerchiefs with the other discharge. As he continued to be very sick, I sent for you." Such was his housekeeper's narrative, and she appeared to give it with perfect candour. He now complained of dull pain over the left temple and across the forehead; it was much aggravated by coughing or vomiting. He had tinnitus in the left ear, and could not hear the watch tick, even when closely applied. The discharge seemed to well up and fill the ear, but only overflowed on his turning over or sitting up. (This point was noticed by the late Mr. Abraham Colles). He had passed no urine since his accident, nor had he any desire to do so; neither was there any evidence of retention. In answer to my questions, he told me he "felt bilious the previous day, and had two glasses of brandy and water at night; he remembered feeling giddy just before he fell." The strong "billy-cock" hat which he wore doubtless saved his head from being cut.

I ordered him five grains of calomel on the tongue immediately, and an effervescing draught with minim doses of Scheele's acid every second hour; a sinapism to the epigastrium; the hair to be cropped close; a cooling lotion to the temples; and ice with iced water only to be given.

9 P.M. There was no material change; everything was vomited; he had passed no urine. Serous fluid was running freely; I collected

two drachms in ten minutes. I now had the assistance of Mr. Troughton, who fully shared my fears as to the cause of the flow. The patient was ordered two grains of calomel every second hour; a blister to the nape of neck; and ice or iced water to be continued.

April 19th, 9 A.M. He had passed about eight ounces of high-coloured urine; had very little sleep. Pulse 100. He vomited only when he drank. The powders were retained; the blister rose well, and was discharging freely. The head was hotter, and frontal pain was very distressing. The fluid ran from the ear as freely as before; it was now quite colourless. The bowels had not acted. He was ordered sulphate of magnesia with compound infusion of roses every second hour, *ad effectum*.

April 20th. He had a tolerably good night, sleeping at intervals. He passed urine twice, and had two motions, but they were of a very costive nature. Pulse 84. He was sick but once, and then after a rather large draught of milk-and-water. There was no diminution of the discharge *per aurem*. I collected half an ounce and submitted it to examination. It did not coagulate on boiling, but nitric acid produced slight cloudiness; it was perfectly inodorous; not at all glutinous; it showed no trace of sugar on boiling with liquor potassæ. On dropping a few drops into a very weak solution of nitrate of silver, a copious white precipitate was thrown down, which we concluded to be chloride. We enjoined strict quiet, and milk-and-water or cold tea to allay thirst.

April 21st. He had had a good night, having slept seven hours. Pulse 74; headache much better; no return of vomiting; tongue more coated. As the bowels had not again acted, he was ordered to resume the saline aperient. Serum was running as freely as before. Working the jaw daily not seem to influence it, nor did it cause any pain. He passed urine freely.

April 22nd. He had a restless night, and complained much of frontal pain. Pulse 70; the tongue more coated, and he was very thirsty; the bowels had acted once and more freely; urine high-coloured, and rich in deposit of urates and purpurates. He complained of much pain over the sacrum; no contusion could be found there. The serous discharge was much less. He was ordered citrate of potassa in effervescence with nitric ether, and seltzer water for drink. 8 P.M. Soon after our moving him this morning to examine his back, he was seized with violent pain in the lumbar region and left hip, which continued for more than two hours, when it suddenly subsided. The headache had been much worse since the lumbar pain left him. Pulse 66. The serous discharge had stopped since mid-day, but a drop or two of bloody fluid came occasionally. He had much thirst, and was more irritable, begging for sleep and strength; his urine was paler and clearer. He was ordered six leeches to the temples, and to continue the mixture; milk and seltzer water for drink; rusk soaked in tea if desired; and hot bran to the back, should pain return.

April 23rd. He passed a restless night, not having had any sleep; still he seemed decidedly better. The headache was much relieved. Pulse 66. Serous fluid was again discharged, but scantily. The urine was loaded with purpurates; backache gone; tongue much furred; he has less thirst. He was ordered to have at night two pills with compound rhubarb pill five grains, calomel one grain, and extract of hyoscyamus three grains, and to continue the mixture.

April 24th. He had about three hours' sleep during the night. The pills had not acted. The serous discharge was very small in quantity. Pulse 56; he had slight headache, and said that "he felt very weak and faint." He was ordered an aperient draught, composed of compound decoction of aloes with infusion of senna; chicken broth, tea and dry toast, seltzer water and milk, according to taste. 10 P.M. I was told he was very restless all day, but he appeared decidedly better to-night. Pulse 60; there had been no discharge from the ear since morning, but he said that "a piece of white cheesy matter came out." (It was, however, wiped off in a handkerchief which went to the wash, so we could not judge of its nature). The bowels were not yet opened, so I ordered him two pills of colocynth, blue pill, and henbane.

April 25th. The bowels had acted freely, and he felt much better. He had some hours quiet sleep. There was no return of the discharge. Pulse 74. He was ordered to have beef-tea in addition to his previous diet, and citrate of ammonia mixture three times a day.

May 9th. He sat up to day for the first time, having accustomed himself gradually to the upright position during the past week upon a bed rest. He felt much stronger, and had had no return of the serous discharge. He enjoyed all his meals, and took a glass of sherry-and-water at dinner.

May 20th. He was down stairs, and doing a little posting in his ledger. He had no complaint of any kind, excepting that he continued totally deaf on the left side. On examining him with Weiss's auri-scope with reflector, the tympanum was seen ruptured, with rugged looking edges.

No subsequent symptoms appeared in this case to cause any anxiety; and, excepting his deafness, this gentleman is now (April 1869) apparently in perfect health.

URÆMIC DIARRHŒA.*

By J. MILNER FOTHERGILL, M.D., Morland.

THE secreting cells of certain excretory organs possess not only the power of appropriating from the liquor sanguinis their own peculiar materials, but also the capability of eliminating other substances when circulating in excess. For instance, the kidneys, in some cases of jaundice, eliminate biliary acids and the colouring matter of bile. Of the capability of the intestinal canal to supplement the kidneys, we are all aware; and, in practice, we act at once freely on the bowels in cases of renal embarrassment. Similar action, however, is frequent without our interference; and nature relieves herself without the aid of art. In congestion of the kidneys, the flow through the convolute capillaries is impeded, and the collateral circulation through the vasa recta is fully developed. The excretory action of the kidneys is thus lost, and the blood becomes laden with effete products and water; thus altered in its physical properties, it flows sluggishly and stagnates in the capillaries, including those of the intestinal canal; spontaneous catharsis comes on, and the balance of the circulation is restored. In chronic renal disease, this becomes more necessary, and is frequently manifested. The inefficient action of the renal secreting cells, together with dilated, constricted, or thickened capillaries, produce frequently an impeded circulation; congestion and further impeded flow follows; the depurative action of the kidneys, for the time being, is held in abeyance; and blood-poisoning ensues. The blood is certainly capable of sustaining a certain amount of excrementitious material with impunity; but this is only to a limited extent. In the treatment of these conditions by art, we usually resort to hydragogue cathartics. Diarrhœa, therefore, in these renal conditions, is of the greatest service, freeing the blood from its retained effete products, and, by thus relieving the kidneys of this work, permitting the embarrassed organs to recover themselves. In uræmic diarrhœa, the watery evacuations present many of the characteristics of urine, and quickly undergo ammoniacal decomposition. We must not, then, regard this as a morbid process going on in the intestinal canal, but rather a setting in action of the bowels, to cleanse the blood of the accumulated products of retrograde tissue—metamorphosis which the disabled kidneys are unable to excrete.

Impressed with this conviction, a short while since, in the case of an old patient, whom I knew to be suffering from chronic renal disease, I declined to arrest a diarrhœa under which the patient suffered, but allowed the bowels to run on; and, though all the symptoms of uræmia were developed, and the patient had a most offensive urinous odour, the case ultimately did well. A few weeks ago, a good opportunity was afforded me of watching the back and forward play betwixt the bowels and kidneys; where, after numerous oscillations of action—when the kidneys were acting the bowels were steady, when there was diarrhœa the kidneys were inactive—gradually becoming less and less, matters settled down to their old condition. In another case, where the patient is liable to inflammatory affections from retained urea, etc., accompanied with deficient renal action, free diarrhœa gives rapid relief.

Whenever, then, diarrhœa occurs in a person presenting the appearances of renal disease, and more especially if there be present albuminuria, or the symptoms of any renal congestion, it may be desirable to hesitate about arresting the alvine flux until some other channel be patent. From the known intolerance of opium in renal disease, preparations of the solanacæ should be administered where the suffering is great. The skin should be immediately acted upon by the hot air bath, or otherwise; hot poultices, sprinkled with mustard, should be applied across the loins when the bath is over. Nutritive support should be given; and a mild diuretic of digitalis, and citrate of potash in infusion of buchu or calumba, may be administered as soon as the kidneys are somewhat relieved. If a little flux remain, a few grains of powdered cassia or cinnamon may be prescribed, and the more powerful astringents should only be administered when the danger to life is imminent; and, of these, a mixture of sulphuric acid and infusion of logwood, is perhaps the least objectionable. But astringents should be used warily and cautiously; absorbed into the blood, they astringe and arrest the activity of the bowels, but, at the same time, check and impede the action of the renal secreting cells, whose restored and renovated activity it is of the utmost importance to keep up. The action of the skin must be fostered, and the patient carefully protected from

atmospheric changes, to which these sufferers are very sensitive; and, as soon as convenient, the patient must be given steel, and the other adjuncts to nutrition. In the first mild case which occurs, I shall feel inclined to try a combination of nitrate of potash, nitric ether, and per-nitrate of iron. Whichever plan be adopted, it is desirable, while affording the maximum amount of benefit, to eliminate, as far as possible, the elements of danger.

CASE OF POISONING BY EXTRACT OF BELLADONNA.*

By R. HIBBERT TAYLOR, M.D.,

Senior Surgeon to the Liverpool Eye and Ear Infirmary; Lecturer on Ophthalmic Medicine and Surgery in the Royal Infirmary School of Medicine; etc.

A YOUNG collier, aged 16, swallowed by mistake about a drachm of the extract of belladonna, which had been given him to make a lotion for his eyes, dissolved in half-a-teacupful of warm water. The poison was taken at a quarter before 11 P.M., immediately after having had his supper. He afterwards drank a little water, and went to bed with his father, an elderly man, who is rather deaf. He does not appear to have slept, and about ten minutes before 12 he suddenly became violently agitated, threw off the bed-clothes, jerked about his legs and arms, and groaned. At 12 o'clock he was seen by his brother-in-law, a young man, who lived in the same house. He found him violently agitated, throwing his limbs about, and groaning or moaning. He was apparently unconscious, and did not speak, nor attempt to do so. These symptoms continued for an hour and a half without intermission, and his relative says that he was obliged to lean upon his legs, to restrain the violence of his movements. He then became comatose, and so continued till his death, which occurred an hour afterwards, at half-past 2 o'clock A.M.

The state of the pupil was not ascertained. His brother-in-law says that he never opened his eyes, but was continually winking, or keeping his eyelids nearly closed.

He did not vomit, nor attempt to do so; neither did he pass any urine, nor were his bowels moved. He did not speak at all from the commencement of the attack.

He was not seen by any medical man during life, nor was anything attempted for his relief. His friends were under the impression that he was suffering from a fit induced by the medicine which he had taken, as he had told them before taking it that it would make him ill.

The following report of the *post mortem* appearances was drawn up by Mr. John Lea Molyneux of Upholland, who made the examination eighteen hours after death. The upper portion of the body down to the middle, and the upper extremities, were greatly discoloured, the vessels of the skin being completely gorged with blood, and decomposition had already commenced. The pupils were greatly dilated, and the rigor mortis was well marked. There was no external injury so far as I could see. The lungs were gorged, nearly blackened in fact. There was a little dark blood in the pleural cavities. The heart was healthy: it was empty, except the right auricle, which contained about six drachms of dark semicoagulated blood. The liver was in a natural condition. The abdomen was considerably swollen. The stomach seemed very fragile and softened in texture, and was very easily broken. Externally it displayed several slight discolourations corresponding to dark patches internally. The contents amounted to about a teacupful, in which I could not distinguish anything particular, but I have not analysed it. All the other abdominal organs appeared to be healthy. On opening the skull, I found the scalp and periosteum very much congested. The membranes and the brain itself appeared to be perfectly healthy, and contained very little blood.

There are only two remarks which I would append to the foregoing details of this case. The first has reference to the extreme rarity of the accident. Instances of poisoning from eating the berries of belladonna are common enough, and we are sufficiently well acquainted with the symptoms induced; but I have only been able to find two examples of poisoning from swallowing the extract. They are both recorded in Taylor's *Medical Jurisprudence* (p. 359, edit. 1865.) The quantity taken is stated to have been a small teaspoonful. In both of these instances the symptoms appear to have been much less violent than in the case which I have narrated. One patient recovered in two days, and the other is said to have died on the seventh day of some disease.

The other remark regards the length of time which elapsed between the taking of the poison and the manifestation of the characteristic symptoms. The extract was swallowed at a quarter before eleven

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

* Read in the Physiological Section at the Annual Meeting of the British Medical Association at Leeds, July 1869.

o'clock, and the symptoms did not appear till nearly midnight, when they seem to have burst out suddenly, and with extreme violence. May not this delay in the development of the effects of the poison be attributed to the fact, that the patient immediately before taking the belladonna had eaten a hearty supper, and then went calmly to bed—circumstances both apparently unfavourable to the rapid action of the poison?

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

A CONJECTURE AS TO THE MODE OF PRODUCTION OF COMMON PSORIASIS.

DURING the cold weather and easterly winds of March and April 1869, numerous fresh cases of psoriasis came under my notice. Two which came to me in the same week deserve notice from their parallelism and differences.

One of these was in the person of a surgical friend, of sanguine temperament and jolly habits of life. After a starving wet day in the hunting-field, he felt much chilled, and forthwith out came a copious eruption of psoriasis. As the disease was recent, many of the patches were as yet guttate. He had had psoriasis once before, some six or eight years ago.

My second case was that of a young Yorkshire gentleman, also of sanguine temperament, and, like my friend, very florid, and in splendid health. He was covered with psoriasis spots, which had been out about three weeks, when his surgeon (Mr. G——) sent him to me. He, also, had experienced a similar outbreak some years ago, from which he had afterwards quite recovered.

No. 1 had lived freely, and taken much stimulant; No. 2 was abstemious in food, and a total abstainer from alcohol. Both believed themselves in excellent health up to the time of the appearance of the eruption. In both the eruption was copious, and in both, as is usual, its outbreak was sudden and development rapid.

In speculating as to the cause of attacks like these, it seems to me more plausible to suspect the nervous system than the blood. If the latter, probably the rash would be produced gradually, not by sudden outbreak; and probably some evidences of disturbed health would precede it. Let us suppose a healthy person exposed to an east wind, to wet, or to a prolonged draught: nine times out of ten he will escape scot-free, having merely felt uncomfortable for a time. On the tenth occasion he is not so fortunate, and then his discomfort passes into downright chilliness, and then follows a sore throat, an attack of hepatic congestion, a pneumonia, a pleurisy, or a skin-eruption. The exact character of the result will be determined by the proclivities of the individual, and many persons know exactly what they are liable to. Surely we ought to attribute such illnesses not to bad development of solid tissues, nor to altered constitution of the blood, but chiefly to derangements of nutrition and of vascular supply, produced by the nervous system. The rigor which frequently ushers the attack in is due to arterial spasm, which is solely a nerve-symptom.—J.N. H.N.

CASE OF ENTERIC FEVER IN A PATIENT OF HEREDITARY HÆMORRHAGIC DIATHESIS.

By CHARLES ORTON, L.R.C.P.Ed., Newcastle-on-Tyne.

IT will not be necessary to give the details of this case, as it presents few points of interest beyond the great amount of hæmorrhage from the bowels and the hereditary nature of the diathesis.

The onset of the fever was well marked, and the change for the better, on the twenty-second day, was sudden and decided. The patient had slept almost uninterruptedly during forty-eight hours before, nourishment being, of course, frequently administered, and he awoke refreshed, rational, and with a relish for food. The first attack of hæmorrhage occurred on the sixteenth day of the fever, and was very copious. I prescribed sulphuric acid and opium, gallic acid, brandy, and injections of cold water. Tincture of the perchloride of iron was afterwards given. Clots continued to pass with the motions every four or five hours until the nineteenth day of the fever, when another fresh-coloured and copious discharge of blood took place, the temperature of the body falling to 97 deg. The iron was increased; extract of beef was given every hour, and one pint of brandy in the twenty-four hours. He recovered

slowly, but has now become much stouter and stronger than before his illness.

The hæmorrhagic history of the family is as follows:—The patient himself, a fair, blue-eyed boy, aged 17, has occasionally bled from the nose. His brother bleeds frequently from the nose; he cannot run or stoop without so doing. His sister is said to have been suffering from low fever, and to have died suddenly from hæmorrhage. The father was suffering from typhus fever; he had bled several times from the nose, but was apparently recovering when diarrhoea came on, and severe bleeding from the nose, lasting all one night. He died exhausted, at the age of 29.

The maternal uncle and aunt both bleed very frequently from the nose; the latter being exceedingly pale. The two paternal uncles both bled very much from the nose. One died of vomiting of blood; the other of dropsy, having become very pale and "bloodless looking." A great aunt is subject to bleeding from the nose. The maternal grandfather bled profusely from the nose, and had bleeding piles; once he had terrible bleeding from the bowels, and is said to have died of cancer of the rectum, with great hæmorrhage, but no pain. The paternal grandmother died of *post partum* hæmorrhage. The parents of the patient were first cousins.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

THE LONDON HOSPITAL.

LUMBAR COLOTOMY FOR STRICTURE OF THE RECTUM, WHICH HAD LASTED FIVE YEARS: DEATH IN FORTY HOURS FROM CHLOROFORM-VOMITING: WITH REMARKS.

(Under the care of Mr. JOHN COUPER.)

THE stricture was about three and a half inches from the anus, and did not admit the forefinger. All that was certain in its history was its long duration, and the amount of suffering caused by it. It was shown by *post mortem* examination to have arisen in the course of an ovarian abscess, pus from which had burst into the rectum, causing ulceration and stricture, and had also made its way by the side of the bowel to the buttock, in which were numerous sinuses. The left ovary was converted into a thick fibrous capsule, larger than a hen's egg, and containing purulent fluid. From it a sinus ran to the recto-uterine pouch of the peritoneum, which contained pus, shut out, however, from the general cavity of the peritoneum by adhesion of the uterus and rectum. Thence the pus escaped in three directions: 1. backwards into the rectum, by a large orifice close below the stricture; 2. forwards into the upper part of the vagina; and 3. to the buttock by the sinuses already mentioned. The rectum had lost its distensibility. Its mucous membrane had degenerated into cicatricial tissue. During defecation, and also when the finger was passed up to the stricture, fæces and purulent fluid oozed from the orifices in the buttock and vagina. The woman's sufferings induced her to assent readily to the operation, after its risks had been fully explained to her.

The bowel was reached by the usual incision. The abdominal muscles were thin, and the peritoneum was quickly exposed. One small artery spouted and was secured by torsion. On dividing the deep fascia, soft loose subperitoneal fat was found in considerable abundance. The colon could not be found at first. It was not distended, although several pints of warm water had been injected past the stricture for this purpose. Probably the sigmoid flexure was unusually capacious, and retained most of the water. During the search, the peritoneum was opened. The aperture was quickly closed, however, and secured against the entrance of blood. The colon was finally found close by the lower border of the kidney. It was then drawn to the surface, opened and stretched to the margins of the skin wound.

The patient had been about thirty-five minutes under chloroform. Shortly after returning to bed she retched and vomited repeatedly. She was pale, had a small pulse, and there was an unusual amount of shock considering the all but bloodless character of the operation. A third of a grain of acetate of morphia was administered subcutaneously, and the pulse soon improved. She was fed with warm brandy and water by spoonfuls, but the stomach rejected almost all that she swallowed. The subcutaneous dose of morphia was repeated in seven hours, and gave her some sleep. The nausea and irritability of stomach returned, however, in the morning. Almost everything swallowed was vomited. The dose of morphia was repeated a third time twenty hours

after the operation. On this occasion it was injected under the skin of the epigastrium. For a good many hours the irritability of the stomach subsided completely, and she was able to swallow a little fluid nourishment. The relief did not last, however. On the evening of the second day the vomiting recommenced. She then began to sink, and died forty hours after the operation.

When operated on, she was fairly nourished, and was by no means greatly exhausted by her past sufferings. She lost no blood at the operation, which could hardly induce great shock by its extent. There were no symptoms of peritonitis, nor were there (with the exception of old adhesions among the pelvic organs) any marks of it after death. The thoracic organs, as well as the liver and kidneys, were healthy; and there was no adequate cause of death, except the chloroform vomiting.

It appears that chloroform vomiting has been hitherto a not unfrequent cause of death after colotomy. Mr. Curling records a case (*Diseases of the Testis*, 3rd edition, p. 177) in which the patient succumbed fifteen days after the operation; and Mr. Maunder encountered a similar mishap in a patient operated on by him. Under these circumstances, one cannot help suspecting that the operation itself may predispose to an irritable condition of the stomach. If the proximity of the colon and stomach to the solar plexus is remembered, together with the fact that both receive nerves from the latter, it cannot be accounted strange if the laying open of the great gut, and the traction needed to bring a portion of it to the surface of a deep wound, causes reflex irritability of the stomach. This, when aggravated by chloroform, becomes dangerous.

Except after capital operations, accompanied by loss of blood and much shock, chloroform vomiting is not a grave complication. In the cases that terminate fatally, pain, hæmorrhage, and the shock arising from the removal of a large portion of the organism, contribute to the result; and, probably, death is rightly attributed to them rather than to the chloroform. Nevertheless, it is certain that large doses of chloroform leave behind, in some persons, great irritability of the stomach, which aggravates shock very materially. Occasionally this is well seen when a large dose is administered for a minor operation. There is no shock from the operation, but the patient suffers great discomfort, and is unable to take food for several days.

Happily this idiosyncrasy with regard to chloroform is rare. Its results, however, are so grave under certain conditions that it becomes important to inquire if there be no other anæsthetic free from this danger. Bichloride of methylene, so far as it has hitherto been tried, is followed by vomiting less frequently than chloroform, but as yet it has not been extensively used except in small doses for short operations. I have had considerable experience of it in eye-operations at Moorfields during the present year. It certainly contrasts favourably with chloroform as regards speedy recovery of the patient, and absence of subsequent nausea or vomiting; but then the majority of operations at that Hospital are of short duration, and do not demand prolonged anæsthesia: moreover, for the few long operations done there, chloroform has been hitherto preferred, not because anæsthesia cannot be prolonged by bichloride of methylene, but because it is prolonged with slightly less trouble by chloroform. On the whole, a fair case is made out for trying the bichloride of methylene in capital operations. Mr. James Adams kindly administered it to a man whose thigh I amputated. An unusually large number of vessels had to be secured, and anæsthesia was maintained for thirty minutes. It was not followed by vomiting, and the patient took fluid nourishment with comfort on the following day. Further experience on these points is greatly to be desired.

KING'S COLLEGE HOSPITAL.

LARGE FIBROUS POLYPUS OF THE NOSE: OPERATION: RECOVERY.

(Under the care of Mr. HENRY SMITH.)

A patient, a boy seventeen years old, was admitted on October 9th, with an enormous fibrous polypus of the nose, which had been growing since Christmas, and had produced, occasionally, considerable loss of blood. The tumour blocked up the cavity of the right nostril, and the nose externally appeared flattened and distended by it. On looking into the mouth, the tumour, nearly of the size of a small orange, was seen hanging behind and pushing forwards the soft palate. The uvula rested on the centre of the tongue. It interfered greatly with his respiration and speech. Mr. Smith removed the growth by first detaching the pedicle from the nostril, and then dragging it out from the mouth. The patient lost a considerable quantity of blood during the operation. The bleeding soon ceased, but returned shortly afterwards, and was checked by injecting cold water up the nostril, and making the patient suck ice. On the 28th, seventeen days after the operation, the patient was discharged well.

SOUTH STAFFORDSHIRE GENERAL HOSPITAL, WOLVERHAMPTON.

A MINER'S SURGICAL HISTORY.

(Under the care of Mr. VINCENT JACKSON.)

JAMES HEWBURY, aged 47, miner, was admitted into the hospital on June 6th, 1868. Just previously to admission, and whilst he was working in a coal-pit, a large portion of earth fell upon him, seriously bruising him. Upon examination, it was ascertained that there was a dislocation of the head of the left thigh-bone forwards upon the obturator foramen. Under chloroform, the dislocation was reduced by extension and manipulation, and he was dismissed cured in eighteen days. The following history was obtained from the patient.

Thirty years since, he broke his nose. Twenty-five years since, he sustained a simple fracture of the right femur. Sixteen years since, he suffered from concussion of the spine. Twelve years since, he received a simple fracture of his left leg. Four years ago, he broke his lower jaw near the symphysis. Six months since, he dislocated his right hip backwards, and also received a comminuted fracture of both bones of his right forearm.

CORK STREET HOSPITAL, DUBLIN.

CASE OF HYDROCEPHALUS, ADVANCED TO SECOND STAGE: RECOVERY UNDER THE USE OF AN ISSUE.

By HENRY KENNEDY, A.B., M.B., Dublin.

THE following case appears worthy of being recorded, as it affords an example of recovery from a disease which is too often fatal; and illustrates a point in practice which would seem to be very little known. Before making any remarks I will give the details of the case. For the notes I am indebted to my clinical clerk, Mr. McDermott.

Bridget Flynn, aged 8 years, was admitted into the Cork Street Hospital, 26th of April, 1869. When seen on the 27th, she lay with her head drawn forcibly back, and complaining of severe pain in the nape; whilst any attempt to move the head caused great suffering. The nurse said that when lifted she was quite rigid. With this state there was considerable fever, a densely loaded tongue, and confined bowels. Leeches were applied to the nape, an injection directed, and one grain of grey powder every three hours. These means were continued for four days—the leeches being also repeated—and were followed by marked relief to the pain in the nape. Vomiting, however, had occurred several times in the mean time, and on visiting her May 4th,—that is seven days after admission to hospital—I found her complaining bitterly of pain in her head. With this there was also vomiting; but much more frequent than at first; and the fever had lighted up again, and more intensely than at any former time. The temperature now was 101.4. The head was at once shaved, and vinegar of cantharides freely applied to the entire scalp; but, as she was not better the following day, a blister was applied over the entire head, and she was given internally iodide of potassium. Still no relief followed. Her state now was as follows. She had frequent vomiting, and the pain in the head was constant. The pupils of both eyes had dilated, and the pulse had fallen to between 80 and 90, and was very unequal in its beats. This was on the 6th of May; on which day a caustic issue was put on the head, and kept constantly poulticed. For some days after this the symptoms were worse and worse. The pulse fell to 54, pupils still more dilated, and the cry of the child from pain in the head was constant, as was also the vomiting; for nothing whatever was now kept on the stomach, and, the child being very much reduced, recourse was had to nutritive injections, given at fixed intervals. These were retained and seemed to be of use; and with them further counterirritation was used, both by blisters and tartar emetic ointment; for the issue had not yet begun to discharge. Finally, however, in about nine days from the time it was inserted, it did so; and *pari passu* with it, the symptoms all began to subside; the pain lessened, the vomiting ceased, the pulse rose, and the pupils regained their activity, though slowly. In this way the child emerged, as it were, from its very critical state, and may now, after eight weeks, be considered well, having regained much flesh in the mean time. The issue has been allowed to heal. Were this a solitary case, I might have doubts about publishing it. I am happy to say, however, it is but one of several in which a similar line of treatment has been directly instrumental in saving life. These I have published elsewhere. That the success is due mainly to the issue I cannot doubt, for I had repeatedly tried all the other measures used here without avail; and it was after their failure that recourse was had to the issue: which, it may be stated here, I find best to put over the centre of the parietal bone. As the hair never grows again, this point ought to be

attended to, particularly in girls. The size of the issue I have used was commonly about that of an oval penny; and in children, as these cases most generally are, very slight rubbing of the caustic is needed; as the bone may be injured if it be overdone. Speaking generally of the cases, no relief follows till the slough begins to separate, and discharge is created. Hence the necessity for keeping up some counter-irritation till this occur. But I have seen exceptions to this, and in one very remarkable case, the issue was scarcely inserted till relief was obtained; yet the patient—a girl of 11—had for two days previously suffered severe pain, and was constantly crying out “My head, my head”; exhibiting besides the signs of the second stage of the disease well marked. I observed that, as the issue was being put in the scalp, all round it exhibited a marked degree of redness. In another instance, a boy of 9 years of age, the patient quite recovered from the head symptoms, under the use of an issue; but signs of mischief in the chest shortly developed themselves; and ultimately the child died, after several months, with all the symptoms of phthisis. With my present experience, then, I look upon an issue as the very best means of combating this most obstinate disease; and I repeat that it seems to me to be too little known; if indeed at all. In a very valuable paper, recently published in the *Bartholomew's Hospital Reports of London*, by Dr. Church, many cases of acute cerebral disease are given. Several of these might, I believe, have been treated with advantage, by means of an issue. But nothing is said about treatment at all.

As to the fine-spun theories recently advanced against counterirritation as a means of treating and curing disease, I cannot entertain them for a moment. Experience points directly the opposite way, and I prefer it to any theory. Whilst I place an issue in the foremost place for the treatment of hydrocephalus, I do not omit other measures; and I now very generally give wine, and from an early period of the attack. In the present instance the child got it, and for more than a fortnight was taking eight ounces daily. It certainly helps to lessen the wasting which is so constant a symptom of the disease; and went on here to an extreme degree. In fact, the child at one period was a skeleton, and did not retain anything whatever on the stomach. It was then that recourse was had to nutritive injections, and with very marked benefit. It should be stated there was no albumen in the urine. The child is now, after two months, fat and well.

COMPARATIVE PATHOLOGY.

THE TEXAS CATTLE-FEVER.

DURING the summer and autumn of 1868, the epidemic disease of horned cattle known as the *Texas cattle-disease* raged with unusual severity in the United States. Early in August last year, the disease suddenly appeared near New York; and such was its virulence, that immediate steps were taken by the sanitary authorities for checking its spread, preventing the sale of diseased meat, and for investigating the phenomena of the malady. The results of the scientific inquiries are published in the *Third Annual Report of the Metropolitan Board of Health of the State of New York* (1868); and from this Report the following remarks have been compiled.

It seems that there were, when this Report was framed, no reliable published accounts of the disease sufficiently detailed for medical purposes, although various persons (chiefly drovers and agriculturalists) had been familiar with it for some seventeen years in the south-western States bordering on the Gulf of Mexico, where its causes appear to be constantly in operation to some extent.

The Texas cattle-disease is a *fever*, infectious, having a somewhat long period of incubation, followed by the sudden occurrence of very serious and definite symptoms, which end fatally in a large percentage of cases. It occurs only during warm weather, and never survives frost. The pathological lesions are constant and definite. We find no evidence in the Report as to the protective power of a first attack.

Symptoms.—It is probable that a rigor ushers in the obvious symptoms; but this was observed only in a few cases. The animal is generally found standing with his back arched, head bored against some support, and hind legs crouched under him, as if hardly able to stand. If he move, his gait is staggering, from partial paraplegia. The animals at first are often delirious and frantic; but the frenzy soon gives place to torpor and paralysis. There is a rapid and feeble pulse, and quick respiration. The temperature rises in a day or two from the normal to 107° or even 110° Fahr. Constipation is usually marked, notwithstanding the abundant secretion of bile; and the fæces are streaked with bloody mucus. The urine is abundant, brown or black from blood-colouring matter, and highly albuminous. If these symp-

toms continue and increase in violence, the animals usually *die in from three to seven days*. A few cattle recover slowly; and in these the temperature sinks to about 103° Fahr. at the end of the first week or so, and the urine loses its blood. Jaundice not unfrequently comes on during convalescence; and the patients often suffer for months from anæmia, emaciation, and dropsical effusions. In fatal cases, the temperature often sinks slightly at the time of death.

After Death.—The *rigor mortis* sets in very early, and lasts but a short time. Decomposition comes on within a few hours of death (quite irrespective of excessively high external temperature), and gas is sometimes found in the tissues and in the capillaries even before death. The red blood-corpuscles are almost entirely destroyed within a few hours after death, and many of the tissues undergo an equally rapid change; so that it is quite necessary to examine instantly after death, in order to ascertain the changes wrought only by the disease. The nervous system, heart, respiratory organs, and upper part of the alimentary canal, are either healthy or show no characteristic lesions. The stomach, intestines, spleen, kidneys, and liver, show the changes characteristic of the disease. The more vascular parts of the alimentary canal undergo intense congestion, with more or less extravasation. Erosions and sloughing of mucous membrane are found in the abomasum. The kidneys are much congested, and often softened and fatty. The bladder is usually full of dark coloured albuminous urine. The spleen is always (with one or two exceptions) very much larger than in health, intensely gorged with blood, and generally quite pulpy. The liver is also very much larger and heavier than in health (on an average, the increase amounts to about 30 per cent. of its normal weight); it shows extreme portal congestion, distension of the minute bile-ducts, and fatty degeneration at the surfaces of the lobules. The gall-bladder is full of bile, and this fluid is found abundantly in the small intestines. Large extravasations of blood are found in the cellular tissue of various parts, and crystals of hæmatoidine are abundant in these situations. The blood in the urine never exists in the form of corpuscles, but as a solution of the colouring matter and albumen. The muscular and adipose tissues are dark and brownish or yellowish brown in colour. The blood is very watery; and the red corpuscles are especially diminished in quantity, and are often shrivelled and crenated. Special stress is laid upon two *microscopical peculiarities of the blood and the bile*. A number of small granular yellow masses are found in the blood and bile, and also in the spleen and some other situations; these masses are supposed to be composed of partially coagulated fibrine, which has absorbed the bile-colouring matter that exists in the blood in this disease. The second point is the constant presence of a minute fungus in the bile and blood. It is asserted that this fungus (*micrococcus*) is not very easy to detect *immediately* after death, but that in a short time it increases and develops so as to form a very prominent feature in these fluids. We find no reference to any examination of the intestinal contents with reference to this fungus. The bile and blood of healthy cattle did not yield a similar result. Several examinations were made of animals in various stages of convalescence, up to about three weeks from the cessation of violent symptoms. The liver was found of nearly normal weight, but fatty, and sometimes waxy, and of a pale colour. The spleen was always somewhat enlarged and soft in convalescents. The lesions in the abomasum were seen to undergo rather rapid repair. The fungus disappeared “quite early” in several cattle which recovered while taking carboic acid internally.

Pathology.—The commissioners withhold their judgment on the relation between the microscopic fungus and the disease. Experiments were in progress, both in America and in the hands of Professor Hallier of Jena, for the purpose of learning the natural history of the parasite. Meanwhile, *its constant presence in the bile* is noted as a well ascertained fact; and, in connexion with this fact, we are asked to note the abundance of the biliary secretion in the small intestines. It is believed that *the primary changes occur in the liver and blood*. There are congestion of the liver, increased secretion of bile, and absorption of bile into the blood. The consequences of the cholæmia are—1. Rapid dissolution of the red corpuscles (such dissolution has been found to occur experimentally, when red corpuscles are acted on by bile); 2. Extravasation of blood-colouring matter and other constituents into various parts; 3. The formation of the “yellow flocculi”, upon whose presence so much stress is laid. As secondary results of the liver-congestion, we have engorgement of the more vascular parts of the alimentary canal and of the spleen.

Method of Communication.—We have mentioned that the disease is infectious; but there is more to be said regarding this remarkable bovine malady than that it spreads by infection. It seems not to have been known in the northern States until the introduction of large numbers of Texan cattle every summer became a common occurrence; and all observers agree that, during the four years of the late war (*when the*

(transit of Texan cattle to northern States ceased entirely), there were no cases of the malady in the northern parts of the Union. It appears that large herds of cattle are taken slowly over many hundred miles of country from their native districts to the north-eastern States. They start in spring, and are conveyed partly by river and rail, but in great part are driven along the roads, and allowed to pasture on common land or on the road-sides. Some weeks are thus occupied before they arrive at their northern destinations. It is found that the *native* cattle which come into direct contact with these *Texans* while on their route, or which pasture on the same land, drink of the same stagnant pools, or travel on the same roads as the Texan cattle, are liable to be struck down with the disease; and further, it is nearly certain that, with a few exceptions, no native cattle take the disease unless they have been directly or indirectly exposed to the excrements of the Texan animals. Another curious and important point is, that the Texan cattle can communicate the disease to the *natives* of the districts through which they pass, *without being obviously diseased themselves at the time*. It seems probable, however, that the Texan cattle sometimes suffer from a mild and non-fatal form of the disease; for a number of Texans, some of which were weak and emaciated, showed, on *post mortem* examination, all the lesions found in cattle known to be convalescent from the Texan disease.

The opinion of farmers and drovers is all in favour of the doctrine that "native cattle" (*i.e.*, cattle born in the northern States), when infected, cannot give the disease to others: but there are several well-authenticated cases recorded in which the fallacy of this assertion was clearly proved; it still, however, remains true that, in the vast majority of cases, native cattle do not propagate the disease. In connection with this point, it is interesting to note the opinion of a non-medical writer, that Texan cattle seem to lose the power of communicating the disease after living in a more northern state for some months. A somewhat *high temperature* is necessary for the development of the disease; and in Missouri we are told that "the disease has never wintered over here"—cold "destroys the germ." The great heat of the summer of 1868 is supposed to account for the increased virulence of the disease last year.

Period of Incubation.—This is never less than *ten days*, and may extend to *three months*; in many cases, from four to six weeks was about the average time. The time elapsing between exposure and manifestation of symptoms will probably vary a good deal, according to the state of the infecting material at the time when first an animal is exposed to it. All the evidence seems to point to the conclusion that, whatever the infecting matter may be, it requires to remain a certain time *out of the body* before it is capable of producing the disease—that a period of "ground-incubation" is necessary for the perfecting of the infecting material. The following striking example will serve to illustrate this point. Some "natives" were herded with freshly arrived Texan cattle; after twenty days, a part of them was removed from the pasture; these native cattle did not take the disease; but the remainder stayed for a month longer with the Texans, and subsequently they nearly all died of the disease. That lengthened exposure is not always necessary is shown by the fact, that in one case fourteen out of twenty-one died after being exposed for *only an hour and a half* to a pasture over which some Texans had been driven. The first death occurred forty-seven days after the exposure.

Opinions differ as to the proportion of those *infected* to the total number exposed to infection. One authority gives two in five, another fifty per cent.

Mortality; Influence of Age, etc.—The mortality is very large in the northern cattle which show obvious signs of the disease—said to amount to eighty per cent. Milch cows and fat oxen are more liable to the disease than any others. All agree that *sucking calves* enjoy complete immunity; and this, again, is negative evidence in favour of the source of infection being in the food or water. The milk is generally suppressed rapidly when the disease declares itself.

The disease is said to be communicable to horses. In some experiments with rabbits, these animals died after feeding on the bile of diseased cattle, with "many of the phenomena of Texas cattle disease", but the fungus found in the cattle was not discovered in these rabbits. Similar experiments on dogs gave negative results. No experiments were performed for the purpose of trying whether the disease is communicable by means of the blood during life—not, we are assured, from want of appreciating their value, but from absence of time and opportunity, amongst the pressure of work connected with the immediate necessities of *post mortem* examinations, etc.

Pathological Affinities of the Texas Cattle Disease.—On this point it is perhaps enough at present to say, that there seem to be several points of resemblance between this disease and the yellow fever of man, especially in the method of propagation, and in the pathological changes found after death.

REVIEWS AND NOTICES.

DES RESECTIONS DU GENOU. Par LUCIEN PENIÈRES, Docteur en Médecine, interne des hôpitaux. Paris: Andrien Delahaye. 1869.

It cannot be considered as a matter of much astonishment that our French *confrères* were slow in adopting the operation of excision of the knee-joint, seeing that, for a long time, even in this country, it was a matter of doubt as to whether it would be recognised as a justifiable proceeding. Now, however, that the controversy regarding the merits of the operation has almost ceased, we are pleased to find that it is being adopted by the surgeons of France.

In the work before us, we are presented with a *résumé* of all that has been done both in this and other countries. The author has evidently bestowed the greatest attention in getting all the information possible on the subject. He has furnished us with a table, which represents the number of 431 operations for disease of this articulation, besides a list of those cases where an operation was performed for ankylosis and for traumatic cases.

Of the 431 cases operated on for disease, it appears that 300 recovered, and 131 died, thus making the mortality, as nearly as possible, 30 per 100. This percentage may appear, at first sight, somewhat large; but it must be borne in mind that this enumeration includes the very early cases operated on at a time when little was known about the operation, when less care was taken in selecting the cases, and when the after-treatment was most imperfect, and, consequently, the mortality was very great—in fact, so great was it that the operation, as is well known, excited the greatest opposition, notwithstanding the high character of those surgeons who were doing their utmost to advance it. Thus the author shows that, in the first two epochs of this proceeding, the mortality was over fifty per cent., whereas in the last two periods the mortality was little more than one-half. Dr. Penières contrasts this with the mortality after amputation of the thigh for disease by cases which he has collected together from various sources—French, American, and English—and he finds that it ranges from 32 to 62 per 100; and he comes to the conclusion that the mortality is about equal after both operations, although, with truth, he might have affirmed that his figures show that amputation of the thigh is considerably more fatal. The author has considered at length and with care the indications for the operations, and has described the various methods which are employed, as well as the consecutive treatment, on the importance of which we are glad to find he lays so much stress. If Dr. Penières had had much personal experience of this operation, we think he would not speak quite so lightly as he does about the bleeding which accompanies or follows excision of the knee, at page 32. Deaths have occurred from bleeding coming on a few hours after operation; and, in other instances, patients have been greatly endangered by loss of blood. In no operation is it more important to tie every single bleeding vessel before removal to bed.

A separate chapter is devoted to the consideration of the operation for the treatment of ankylosis of the knee, consisting, as is well known, in removing a wedge-shaped portion of bone, and straightening the limb. A table is appended, by which it appears that this operation has been practised thirty-two times by various American, English, and continental surgeons, with the very pleasing result of twenty-eight recoveries. Not one case underwent amputation; and re-excision, with a favourable issue, was practised on one patient only. The favourable results after this operation are due, doubtless, to the fact that the patient is, for the most part, entirely free from any concomitant disease.

At the end of the treatise a table is given, wherein the results of excision of the knee for traumatic cases are shown. These results are, as may be expected, not very favourable; but still, in certain instances of gun-shot injuries, the operation is doubtless justifiable. Partial resections at the knee also claim a little attention. The author shows that the results are "bien plus mauvais que la résection totale".

We strongly recommend the study of this work to all those who are interested in the question before us. Dr. Penières writes fairly, and without prejudice; he speaks in high and handsome terms of those British surgeons who have contributed, by their example and writings, to establish excision of the knee-joint as a legitimate proceeding; and we doubt not that his observations will be the means of more directly drawing the attention of French surgeons to the practice. The author states that twenty cases have already occurred in France; and this fact proves that the prejudices which existed against the operation are being gradually conquered.

NOTES ON BOOKS.

Thoracic Aneurism. By THOMAS HAYDEN, M.R.I.A., Physician to the Mater Misericordie Hospital. Dublin: 1869.—This is an able account of a very interesting case of thoracic aneurism. The notes extend over rather more than three years. The question of diagnosis, the symptoms present, and their significance, are most carefully considered in detail, and an abstract suited to our space would scarcely do justice to the subject.

Temporary Deligation of the Abdominal Aorta. By WILLIAM STOKES, jun., Surgeon to the Richmond Hospital, Dublin.—The case was that of a man aged 50, who had a large pulsating tumour occupying the right ilio-femoral region. Pressure was attended with very severe pain; and the idea of using it was abandoned. The chief difficulty in the operation attended the separation of the peritoneum from the transversalis fascia. The aorta having been exposed, Mr. Stokes "passed a Liier's aneurism needle round the aorta, just above its bifurcation, and attached to the ligature a piece of silver wire, which was then drawn round the vessel. The ends of this were then passed through Mr. Porter's artery-compressor, and traction was made on them until all pulsation and *bruit* had perfectly ceased in the tumour. The ends of the wire were then secured to the ring of the clamp." The wound was now closed. "The operation was almost bloodless." Afterwards, restlessness, pain, and sensation of heat, were the chief symptoms. The operation was concluded at 11.15 A.M. At 2.30 P.M., it is noted: "The temperature in the left lower extremity is very good; that in the right has greatly improved." At 9 P.M., pulsation in the left femoral artery had returned. At 10.30 P.M., the patient became unconscious; and at 12 (midnight), he died—about twelve hours after the operation. On removing the wire-compressor and slitting up the artery, its coats were found not to have received the slightest injury. Mr. Stokes, in summing up, calls attention to the following facts: 1. Occlusion of so large a vessel without injury to its coats; 2. Early re-establishment of collateral circulation; 3. Rapid consolidation of contents of aneurism after the operation; 4. Death due to shock in a person with fatty heart; 5. The non-liability to gangrene, owing to re-establishment of collateral circulation, and the power of removing the compression at any time. Finally, a table of the previous cases is given.

On Opportunities for Pharmaceutical Education in the Provinces. By G. F. SCHACHT, Clifton.—It is probable, says the author, that about one thousand seven hundred new students of pharmacy will now annually require scientific instruction in the elements of chemistry and botany. Without entering into numerical details, it is sufficient to say that the present arrangements for meeting this large demand are probably very deficient; and it will always be difficult to bring students living in small towns within reach of publicly organised scientific teaching. Mr. Schacht commends a plan which he himself has found to answer very well in one such case. It is the establishment of a series of "readings" by any "master pharmacist" who may have the requisite energy to form a class for studying some elementary text-book.

Eye-Symptoms in Spinal Disease. By D. ARGYLL ROBERTSON, M.D., F.R.C.S.—In this pamphlet (reprinted from the *Edinburgh Medical Journal*), Dr. Robertson gives us an exceedingly able account of the different views held as to the nervous supply of the iris, and the action of atropine and Calabar bean on the pupil. The case itself is somewhat vague; and, in the absence of a *post mortem* examination, it is perhaps doubtful as to the exact location of the disease—whether in the spine or in the brain. Dr. Robertson's chief reason for diagnosing spinal disease seems to be the extreme contraction of the pupils. Now, to this it may be objected that, in paralysis of the cervical sympathetic, myosis is not produced, but simply inability to dilate; whilst, of certain cerebral diseases, extreme contraction is a well known symptom. There are several other points in the case which seem open to some doubt.

Natural Philosophy popularly explained. By the Rev. S. HAUGHTON, M.D., F.R.S. With numerous Illustrations. Cassell, Petter, and Galpin. 1869.—A little handy volume of 271 pages, illustrated by 164 excellent woodcuts. It includes Statics, Hydrostatics, Pneumatics, Dynamics, Hydrodynamics, Acoustics, Light, and Heat. These subjects are so treated that they can be mastered by any one who possesses a knowledge of arithmetic and of the elements of algebra and geometry. It is written exceedingly well; indeed, the name of the author makes that point certain.

An Elementary Course of Theoretical and Applied Mechanics, designed for the Use of Schools and Colleges, etc. By RICHARD WORMELL, M.A., B.Sc. Groombridge and Sons. London: 1869.—One of a series of excellent little manuals issued by Messrs. Groombridge. It is well suited to the wants of those preparing for any of our public examinations. It is liberally illustrated by woodcuts.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paris, Monday, November 8th, 1869.

1. *Dr. Dolbeau's Use of Alcohol in Dressing Surgical Wounds.*—
2. *Opening of the Medical School.*

1. *Dr. Dolbeau's Use of Alcohol in Dressing Surgical Wounds.*—Twelve months ago, I paid several visits to the surgical wards of the Royal Infirmary of Edinburgh, where, among much which I saw to admire, was the manner of dressing surgical wounds. During last week, I have seen a very different system employed by Dr. Dolbeau, the eminent surgeon of the Hôpital Beaujon, in the Faubourg St. Honoré. The diversity of the practice from that employed in Edinburgh and London, and the satisfactory results of Dr. Dolbeau's method, induce me to give a short account of it to my fellow-members of the British Medical Association. I have no indictment to prefer against *carbolic acid* and the *first intention*; but I wish to describe a system by which good results are achieved in respect of surgical wounds, by disbelievers in the alleged advantage of healing by adhesion and without suppuration.

The following is Dr. Dolbeau's plan of proceeding. Having performed the amputation, or removed the tumour, as the case may be, he staunches the hæmorrhage by such means as are appropriate and usual in the circumstances. He then washes the wound with what he calls *pure alcohol*; or, in other words, with the strongest commercial alcohol, unmixed with water. The next proceeding is to dry the bleeding surface with fine soft linen. The dressing is now applied. This consists in filling up the cavity caused by the loss of substance, or covering the flaps of the amputation, with feathery tufts of fine charpie soaked in pure alcohol. The part is then farther covered with compresses, which likewise are soaked in pure alcohol. The dressings are then enclosed in a double envelope of the impermeable gutta percha tissue, which has of late years superseded oiled silk for most medical and surgical purposes, and which is superior in respect of elasticity and cheapness. The whole of the dressings and coverings now described are retained in position by a few rounds of a bandage.

The dressings now described—applied, be it observed, when all bleeding has ceased—remain undisturbed till the following day, when they are entirely renewed. During the course of that day, it is useful to open up the impermeable covering, and, without touching the underneath dressing, moisten it with pure alcohol. At each dressing, it will be found that the charpie is adherent to the raw surface: to detach it without causing an oozing of blood, the dressings ought to be moistened by means of syringing it with alcohol.

When the proceedings as above described are carried out with exactitude, there is no bleeding from the wound, and the parts are kept in a favourable state of moisture. At the end of a period, varying from five to ten days, the raw surface is quite dry, and presents a slate-grey appearance. The surface may be kept in this dried-up state—in this condition of local embalmment—as long as is desired. Cicatrization proceeds very, very slowly; and, to accomplish permanent healing, it is necessary to induce suppuration in the wound.

Dr. Dolbeau holds that his method of alcoholic dressing prevents the occurrence of traumatic inflammation; and I am assured by friends who have had considerable opportunities of observing his hospital practice, that this opinion is well founded. He says—and this I have personally observed—that the patients have generally little or no fever, and that their strength is inversely proportionate to the suffering they have had or the quantity of blood they have lost in the operation. By keeping the wound in the state of alcoholic dryness (*sécheresse alcoolique*), as Dr. Dolbeau calls it, traumatic reaction is prevented; and by that means, any necessary length of time is obtained for the patient to get up his strength.

When all goes well—when the appetite and sleep are natural—when strength is regained, the alcoholic treatment is discontinued, and glycerine is used. The time has now come, according to Dr. Dolbeau, when, without detriment, the patient can support suppuration. The surgeon, however, after instituting suppuration by dressing with glycerine, may, if he think it necessary, arrest or diminish the formation of pus by using pure alcohol, or a mixture of alcohol and water.

At first, the alcoholic treatment occasions a good deal of pain; but, by the end of the second or third day, the wound has become insensible. Some patients beg urgently that the alcohol may be used somewhat diluted with water, but Dr. Dolbeau says that this demand ought to be resisted.

The direct application of pure alcohol often vesicates the skin surrounding the wound. When this inconvenience occurs, it is easily reme-

died by powdering the blistered surface with starch or rice. In a few exceptional cases, the lips of the wound become greatly swollen, while the surface of the wound has the usual alcoholic dryness and the usual slate-grey colour. In such cases, Dr. Dolbeau discontinues using the alcohol, and has recourse to starch poultices. Once the swelling has disappeared—an event which occurs simultaneously with the establishment of copious suppuration—Dr. Dolbeau resumes the use of the glycerine dressing, and syringes the wound every morning with pure alcohol, so as to cause the separation of all the portions of tissue destroyed by the suppuration.

Having now briefly described and explained Dr. Dolbeau's method of alcoholic dressing, let me add that it seems to deserve the careful study of surgeons, particularly as, according to Dr. Dolbeau, it protects from traumatic fever, and enables the surgeon at pleasure to prevent or diminish the suppuration of wounds.

2. *Opening of the Medical School.*—Last week, the clinical classes began at the hospitals, and most of the professors at the Ecole de Médecine delivered their introductory lectures. By the day after to-morrow all the courses will have commenced.

On Saturday, at five P.M., I went to hear the Professor of Histology—Charles Robin—begin his course. The large theatre was literally crammed; but more than half of those present were there to lark and not to learn. Before the lecture began, the noisy puerility, for which students are remarkable, attained a disgraceful pitch, snatches of the *Marseillaise* and unearthly sounds varying the more monotonous noises of tongues and feet. The din continued when the professor entered, and for the first half hour there was scarcely one entire sentence audible. Professor Robin went on calmly and bravely for this time, when he paused. This induced a lull, which enabled the professor to state, within the hearing of the whole assembly, that although the noise might prevent him from being heard, he was determined that it should not prevent his going on with the lecture to the end. After this statement, which was loudly cheered, forty or fifty of the more noisy left the theatre, when the lecture proceeded amid considerably diminished uproar. The lecturer—whose bearing is gentlemanly, voice clear, and language concise—was, after this exodus of the roughs, pretty fairly heard. From first to last, however, the scene was as disgraceful a manifestation of student folly as it is possible to imagine.

THE FORTY-THIRD MEETING OF GERMAN NATURALISTS AND PHYSICIANS; HELD AT INNSBRUCK.

I.

ON September 17th, the visitors began to arrive; and, on the evening of that day, the "Redoutensäle", which were set apart for the social gatherings, were already well filled. The scene of that first—in many cases quite unexpected—meeting of old friends, coming from all parts of Germany, was a most animated one, and was graced by the presence of not a few ladies, many of the visitors having brought their wives and daughters. Altogether, the lists contained over a thousand names, first in number being the Austrians, then Germans from all parts of the Fatherland. From foreign nations, there were two Englishmen, several Frenchmen and Italians, and a few Russians.

The opening of the meeting took place on the morning of September 18th, in the very handsome theatre, which was filled to the roof by a splendid assembly, the boxes being mostly occupied by ladies. The formal part of the proceedings having been completed, Professor Helmholtz delivered the first general address, on the History of the Development of Modern Natural Science. He drew a most masterly sketch of the progress of natural science since the first attempts were made to bring the great variety of facts under common laws: the theory of mechanics, as originated by Galileo, and worked out by Newton and Leibnitz; the development of chemistry in the second half of the last century; the law of the conservation of force; and, next in the foreground, Darwin's fertilising hypothesis, forming the striking points of the picture. Thus, the speaker said, the great mass of phenomena became more and more organised in the hands of science; and that the movement was one in the right direction, was shown by its practical consequences. In close relation with physiology, which has made great progress since the application to it of those methods of investigation which are recognised as the only proper ones in the natural sciences, even practical medicine has received an immense impulse, of which he could speak from experience, having himself been educated as a medical practitioner at a period when complete dispersion prevailed in medicine. The professor concluded by wishing success to the newly founded medical faculty in the University of Innsbruck.

Dr. J. R. Mayer of Heilbronn, who had been the first to pronounce

the law of conservation of energy in its completeness, read a paper on Necessary Consequences and Inconsistencies of the Mechanical Theory of Heat. The author described a new dynamometer; and, among other matters, he gave a new hypothesis for the explanation of the earth's magnetism, the principal proposition of which was that the trade-winds are generators of electricity by their friction against the surface of the sea. It would have been better had Professor Helmholtz's address stood alone on the programme of that morning's proceedings, both for the audience and Dr. Mayer, whose paper would, perhaps, have been, in some parts, more intelligible, had the subject matter been less aphoristically treated.

It will be conceded that this had been a good morning's work; so, after the eighteen sections which have already been enumerated in a former number of this JOURNAL (October 9) had been formed and introduced into their respective quarters in the University building, the rest of the day was devoted to pleasure, the greater part of the visitors first dining together in the Redoutensäle, whilst those who could not find room there, broke up into small parties. All met together again in the afternoon, on the Mount Isel, with its splendid view on the valley of the Inn; and, in the evening, in the theatre, where a very creditable performance of Mendelssohn's *Walpurgis-nacht*, and of part of Handel's *Samson*, took place. This was not the only occasion on which the visitors had an opportunity of admiring the musical talent of Innsbruck; another entertainment, consisting, chiefly, of national part-songs, having been provided on one of the other evenings by the different musical societies of the town. Next day, being Sunday, was entirely devoted to an excursion, by railway, over the Brenner to Botzen, which town had invited the meeting for that day. A long description might be given of the magnificent mountain scenery through which we passed, and of the interesting works by which the railway had been carried through mountains and along steep precipices; of the hearty reception the two excursion trains met with almost at every station, where bands of music were playing, speeches were made, and the mountains re-echoed the thunder of guns; of the few hours passed at Botzen, where the inhabitants had provided for their guests a repast of the choicest fruit and wine in the park; of the many amusing and interesting incidents that occurred; but, suffice it to say, that all were unanimous that they had never passed a more agreeable day in their lives.

It might be thought that such a pleasurable way to commence a scientific meeting would, perhaps, not be the best preparation for the more earnest business which was to follow; but the work done during the four following days completely refuted such apprehensions. We shall, by-and-by, give some details of the proceedings of those sections which are more intimately connected with medicine, confining ourselves, for the present, to the report of the general events of the meeting.

The second public meeting was held on September 21st, in which, after a vote of thanks to the town of Botzen, and after the reading of an invitation from the International Congress at Florence, the place of meeting for the next year was chosen by accepting an invitation from the town and University of Rostock. A resolution was then passed, which had already been brought forward at the last meeting at Dresden, to the effect that a rule be added to the statutes "that no votes are taken on scientific questions either in the general or in the sectional meetings." This question had first been raised two years ago, when a large party of members of the section for Public Health desired to give their opinion that weight which it would have acquired had it gone forth as a resolution, carried by a majority at the Association of General Naturalists and Physicians. It is manifest that an Association of so accidental and variable a composition is not the proper body to decide practical questions by majorities; and such a proceeding would be entirely contrary to the objects of the Association. It is, however, to be regretted that a great number of sanitary reformers were so bent upon passing resolutions, that the proceedings of the Public Health Section almost collapsed when there was no more prospect of doing so. We trust that this collapse is only temporary, and that this section will rise to fresh and more vigorous life at the next meeting; for it has already done immense service since it was first founded two years ago at Frankfurt, in bringing sanitary questions more prominently before the German public.

The audience, especially the ladies, must have felt greatly relieved when these business matters were settled, and when Professor Carl Vogt came forward to speak on the Results of Recent Researches in Early History. The speaker first discussed the age of the human race, glancing at the changes through which Europe must have passed during the time it has been inhabited by man, and further alluding to what the most recent researches, the results of some of which had only been brought out at the recent Ethnological Congress at Copenhagen, allow to be concluded with regard to the gradual development of civilisation in those early times. Some of these conclusions are not very flattering to our forefathers; for, the learned professor said, it can

hardly admit of any doubt that our ancestors in Europe were not only savages, but even cannibals. As a third subject of investigation in early history, the speaker mentioned the physical development of man himself, in which branch of science much had yet to be done. But this much could already be said, that man has only gradually acquired those characters which make him man, and that they are the result of the work for his existence, and chiefly of the work by his mental powers. The professor, whose lectures are always most attractive, was listened to with the greatest attention, and was much applauded at the end, although not a few of those present may have been occasionally a little shocked by the somewhat irreverent handling of certain subjects. We may here also mention that, at the instigation of Professor Vogt, the Section for Anthropology and Ethnology decided upon the formation of a German Anthropological and Ethnological Society. A committee was elected, and the central direction provisionally conferred upon Professor Semper of Wurzburg.

The proceedings were concluded with a short address, by Professor Leidesdorf of Vienna, on The Relation of Society to those Mentally Afflicted, and on the Means of Preventing Mental Diseases. In the afternoon, there were some section meetings, and the members of the Psychological Section visited the asylum at Hall. On the 23rd, there was a special excursion for the geologists to inspect the salt mines of Hall; and, on the afternoon of the 24th, all joined in an excursion to the Lanser Köpfe, two hills a few miles south-east of Innsbruck, with magnificent scenery. A great many ladies and gentlemen from Innsbruck accompanied their guests.

In the third and last general sitting, Professor Virchow was the speaker; and, as could be anticipated, gave a most interesting popular lecture on the Position of Pathology in the Present Time. The professor first reviewed the different opinions which had been held in the course of time on the question what "disease" really was. He showed that, until recently with the profession, and even to the present day with the people, all explanation started from the supposition that disease was some substance foreign to, and intruding into, the body, and which by one school had been more intimately connected with the fluids, by another, more with the solid constituents of the body. By-and-by, characters were found out in disease which were incompatible with the idea that it was only some dead substance; that, on the contrary, it presented many phenomena appertaining to living bodies; and the attempt made at different times to reduce all disease to some minute parasitic organisms, was only a further step in this direction. In opposition to these more materialistic views of disease, it had been maintained that some spiritualistic substance was the essence of disease—a notion which had still a very firm hold of the mass of the people even in our countries, and which was the cause that, in their ailments, they so frequently apply to the wrong address for assistance.

Gradually, however, since the middle of last century, the conviction had gained ground that disease was no separate substance at all, but that it was inseparably connected with the living body; that, in a certain sense, it was part of the body itself; and that what in former times was considered the substance of disease, really was only its cause; that there was not one, but innumerable causes for different diseases. A further step was the recognition that disease was not a substance or a body, but a process; that, in fact, it was simply a different form of life. Thus pathology had become more and more intimately connected with physiology. Professor Virchow then pointed to the means which the organism possesses to accommodate itself to various external conditions and influences, and showed how the insufficiency of these regulatory means relatively to the external influences must have disease as its consequence. The activity of the physician in the presence of disease must be directed to support and to liberate those regulatory functions; and, if this be impossible, then all physicians are of no avail. To be imbued with the necessity of these functions, the speaker said, means at the same time to be imbued with the conviction that there really is a healing art, which consists in nothing else than in keeping away, removing and neutralising any unnatural and abnormal conditions; and, on the other hand, in actively interfering with the processes of life, thus causing the organs of the body regularly to perform their functions. The professor then glanced at the great progress which had been made in localising the diseases, arriving at last at the constituents of the organs and tissues—the cells—and thus finding the essence of disease in anatomical changes. He concluded by expressing hopes that the more and more extending knowledge would prevent the people from falling back again into superstitious notions, and that, by-and-by, the care for the health of the people would become of greater importance to our statesmen than the question with whom the first battle was to be fought, and who was first to be killed. It was for the medical profession more loudly to raise its voice in public affairs—not in order to assist diplomacy in its external arts, but to

imbue governments with the knowledge how the people can be made healthy and happy.

Immense applause followed this speech; and then Professor Rumbold formally closed the meeting.

A vote of thanks to the town of Innsbruck, the local secretaries, and those who had assisted them, proposed by Professor Rienecker of Würzburg, terminated the proceedings.

Many visitors had already left Innsbruck, still the theatre had been tolerably well filled at the last sitting. In the afternoon, most of the others left; and, after a week of excitement, the good town of Innsbruck—who may well be proud of the success of the meeting held within her walls—once more resumed her usual aspect.

THE ASSOCIATION IN 1868 AND IN 1869.

THE subjoined analysis of the numerical strength of the Association in the different districts, prepared from the lists of this and last year, is interesting. It will be seen that the number of ordinary members has increased in the ratio of 10 to 9; that is, the Association has thus added to its branches one member for each nine which it had in 1868. It will further be observed, that two-thirds of the increase has taken place in Yorkshire (a result of the holding of the annual meeting in Leeds), in Middlesex, and in Lancashire. This large increase is most gratifying, and is a continued proof of the appreciation, by the profession, of the efforts of the Association and the JOURNAL. The list, as given below, does not include the honorary members; of whom there were 35 in 1868, while in the present year there are 38.

	1868.	1869.	Increase.	Decrease.
Bedfordshire	27	27	—	—
Berkshire	29	31	2	—
Buckinghamshire	25	21	—	4
Cambridgeshire	35	38	3	—
Cheshire	94	101	7	—
Cornwall ..	24	26	2	—
Cumberland	59	68	9	—
Derbyshire	46	46	—	—
Devonshire	75	80	5	—
Dorsetshire	12	14	2	—
Durham	83	104	21	—
Essex	26	30	4	—
Gloucestershire	117	138	21	—
Hampshire	65	69	4	—
Herefordshire	12	12	—	—
Hertfordshire	16	24	8	—
Huntingdonshire	14	14	—	—
Kent	145	144	—	1
Lancashire	283	325	42	—
Leicestershire	33	37	4	—
Lincolnshire	52	62	10	—
Middlesex	536	602	66	—
Monmouthshire	11	14	3	—
Norfolk	39	35	—	4
Northamptonshire ..	52	48	—	4
Northumberland	37	48	11	—
Nottinghamshire	39	39	—	—
Oxfordshire	30	30	—	—
Rutlandshire	2	2	—	—
Shropshire	80	75	—	5
Somersetshire	118	124	6	—
Staffordshire	81	88	7	—
Suffolk	53	61	8	—
Surrey	120	134	14	—
Sussex	94	91	—	3
Warwickshire	168	170	2	—
Westmorland	7	14	7	—
Wiltshire	26	30	4	—
Worcestershire	51	54	3	—
Yorkshire	195	361	166	—
Wales	118	132	14	—
Islands	4	5	1	—
Scotland	77	86	9	—
Ireland	376	321	—	55
Army and Navy	24	40	16	—
Colonies, etc.	49	51	2	—
Total	3659	4066	483	76
TOTAL GAIN			407	

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, NOVEMBER 20TH, 1869.

ST. BARTHOLOMEW'S HOSPITAL.

WE are informed that a meeting of the Governors of St. Bartholomew's Hospital will be held next week, at which the Treasurer will make a statement in reply to recent charges. It is stated that the Prince of Wales will preside. We may confess that our impression is that such a meeting should be of a more business-like character than the presence of his Royal Highness would seem to imply. It might not be amiss that its members should adjourn to the wards and inspect the dormitories of the nurses, about which so much has been said. The public has heard a good deal about the Royal patronage of this hospital, and it would be pleased to hear more of its business-like management. His Royal Highness is, as President of the Hospital, quite in his place at any meeting of Governors, and we applaud his motives on the present occasion. As regards those more immediately concerned in the management of the Hospital, it is, however, time that they should feel that a really searching inquiry cannot be avoided, and that such reforms as are found necessary must follow. It would be well to avoid even the appearance of attempting to shelter behind the ægis of a Royal patron.

Although we have not during the last few weeks taken any share in the discussion of the alleged shortcomings, our silence has not been from any want of interest in the matter, but rather from the belief that it had been so taken in hand that nothing necessary would be left unsaid. We shall not now attempt to forestall the Treasurer's defence. The greater part of the charges apply officially to him. Statistics are always slippery matters, and we shall not be surprised if he is able to show that the expenditure of the Hospital has been much better managed than has been asserted. We trust, however, that he will give us candid information as to the sums reported to have been laid out in ornamenting the hall, and give some reasons justifying, in this utilitarian age, such an employment of money designed for the benefit of the poor. His reply, as regards overwork in the out-patients' department, may be anticipated without fear of inaccuracy. It will be that the number of cases has been exaggerated, and that a very large proportion of them are trivial ones; in both of which suggestions there will, probably, be some foundation of fact. When every allowance has, however, been made that can properly be made on these heads, there will still, we cannot but believe, remain, as an urgently needed reform, the increase of staff. Whether this matter rests with the Treasurer alone or not we do not care to inquire; but, should he need information on the subject, the unanimity of the medical press regarding it must have conveyed its lesson. We have already spoken in some detail as to the directions in which we think that increase of staff is specially desirable. It is impossible for the warmest friend of St. Bartholomew's Hospital to assert that her out-patient practice has been well managed at any period during the last twenty years. Both on the medical and the surgical side the employment of irresponsible assistants has, we believe, been common, if not constant, and the number of junior officers has been utterly inadequate to the work devolving on them. This must surely be changed; and it is to be regretted that a public outcry should have been necessary to bring about reform. As regards

special departments, St. Bartholomew's Hospital has also been definitely behindhand. Ophthalmic wards were provided long ago under the care of the veteran Lawrence; but we believe there never was any out-patients' clinique for eye-diseases, and it is impossible to deny that the arrangements more recently made are illiberal and unsatisfactory in the extreme. At the present moment, a department for skin-diseases is, we believe, conducted with great ability by Dr. Gee; but it has been only quite recently organised. We do not write in any spirit of depreciation of the noble institution which has just met with such severe criticism. Our single wish is to see its details improved to the utmost. Its managers may, we believe, allege with perfect truth that the wards of St. Bartholomew's Hospital are as popular amongst the London poor as those of any rival institution; and whatever may be the rumours current as to comparative neglect of clinical instruction, the manner in which the school has kept together is in some sense a substantial answer to them. For the last four years, the staff has published regularly an annual volume of Reports, and for a much longer period the statistics of the institution have been put on record in a manner not surpassed by any other hospital. We might instance the recent success in the operation of excision of the knee-joint—a success considerably surpassing that of either of the two next largest of our metropolitan hospitals—in proof that the wards have been maintained in a healthy condition. To the credit of the management must also be carried the fact that the medical and surgical staff is paid for its services—an example well worthy of imitation by the governors of other institutions.

In conclusion, we may express our belief that the pending investigation will not reveal the necessity for any sweeping changes; but that certain improvements are necessary in the directions to which we have alluded must, we think, be evident to all.

UNFIT FOR HUMAN FOOD.

OUR health-officers and sanitary inspectors are at present placed in a difficult position. They have the power, according to the present law, of declaring, at discretion, any sample of meat "unfit for human food", and, upon their verdict, follows the destruction of the article condemned, and the prosecution of its vendor. Respecting some diseases of cattle, custom has established a rule, and has declared that, at whatever stage of the malady the animal is when killed, and however excellent the meat may seem to the eye, it shall not be sold for food. This applies, we believe, especially to the disease known as pleuro-pneumonia. That affection is contagious; and if a farmer, in whose homestead it prevailed, observing one of his fat stock to look ailing, were to have him killed at once, and sent to market, he would expose himself to the risk of imprisonment. The knowledge, on the part of the seller, that the animal was ill, would be sufficient to convict. This rule, as regards pleuro-pneumonia, is well known throughout the country, and farmers and inspectors are alike relieved from uncertainty. The difficulty to which we have alluded refers to the meat of animals killed on account of the foot-and-mouth exanthem. Hitherto, the meat of these animals has, we believe, been admitted into our shambles without question. The law, however, clearly puts those who so expose it in the hands of the inspectors; and if a medical officer of health should declare that, in his opinion, the meat of an animal suffering from such a blood-disease was unfit for human food, a conviction would follow.

Practically, no animals are killed by the farmers on account of this exanthem. It is so mild, and the probability is so great that the animal will recover and regain his full value, that there is no temptation to send him to market at half price. Nor are any measures for stamping out the disease by the slaughter of those which, not ill, have been exposed to infection, thought necessary. It is almost solely in regard to new arrivals from abroad that the difficulty is likely to arise. A flock of sheep is landed at a wharf, and the inspector finds one or two of them suffering from the exanthem; they are ordered to be killed, and such restrictions are placed upon the movements of the others that it becomes

the owner's interest to have them all slaughtered at once. The probability is great that many of them might be just sickening. Their flesh, when it arrives at the butcher's shop, presents no peculiarity whatever. What ought to be the course of the inspector? Most undoubtedly the foot-and-mouth exanthem is not a local malady—it is neither eczema nor aphtha—it is a specific fever. Its mildness and the fact that it causes no visible change in the flesh, are the features which incline most concerned to place it, as regards the saleability of the meat, in a different category, from other maladies.

The question, then, may be thus pointedly put: Is the flesh of an animal suffering from a specific fever likely to be injurious if eaten? The first reply which suggests itself is that, whether wholesome or not, it should be thrown away. This method of settling the matter, although it might be very satisfactory in the Argentine republic, is not wholly so in England. Here, beef and mutton are very valuable; and everyone who has thought for a moment on the subject, will see that, although the rejection of a few carcasses may not appreciably alter price, yet it is, when unnecessary, a *bonâ fide* waste, and deprives us of just so much food. It is not alone a loss to the owner or salesman, but, in the most direct manner, a loss of food to the community, and it touches first those who are most in need. Many intelligent agriculturists entertain strong opinions on this subject. They say that the present laws cause not only heavy losses to them, but deprive the poor of much perfectly wholesome meat. Although their opinion may probably have a bias, yet it is evident that it is very possible to allow sentimentality to go into an extreme. That all flesh should be sacrificed which is tainted in any visible or demonstrable manner, or respecting which there is any evidence that it can cause illness, all will admit. Thus the flesh of animals suffering from carbuncular diseases, or from any malady giving a tendency to rapid decomposition, should unhesitatingly be rejected; and in such cases, fortunately, the need for rejection is made manifest to the senses. The same rule would probably apply to other diseases in such advanced stages that death was likely to occur. There is, however, we believe, no evidence of the unwholesomeness of a considerable quantity of the meat which is now condemned, not on account of visible qualities, but merely because the animal was suspected to be suffering, or about to suffer, from a specific illness. It is a matter upon which clinical evidence should be sought for more than has been the case, and *à priori* speculation less trusted. We have possibly assumed too hastily that the flesh of diseased animals is necessarily diseased flesh, in the sense of being either innutritious or unwholesome. If it be really the fact that mutton from a sheep just sickening with foot-and-mouth disease is not distinguishable, by taste or any other quality, from other mutton, that it is quite inert as regards the communication of any disease, and that it is capable of digestion and of conversion into good human blood, then the wisdom of its rejection may fairly be doubted. We are far from assuming that all these points are settled in the affirmative, but we do think that it would be well to obtain evidence before considering them decided either way. Such evidence of a definite kind is, we may admit, somewhat difficult to obtain. We may remember, however, that animal flesh in many conditions which, *à priori*, might have been thought objectionable, has been found, by experience, innocuous. As regards ailing sheep and pigs, it has long been the custom in some large farming establishments to kill them for home consumption, and, we believe, never with any ill consequences. The Highland peasants rarely eat any other than "braxy mutton", and include under this term all animals that have been found dying or dead. Our poor relations, the other carnivora, make no objection whatever to diseased provender; and should the foot-and-mouth carcasses be rejected from our shambles, we suspect that they would find their way to the Zoological Gardens, without any detriment to the animals. If the authorities at Regent's Park should, as is possible, prove too particular, there is no kind of doubt that the cats and dogs of our metropolis would be the gainers.

As the law at present stands, those who sell meat from animals suffering from the foot-and-mouth disease, put themselves at the mercy of the opinions of individuals. If our medical officers of health should in-

cline to affirm that such flesh is unfit for human food, its vendors would, without warning, be liable to punishment. Clearly they have a right to ask that the profession, especially the advisers of the Privy Council, should make up their minds and declare their decision.

As regards the public, it clearly leaves the responsibility with our profession, and, unless instructed that certain kinds of meat are unwholesome, is not prone to entertain suspicion. Our easiest way out of the matter would be to pronounce on the safe side; but it may be doubted whether, all things considered, such a verdict would be for the national good.

RELAPSING FEVER.

WE are glad to know that measures are being adopted in several districts to remove the fever patients from their own homes. This is the most rational means of checking the spread of this disease.

Some doubt seems to exist as to the source whence this epidemic came. We are informed, however, on good authority, that it began, as last year, amongst the Polish Jews, and was imported from the continent. There is no appropriateness in the term "famine-fever", so far as we are concerned. The disease spreads by contagion, and contagion only; and it is against contagion that we must provide.

The accommodation at the London Fever Hospital being inadequate to the demand in connexion with the outbreak of relapsing fever, it has been proposed that a temporary building should be erected on ground belonging to the authorities of the Fever Hospital, whereby sixty additional beds will be made available.

The Managers of the Metropolitan Asylum Board have also undertaken to provide temporary accommodation on their building-site at Hampstead.

The Poplar Board of Guardians, on the recommendation of Mr. Gray, intend to reopen their North Street Infirmary for the reception of fever patients.

The House Committee of the London Hospital have decided to set aside wards for the reception of patients suffering from relapsing fever; and it is under the consideration of other hospitals to afford similar accommodation.

Mrs. Gladstone, in a letter to the *Times*, states her determination to reopen the Houses at Clapton for the gratuitous reception of those recovering from relapsing fever. She thinks the temporary hospitals may take some time to prepare, and that it is necessary that some accommodation should be found at once.

MR. SPURGEON is suffering from an attack of small-pox.

DR. S. MONCKTON has been appointed a magistrate for the borough of Maidstone.

DR. SYMES THOMPSON has been appointed Physician to the Brompton Hospital for Consumption.

A PROFESSORSHIP of Hygiene has been established in King's College, and Dr. Guy has been appointed to the post. A course of lectures will be given during the first three months of the year. The King's College authorities are to be congratulated on having followed the example set by University College.

THE Queen has been pleased to confer the order of knighthood on James Alderson, M.D., F.R.S., President of the Royal College of Physicians. The fact will give general satisfaction to the profession. Sir James represents the provinces as well as the metropolis, having first gained his fame as a practitioner in Hull, and afterwards sustained and increased it in connexion with St. Mary's Hospital.

A SIGN OF THE TIMES.

PROFESSOR HUXLEY is giving a course of lectures at the South Kensington Museum. They are intended chiefly for women, those engaged in teaching being admitted on lower terms than others. "Men will not be excluded, if there be room."

THE ROYAL ACADEMY.

THE annual course of lectures on Anatomy to the students and Royal Academicians was commenced on Monday last, by Professor Partridge, F.R.S., in the new theatre at Burlington House, instead of Trafalgar Square as heretofore. The lectures will be continued every Monday evening up to December 13th inclusive.

UNFOUNDED CHARGE OF NEGLECT.

MR. LOWE of Lincoln was lately charged before the Board of Guardians, on the evidence of a nurse, with having neglected to see a child for four days previously to its death. The Board thereon sent a communication to him, asking if the charge were true; in reply to which, he produced his book, showing that he had daily visited the patient.

MEDICAL MAYORS.

IN addition to those mentioned in last week's JOURNAL, the following members of the medical profession have been elected mayors: G. W. Daniell, Esq., Blandford; Dr. Evan Pierce, Denbigh (fourth time); Dr. E. Clapham, Devizes; Dr. J. R. Jenkins, Ruthin (re-elected); Dr. T. Parnell, Wells (third year); Dr. C. W. Hollis, Ryde, Isle of Wight; Dr. Sharpley, Louth, Lincolnshire.

THE FEVER AT THE MAURITIUS.

ALTHOUGH by the latest accounts the rate of mortality from all diseases was less than it had been for some years, the proportion of deaths from fever was still large, and some apprehensions were felt that an increase in the number of fever-cases would take place on the occasion of the hot weather. Several sanitary improvements were about to be carried out, and a sum of £30,000 raised for that object. This amount is, however, totally insufficient for the purpose.

SCARLET FEVER IN ST. MARYLEBONE.

DR. WHITMORE reports the continued serious ravages of scarlet fever in St. Marylebone, remarking especially that nearly all the cases have occurred in houses occupied by several families, where the overcrowding prevents any attempt on the parents' part to separate sick from healthy. The practice of removing children into the country during the desquamating stage is strongly deprecated by Dr. Whitmore.

SIR JAMES PRIOR.

THE death of Sir James Prior, who was for many years in the medical service of the navy, is announced. He served off Greenland and in the North Sea, in Africa, in the East Indies, Brazil, and on the eastern coast of Africa. He was Staff-Surgeon to the Chatham Division of Royal Marines, and was appointed, in 1843, Deputy Inspector-General of Hospitals and Fleets. He was the author of a *Life of Burke*, a *Life of Goldsmith*, and some medical works. Sir James Prior was born in 1790, and was knighted in 1858.

PRESERVATION OF MEAT.

A NEW method of preserving meat, invented by Mr. R. Jones, was lately examined by a number of gentlemen interested in this subject, and very favourable opinions were expressed as to the result obtained. The meat is quite free from that ragged and sodden character so common with preserved meat, and it presents all the appearance and flavour of having been recently roasted. There appears to be every reason to anticipate a great success for this method of preservation, if the commercial part of the matter can be worked out satisfactorily. The question of the preservation of meat is of considerable importance at the present time; and every improvement in the means by which the meat of other countries can be brought to our shores deserves attention. The special merit of the new method is that the meat is preserved at a low temperature, so that the nutritious quality, as well as its firmness and flavour, are retained, instead of being destroyed by the excessive heat employed in the systems hitherto adopted. These desirable results are obtained by means of a practical application of the Torricellian vacuum. The raw meat, without previous preparation, is

put into air-tight tins, which are very simply connected with the vacuum-chamber by means of small tubes; they are then placed in pans of boiling water (at a temperature of 212 deg.), and, by means of an occasional application of the vacuum pressure, in addition to the air-expelling power of heat, the desired result is obtained in a few hours by a complete exhaustion of the air, and the perfect preservation of the meat for an indefinite time. The closing of the tins is then effected by compressing the small connecting tube with a pair of long-handled pincers in one hand, and applying a soldering-iron with the other. By this easy operation, the tin is at the same time separated from the apparatus and hermetically sealed. There is an intermediate vessel, of well-designed construction, which intercepts the small quantity of juices given off during the process, and in this vessel is thus obtained an excellent extract of meat. The patentee—Mr. Richard Jones, 29, Botolph Lane, City—is a member of the Royal College of Surgeons, and has for some years devoted his attention to this important subject. Mr. Jones obtained a medal at the Exhibition of 1862 for meat preserved by means of a chemical process. The present system is very superior to that in simplicity and the total absence of chemicals.

YELLOW FEVER (?) IN CATTLE.

WE publish in another page a report on a most interesting and important animal subject—the *Texas cattle-disease*. This malady illustrates admirably the very great importance of giving to Comparative Pathology its fit place in medical science. Here we have an infectious disease spreading rapidly along the line of march of cattle coming from one particular part of the country, having a long period of incubation, killing a large percentage of animals attacked, and showing, apparently, many affinities, both clinical and pathological, with human yellow fever. The subject of the fungus-origin of some diseases receives important additional evidence from the facts discovered by the microscopical investigation of this disease.

A POLICE DIAGNOSIS.

ANOTHER case of apoplexy, which was considered by the police to have been drunkenness, occurred this last week. A man named Lucas, about sixty years of age, became insensible in the street, and was taken to a police-station, on the charge of being drunk and incapable. His son appears to have been with him, and to have expostulated with the police, but without effect. After having been locked up at the station some time, he was so evidently ill that a surgeon was sent for. The nature of the case was then recognised, and the man sent home, where he died. That one of the constables thought "he smelt of beer", seems the only excuse offered for the conduct of the police. Such an occurrence as this shows the desirableness of taking any person who is found insensible either to his own home or to some hospital, or, at any rate, of sending for the divisional surgeon to take the responsibility. It is absurd to expect that policemen should be able to tell whether they have to deal with a case of apoplexy or not.

AN EXCELLENT EXAMPLE.

WE observe with much satisfaction that, after some discussion, it has been decided to absorb the Eye and Ear Hospital at Leeds into the General Infirmary of that town. Of the details of the arrangement we know nothing, but we trust that they have been concluded in a liberal spirit towards the promoters of the special institution. Now that our larger hospitals are slowly beginning to see their interest in the classification of their patients and the formation of special departments, we hope to hear from many quarters of amalgamation movements. The position which specialists have gained, and the fact that in many instances the institutions which they have formed were urgently wanted, must be kept in mind; and they must be fairly treated. We feel sure that nothing but selfish exclusiveness on the part of those who have got possession of the best positions will prevent a wide-spread movement in the direction indicated. Should it take place, it will tend much to consolidate our medical charities, and be of great advantage to medical education.

MIDDLESEX HOSPITAL MEDICAL SOCIETY.

THE first ordinary meeting for the session of this society, which is, we believe, the oldest medical students' society in London (having been founded in 1774), took place on Thursday, the 11th instant. An admirable paper was read by Dr. King on "Cells and Cell-development."

THE "PRACTITIONER" ON VACCINATION.

THE Editor of the *Practitioner* gives us an admirable article in his current number on the vaccination question, in which he concludes that the transmission of diseases by this process (except under the rarest and must culpable conditions) may be considered as finally negatived. Whoever wishes for a clear conviction on the subject should read this article.

DEATH FROM FRACTURE OF THE JAW.

AN inquest has been held at St. George's Hospital respecting the death of a man aged 31, who was struck on the jaw by a spoke of a revolving wheel on November 1st. Mr. Wilson stated that he sustained a fracture of the jaw, and attended as an out-patient at the hospital for a week, and was then admitted, and died a week later (thirteen days after the accident), of pyæmia. Hospital air cannot be accused of causing pyæmia to ensue in this case. Fractures of the jaw are common, and, being usually compound, air is necessarily admitted; but pyæmia is certainly an unusual consequence in English practice. We have been told that it is not uncommon in Paris.

THE NEW JOURNAL OF NATURAL HISTORY.

"NATURE" is the name of a new weekly journal of general natural history (applying that term to physical as well as biological phenomena). *Nature* contains original articles, and reviews of books on subjects of scientific interest, as well as separately headed columns in which abstracts are given of new scientific work in several important branches of natural history. The first number has communications from Professors Huxley and Williamson, Sir John Lubbock, A. W. Bennett, Norman Lockyer, W. S. Dallas, A. Geikie, and others—an array of names which should be a guarantee for the maintenance of a high standard of excellence. *Nature* is well got up in every respect.

WATER-SUPPLY OF THE METROPOLIS.

AT the meeting of the Metropolitan Board of Works on the 12th inst., a report on the water-supply was presented by the Works and General Purposes Committee. The report drew attention to the recommendations of the Royal Commission that the control of the supply should be entrusted to a central responsible body, with power of levying rates; and suggested that the Chairman should seek an interview with the Home Secretary, inquiring if it was the intention of the Government to bring in a Bill founded on the Report of the Commission, and placing before him the Board's general approval of the Report. The further consideration of the subject was adjourned for a fortnight.

THE BEDMINSTER WORKHOUSE.

IT is now more than two years since the condition of the workhouse Infirmary at Bedminster, near Bristol, was commented on in this JOURNAL; and was also discussed in the Board of Guardians of the Union. About the same time, also, an inspection was made on the part of the Poor-law Board. The state of the Infirmary was shown to be very defective; especially in the overcrowding of the wards with patients. The matter has since that time been under discussion; and the house has been reported on by Colonel Ward, the official inspector, who has urgently recommended the erection of a new infirmary building, and has, indeed, threatened that if the Guardians will not do this themselves, the Poor-law Board will do it for them. About a fortnight ago, there was a warm contest in the Board of Guardians on the question: the rural Guardians of the Union opposing the proposal to erect a new infirmary. A motion and several amendments were passed; and ultimately an amendment was carried by a majority of 21 against 17: "That, it being inexpedient at this season of the year to commence the

Infirmary buildings, the matter shall be postponed for the present." An amendment proposing to commence the erection of the buildings in February next, was lost. Thus the matter is postponed indefinitely; and this notwithstanding the strong recommendation of the Poor-law Board, and the fact that, after negotiations with the Poor-law Board, plans for the new buildings had actually been agreed on. The conduct of the Bedminster Guardians—or rather of the unenlightened majority—scarcely requires comment. We should not be surprised, nor displeased, to hear that the Poor-law Board has carried out its threat and taken the matter of the building into its own hands.

CHLOROFORM AND THE PUBLIC.

ALREADY the effects on the public mind caused by the recent melancholy deaths from chloroform, aided by certain of the daily papers—are being abundantly exemplified. Medical men, before prevailing on their patients to submit to its administration, have now to undergo a more painful cross-examination as to the dangers of chloroform than ever. Ladies in greater numbers discover that they have heart-disease, lung-disease, and such like maladies, and not infrequently work themselves up to a pitch of excitement, that really the chief danger to be feared ought rather to be that they die of fright than from the effects of the chloroform administered. Some again refuse point-blank to have anything to do with the drug, while others (mostly hospital patients) would "rather die than have chloroform." If, instead of reading the sensational nonsense and placards of certain papers, the public bore in mind the fact that chloroform prevents the fatal effects of shock from operations to an infinitely greater extent than it endangers life, it would be better for all parties.

COMPLAINT AGAINST A HOSPITAL.

A FRESH complaint against St. Bartholomew's has been made in a letter from a guardian of the Clerkenwell Union, to the effect that a man who came up from the country to the hospital had his finger amputated, and then was sent out at once into the street, not having any home in London to go to. The man wandered about all night in the cold; and then at last was received into the workhouse, and sent to the infirmary to be treated. There seems little doubt that the man went to St. Bartholomew's, and that his finger was amputated there. It is quite customary at other hospitals to allow patients to go away who have just had fingers amputated. In this case, however, there were special circumstances, which were probably unknown to those concerned in the case.

THE PATHOLOGICAL SOCIETY.

AT the meeting on Tuesday last, a very singular and amusing case was brought forward by Dr. Legg. A woman had been several times admitted into University College Hospital for attacks of colic. Percussion of the lower part of her abdomen produced a rattling sound, distinctly audible to the bystanders, and similar to that produced by shaking dry peas or marbles in a drum, or by percussion of a bladder containing a few fruit-stones. During one of her visits to the hospital, she passed several cherry-stones with her stools; and, after death, a pint of fruit-stones was found in the jejunum and ileum. The ileo-cæcal orifice was contracted, apparently from a congenital lesion, to the diameter of a No. 9 catheter. Through this small opening the whole of the fæces had passed during life.

MEDICAL SCIENCE IN CHINA AND JAPAN.

WE learn some interesting particulars from the *California Medical Gazette* as to the state of medical and surgical science and practice in China and Japan. Japanese physicians never dissect, so that they know almost nothing of anatomy. They believe, for instance, that each side of the body is supplied by a corresponding side of the heart. Surgery does not exist; no attempts are made to replace a fractured bone; and the want of anatomical knowledge would render any instruments comparatively useless. Dr. Vedder tells us that "the medical men attached to the Japanese Embassy to the United States practised most freely

upon the credulity of members of the profession there, in their accounts of hospitals at Yeddo, and of surgical operations performed in Japan." Dr. Vedder says that no native hospital exists in Japan. Credulity is not wanting at San Francisco, it appears; for we are told that "an impostor from the celestial kingdom is the latest novelty in the healing persuasion" in that city.

MR. GRIFFIN.

It is not unlikely that many, who have only heard of the late Richard Griffin as an agitator for increased pay and a better organisation of the Poor-law Medical Service, may have made an ideal for themselves in which he figured as the "starved apothecary" of Shakespeare. Of course, many of our readers knew better, and were aware that he was a justice of the peace in Weymouth, in good practice, and in a comfortable position of life; and that his efforts to relieve the monstrous wrongs of his brethren in the profession, and of the parochial poor, were entirely unselfish, and brought him nothing but loss in a pecuniary sense, besides, from the enormous labour involved, tending to the paralysis which shortened his days. But probably few were aware that he was also one of our best ornithologists, and in other ways a "many-sided man".

THE ST. PANCRAS GUARDIANS.

THE *tapage* at St. Pancras drags on; and during the week several inquests have been held, of a similar kind to those already noticed, and resulting in similar verdicts. On Saturday, the Guardians held an *extraordinary* meeting, when expressions of sympathy with each other at the manner in which they had been shamefully scandalised were freely exchanged. The business consisted in the reading of a report by Dr. Edmunds, which was adopted and sent to the Poor-law Board; a resolution being at the same time passed, requesting the Board to make a full inquiry into the whole matter. This the Poor-law Board has since consented to do. It is to be hoped that the Guardians will be satisfied with the decision which they have sought.

THE FOG.

A CONSIDERABLE number of accidents occurred in the streets of London during the fog on Wednesday, some of them proving fatal.

ANTI-CLEANLINESS.

BATHS and washhouses are wanted at Keighley in Yorkshire, and were to be erected. But there is a sum of £2,500 wanted to complete them; and a poll of the inhabitants has been taken on the question whether a grant of that amount should be made. The "noes" prevailed, by 1,916 against 1,486.

BRISTOL GENERAL HOSPITAL.

LAST week, Dr. Fripp, who had retired from the office of physician in consequence of his term of office having expired, was unanimously re-appointed by a general meeting of the subscribers. In returning thanks, he took occasion to speak of the out-patients' department; for which he urged the necessity of lavatories and baths. He spoke also of the necessity for a hospital to receive cases of contagious disease, and for some means of exercising selection in the case of in-patients.

THE ANATOMY ACT AND THE PADDINGTON BOARD OF GUARDIANS. AT a meeting held on Wednesday, a motion was brought forward to put the 7th Section of the Anatomy Act in force, in order that a greater supply of bodies might be ensured for the medical schools. It seemed to receive considerable support from the guardians present, but its further consideration was deferred for a fortnight.

SCOTLAND.

THE ABERDEEN AND GLASGOW UNIVERSITIES ELECTION.

THE polling commenced on Monday at Aberdeen and Glasgow. Twenty votes were recorded at each place for the candidates alternately at the last election. Although the poll was not closed at the time

of our going to press, the final result was a matter of no doubt, Mr. Gordon having a majority at Aberdeen of fully 450, and at Glasgow of about 100. The result at Glasgow was rather unexpected.

THE UNIVERSITY OF ABERDEEN.

A LORD RECTOR has once more to be appointed, and the students are beginning to prepare for the usual pantomime. They have, of course, brought forward an opponent to the present excellent Rector, Mr. Grant Duff, the victim being Sir W. Stirling Maxwell. We trust the time is not far distant when the election will rest at this, as at all other Scottish Universities, not with those who (no doubt in ignorance) make it an occasion merely for a little novel amusement, but with those who feel the importance of the appointment as a probable source of University reform.

UNIVERSITY OF EDINBURGH: REGULATIONS FOR FEMALE MEDICAL STUDENTS.

THE following regulations, among others, have been resolved upon by the University Court with regard to the educating women in medicine: "The instruction of women for the profession of medicine shall be conducted in separate classes confined entirely to women.—The Professors of the Faculty of Medicine shall, for this purpose, be permitted to have separate classes for women.—Women not intending to study medicine professionally may be admitted to such of these classes, or to any such part of the courses of instruction given in such classes as the University Court may from time to time think fit and approve.—The fee for the full course of instruction in such classes shall be four guineas; but in the event of the number of students proposing to attend any such class being too small to provide a reasonable remuneration at that rate, it shall be in the power of the professor to make arrangements for a higher fee, subject to the usual sanction of the University Court.—All women attending such classes shall be subject to all the regulations now or at any future time in force in the University as to the matriculation of students, their attendance on classes, examination, or otherwise.—The above regulations shall take effect as from the commencement of session 1869-70."

IRELAND.

A FEMALE STUDENT AT THE MEDICAL SCHOOLS.

WE understand that, at Steevens's Hospital, Dublin, a lady is attending the lectures, and that she intends to apply for admission to the preliminary examination of the Royal College of Surgeons.

SIR PATRICK DUN'S HOSPITAL.

DR. THOMAS LITTLE, Demonstrator of Anatomy in the University, has been elected to the surgeoncy of this Hospital, for a limited period of two years and a half.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

AT the annual stated meeting of this College, held on St. Luke's Day, the following officers were elected for the ensuing year:—*President*—Dr. Banks. *Vice-President*—Dr. Freke. *Censors*—Dr. Atthill, Dr. Hayden, and Dr. Walter Smith. *Examiners in Midwifery*—Dr. Ringland and Dr. Jennings. *Treasurer*—Dr. Dwyer. *Representative on the General Medical Council*—Dr. Aquilla Smith. *Professor of Medical Jurisprudence*—Dr. Travers. *Registrar*—Dr. James Little.

COLLEGES OF PHYSICIANS AND SURGEONS.

A JOINT COMMITTEE, consisting of seven Fellows of the College of Physicians, and seven members of the Council of the College of Surgeons, are anxiously considering the subject of a joint examination and diploma to be granted by these bodies. It has been proposed in the latter body to limit the examination for Fellowship to the subjects of a thesis, or of six reports of cases submitted, in the case of licentiates of ten years' standing. This will permit of a considerable increase of the constituency without the attainment of a new charter, which the Council has resolved not to seek in the present unsettled state of the question of medical reform.

CLASSES OF THE MEDICAL SCHOOLS.

IN nearly every one of the schools the classes are larger than for many preceding years. The number of new entries is especially large, but as there were fewer of these last year, the second year pupils are not very numerous.

THE COW-POCK INSTITUTION, DUBLIN.

THE office of assistant-secretary and physician to this institution is vacant by the death of Dr. George Montgomery. The efficiency of the organisation for vaccinating at its stations, as well as by the dispensary officers, is proven by the fact that no fatal case of small-pox has occurred in Dublin for twenty-eight months.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Queen's Hotel, Birmingham, on Friday, the 3rd day of December, 1869, at 3 o'clock P.M. *precisely*.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.

13, Newhall Street, Birmingham, November 9th, 1869.

SOUTH-EASTERN BRANCH: INAUGURATION OF DISTRICT MEETINGS IN EAST SUSSEX.

A MEETING of the members of this Branch, resident in East Sussex and its immediate vicinity, will be held at the Star Hotel, Lewes, on Wednesday, the 24th instant, at 3 P.M. (Dr. HOLMAN, of Reigate, the President of the Branch, in the Chair), for the purpose of inaugurating District Medical Meetings in East Sussex, on a similar plan to that so successfully carried out for some time past in other districts of the Branch.

Agenda.—1. To consider and adopt bye-laws for the regulation of these meetings, and submit them to the Executive Council of the Branch for their approval. (The Executive Council will assemble at 3.45 for this object, and also to elect new members.)—2. To appoint an Honorary Secretary and Treasurer for these District Meetings. (F. C. Mudd, Esq., of Uckfield, has kindly consented to undertake the post.)—3. To read and discuss papers, etc., of professional interest.

A dinner will be provided at the hotel, at 5.30 (charge, 5s. each, not including wines).

Gentlemen proposing to make communications to the meeting, or to join the dinner, will much facilitate the arrangements by informing the undersigned the day previously.

G. FREDERICK HODGSON, *Hon. Secretary to the Branch*.

52, Montpelier Road, Brighton.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH: PATHOLOGICAL AND CLINICAL SECTION.

THE next meeting of the Section will be held at the Midland Institute, Birmingham, on Friday, November 26th. The Chair will be taken at 3 P.M.

BALTHAZAR W. FOSTER, M.D., } *Honorary Secretaries.*
T. VINCENT JACKSON, }

Birmingham, November 17th, 1869.

BATH AND BRISTOL BRANCH: ORDINARY MEETING.

THE first ordinary meeting of the Session was held at the York House, Bath, on Thursday evening, October 28th. In the absence of C. H. COLLINS, Esq., the President, R. N. Stone, Esq., lately President, took the chair. There were present thirty members and seven visitors. The minutes of the last meeting were read and confirmed.

New Members.—The following gentlemen were elected members of the Branch: Walter Fergus, M.D., Marlborough, and William Sugden, Esq., Horfield. Three other gentlemen were proposed, and will be balloted for at the next meeting.

Special Business.—The meeting was then rendered special, to consider the following resolution, which was proposed by Dr. BUDD, at the annual meeting: "That power be given to the Local Councils to fill in any vacancy that may occur in the Council, *ad interim*, to the next annual meeting". Mr. PRICHARD and Dr. DAVEY spoke in favour of this resolution, which was put to the meeting, and passed unanimously.

Mr. BARTRUM, in a most feeling speech, mentioned the death of Dr. Colborne, President-Elect, and, in the name of the Bath Council, recommended the election of Charles Bleec, Esq., of Warminster, to the vacant office. The proposal was carried unanimously.

Dr. FALCONER proposed a vote of sympathy and condolence with the widow and family of the late Dr. Colborne, on their severe bereavement; which was ordered to be entered in the minutes, and forwarded to Mrs. Colborne. At the same time, Dr. DAVEY proposed a vote of condolence with the President, C. H. Collins, Esq., on the loss which he has recently sustained by the death of his wife.

Papers, etc.—1. Mr. PRICHARD read a paper on Surgical Operations, which gave rise to a discussion on Hospitalism, in which Messrs. A. M. Clarke, C. Steele, Dr. E. L. Fox, and others, took part. An unanimous vote of thanks was accorded to Mr. Prichard.

2. Mr. J. S. BARTRUM exhibited a large Tumour projecting from the Anterior Lobes of the Cerebrum. The subject was a female, aged 34, in service, and had been an attendant at a lunatic asylum. From the year 1859, she had complained of severe headache, loss of vision, habitual constipation, absence of catamenia, and anæmia. In 1861, setons were inserted in the neck, and issues made in the scalp, without relief; and, after this, she was only occasionally seen professionally until her death in 1869. There never was the slightest loss of power over limb or speech, or of any loss of intellect, or of any sense but eyesight; still, she became more and more apathetic, refusing food almost entirely, though she would occasionally wander about in the night, and shew great intelligence in discovering food. At all times, she would be roused, and, on these occasions, was perfectly calm and collected.

3. Dr. E. L. FOX gave notes of a Peculiar case of Hæmatemesis. The patient, a butcher, aged 34, was admitted into the Infirmary, having been ill for seven weeks. Six weeks before, he had considerable hæmatemesis, which recurred twice in the next week, and was followed by three epileptiform attacks, and by a low delirious condition, which lasted above a fortnight. On admission, he was very anæmic; there were tenderness and dulness over the pyloric region of the stomach. The tongue was a little coated; the appetite good. He vomited fluids, but not solids. The bowels were open; the pulse 66, thready. He lived twenty-nine days after admission, without any recurrence of hæmorrhage by the mouth, with very occasional vomiting, but with persistent relaxation of the bowels; the stools being black and fluid. Death took place from exhaustion. The only treatment consisted in support and astringents. On *post mortem* examination, the stomach was found healthy, but the upper portion of the pancreas and under surface of the left lobe of the liver were adherent to each other over a space of the size of a five shilling piece. The portion of duodenum close to the entrance of the common duct, was indurated in the submucous tissue, and the orifice of the duct was larger than usual. Just where the ducts of the pancreas and liver united, there was a small ulcerated opening, which had laid bare the great pancreatic artery or one of the smaller branches to the pancreas of the splenic artery, from which this bleeding originated.

4. Dr. T. H. FLEMMING made some observations on the Use of Erythroxylon Coca in Phthisis.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 9TH, 1869.

GEORGE BURROWS, F.R.S., President, in the Chair.

ON THE PHYSIOLOGICAL RATIONALE OF PNEUMONIA AND BRONCHITIS.
BY JAMES NEWTON HEALE, M.D.

THE author doubted that pneumonia was inflammation of the substance of the lungs, and suggested that it might be another thing. The venous blood was sent to the lungs, not because the lungs needed for nourishment either more blood or different blood than other organs of similar dimensions; but in order that it should be rendered arterial, and that a particular force, comprised in the word "vitality", might be excited. The author thought that a state of cirrhosis, either partial or general, fulfils much more nearly the condition of inflammation of the substance of the lungs than did that of pneumonia. The lungs frequently became "engorged" with blood brought by the pulmonary artery, and this constituted an early stage of, and was indeed nothing else than, pneumonia. This engorgement was not on account of the failure of the nutrition of the lungs, but because the venous blood brought to them failed to become arterIALIZED and transmitted onwards. Many causes were capable of producing such a result. 1. The lungs might be themselves in fault

—e. g., some defect in their structure might prevent the blood from being brought into sufficiently close contact with the air. 2. The blood might not be arterialised because the air itself was in fault. 3. The blood itself might be in fault—e. g., pus-globules, or tuberculous matter artificially introduced, might block up some of the smaller arteries, and prevent the blood from reaching the plexus of the air-cells. 4. The failure of the arterialisation might result from a severance of the continuity, whereby the capillaries in the lungs might become disunited from those in the system at large, where the functional changes in correspondence with the arterialisation in the lungs ought to take place; the vitality which should be created by the concurrence of both being arrested, and the arterialisation failing in consequence. From pneumonia to bronchitis the transition was not difficult. Inasmuch as the plexus of the bronchial membrane and its peculiar secretion were products of the pulmonary bloodvessels, and not of the bronchial arteries, it followed that pneumonia and bronchitis must be nearly allied; but inasmuch as the plexus of the air-cells, when the venous blood was converted into arterial, intervened between the blood sent by the pulmonary artery and that which reached the bronchial membrane, there was a notable distinction between the two. The direct action of the right ventricle was not sufficient to propel the blood into the plexus of the bronchial membrane; moreover, the blood, after it had passed the air-cells, had the option, as it were, of reaching the left auricle by the veins. Any cause which would retard the blood in its transit through the left auricle would increase the quantity of blood flowing through the plexus of the bronchial membrane, and thus have a tendency to produce congestion. Pathological instances were cited, and the following conclusions were drawn. 1. An increased function in the plexus of the bronchial membrane (a copious discharge of bronchial mucus) would diminish any accidental congestion in the left auricle. 2. The increased activity of the function of the bronchial membrane would also bring into play a largely increased aërating surface. The bronchial membrane, in such contingencies, reinforced the action of the pulmonary capillaries, and supplemented it in the creation of arterial blood and of vital force. Pneumonia, then, was an affection belonging to the blood before it had passed through the air-cells, and while it was as yet wholly unarterialised; while bronchitis was an affection of the same blood after it had passed the air-cells, and having, at least to some extent, become arterialised; and the morbid action peculiar to bronchitis took place while the blood was ramifying in the bronchial mucous membrane, and after that particular blood had escaped all risk of pneumonia.

After a few remarks from two Fellows of the Society, Dr. A. T. H. WATERS expressed his dissent from Dr. Heale's views as to the flow of blood through the bronchial plexus. He had shewn in former papers that pneumonia was an inflammation of the pulmonary plexus in the walls of the air-sacs—the vessels concerned in the nutrition of the lung. The idea that pneumonia was a result of mechanical interference with the circulation was disproved by its occurrence after burns; where it was rather of reflex origin. Dr. Heale's hypothesis was a consequence of his views on the arrangement of the blood-vessels of the lungs; but with these views he (Dr. Waters) could not agree.

OBSERVATIONS ON THE TREATMENT OF PNEUMONIA, WITH AN ANALYSIS OF CASES TREATED BY THE AUTHOR.

BY A. T. H. WATERS, M.D., F.R.C.P.

The paper was founded on the results of treatment in 53 consecutive cases of acute pneumonia treated by the author in the Liverpool Northern Hospital; and was accompanied by a tabular statement presenting the leading features of each case. The ages of the patients were: under ten years, 1 case; between ten and twenty years, 7 cases; between twenty and thirty years, 25 cases; between thirty and forty years, 12 cases; between forty and fifty years, 7 cases; between fifty and sixty years, 1 case. All the patients were males except two. A large proportion of them were sailors. Many were strong, robust-looking men, whose previous health had been good, and in whom the disease had existed for a few days only before admission into the hospital. The disease was single in 44 cases, involving from one-half to the whole of the lung; it was double in 9 cases. Of the single cases, the right lung was attacked in 20, the left in 24. Of the double cases, the left lung was most involved in 6, the right in 1. Both lungs were equally involved—viz., one-half—in 2 cases.

Treatment.—Venesection was not practised in any case. Only 3 cases were cupped; and only 2 had leeches applied. Whenever antimony was given, it was in small doses—from one-twelfth to one-fourth of a grain—except in 2 instances, in which it was given in doses of three quarters of a grain and a grain. In 33 cases no antimony was given. In a large proportion of the cases some alcoholic stimulant was given early. In 30 cases, alcoholic stimulants formed the main therapeutic agent; and in some of the most severe cases no other medicine was

given. In 6 of the remaining cases, stimulants were given after a few days' treatment by other means. The stimulants were given at regular intervals, frequently with food, beef-tea, or milk. In the instances marked by a very rapid pulse and great dyspnoea, brandy was given every hour, or every hour and a half. Mercury—calomel with opium—was not given in any case. In one case blue-pill was given twice a day for six days; but no soreness of the gums was produced. In no other instance was mercury given, except as a purgative in combination with some other drug. In every case nutrients were allowed freely—viz., beef-tea and milk from the commencement of the treatment, and solid food as soon as the patient could take it.

Results.—Of the 53 cases 1 died. In this case, after convalescence had apparently set in, and the pulse had fallen to 80, effusion into the pleura took place somewhat suddenly, and to a large extent, and death soon followed.

The average duration of the 52 cases that recovered, from the commencement of treatment to the period of convalescence—namely, when all active symptoms had subsided, when the pulse had fallen to a natural or nearly natural standard, and when the patient could take solid food—was eight days and a sixth.

The date of the commencement of the attack was clearly ascertained in 41 cases. The average duration of these, from the onset of disease to the time of convalescence, was eleven days and a half.

The average number of days during which the 52 patients remained in the hospital was twenty-four days and a fifth; but of these patients, 6 were kept in for a long time in consequence of impaired health from other causes besides pneumonia—namely, from rheumatic fever, tubercular symptoms, and gangrene of the lung, great debility, and emphysema. Excluding these 6 cases, the average of the remaining 46 was twenty days and a half. The patients were, for the most part, not discharged until they had gained sufficient strength to be able to resume work.

The results of these cases tended to prove that pneumonia was far from being fatal, and that under a treatment which consisted in supporting the patient, and in abstaining from depletory or depressing measures, its mortality was low. None but hospital cases had been tabulated, as these alone were available for public reference; but the author had pursued a similar line of treatment in cases met with in private practice.

The author did not give large doses of any of the so-called antiphlogistic remedies. Nourishment was never withheld if the patients could take it, and powerful purgatives were not resorted to. Stimulants were frequently prescribed at an early period, and they were often mainly relied on. General bloodletting was never practised, and local bleeding only occasionally (in five of the cases). No remedy was specially curative of pneumonia. Antimony in small doses was useful in a few cases; in no case should its administration be prolonged.

As to the administration of alcohol in pneumonia, no fixed rules could be laid down. Many cases of pneumonia might be conducted to a satisfactory issue without alcohol; and, in others, alcohol aggravated the symptoms. There were also cases which were decidedly benefited by it. To distinguish between these cases was sometimes difficult. When the pulse was very quick, the dyspnoea urgent, and the disease extensive, the author never hesitated to prescribe stimulants freely. He did not prescribe mercury—calomel with opium—in the disease. It possessed no special properties for promoting absorption of effused matters. It was useful as a purgative; but, if given to produce salivation, would generally be prejudicial. Opium was useful in relieving pain in the side, in allaying cough, and procuring sleep. Ipecacuanha was apparently useful in some cases. The author frequently gave it with stimulants in the pneumonia of children. Carbonate of ammonia, chloric ether, and bark were also often given, either alone or in conjunction with alcoholic stimulants, and quinine as soon as the acute symptoms had subsided. Salines were not, as a rule, administered.

In the early stages of a severe attack there was but little desire for food; and there was a risk that nourishment might be withheld too long. Beef-tea and milk might be safely allowed even in the acute stage, and as the case progressed the diet should be more liberal. In cases requiring an early and free administration of alcohol, nutrients should be given liberally from the first.

The author believed that mild counterirritation was useful in the early stages of an attack, and that, later, blisters were frequently of service. In forming an opinion of the most appropriate treatment in any case of pneumonia, regard must be had to the constitutional condition of the patient, the frequency and character of the pulse, and the antecedent circumstances of the patient, rather than to the amount of lung involved, or the stage which the disease has reached.

Mr. WYATT said that important indications as regarded the administration of alcohol were to be derived from the temperature of the pa-

tient. He asked, also, at what date resolution appeared in Dr. Waters' cases.—Dr. BURDON SANDERSON said that, in the London hospitals, the fact that a case was called one of pneumonia gave very little information. Essentially, there were two different sets of cases: one in which pneumonia was the primary disease; and another where bronchitis was present from the first. In cases of the former kind, the disease lasted a longer time, and was lobular rather than lobar. In London, the bronchitic or catarrhal form was the more common. In order to shew the value of the treatment, there should be an abstract of the cases.—Dr. HEALE thought that Dr. Waters's remarks on treatment were opposed to the theory of pneumonia being a local inflammation, and led to the conclusion that the best treatment of pneumonia was that which relieved the impeded pulmonary circulation.—Dr. SANSOM thought that many of the cases of pneumonia referred to were of septic origin, and that alcohol did good by its action as an antiseptic, and by its property of stimulating the vaso-motor nerves.—The PRESIDENT called attention to the fact that, out of 44 of Dr. Waters's cases, the pneumonia was on the left side in 24. This was contrary to the received statistics.—Dr. O'CONNOR said there was a want of history of the cases; and thought that the tongue afforded better indications for treatment than the pulse.—Dr. WATERS had not made thermometric observations; but had personally satisfied himself as to the nature of the disease in each case by the ordinary means of diagnosis. The leading particulars of the cases were all given in a table which accompanied the paper. He thought that, in most of his cases, bronchitis had not preceded the pneumonia. All were cases of uncomplicated pneumonia, with no advanced pulmonary, cardiac, or renal disease. He believed that pneumonia partook of the nature of a blood-disease, and also of a local inflammation of the lung itself. He had found alcohol to do good both in very young subjects (3 to 6 years) and in the aged (80).

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, NOVEMBER 3RD, 1869.

GRAILY HEWITT, M.D., President, in the Chair.

Dr. EDWARD JONES of Sydenham exhibited an Anencephalous Fœtus. In addition to the cranial deformity, there was a spina bifida in the cervical region.

Mr. WORSHIP of Sevenoaks exhibited, and gave the particulars of, a small Extrauterine Fœtation in the right Fallopian Tube. The uterus was lined with a decidua.

Dr. MADGE gave particulars of four cases of Congenital Imperforate Vagina, and one case of Congenital Phimosis, in the same family.

Dr. AVELING read a paper on a new principle of treatment of Prolapsus and Procidentia Uteri. He proposed to cause the uterus to assume such an angle with the vagina that it could not readily enter and pass through it. In a case of complete procidentia, which he cured by removing a portion of mucous membrane from the anterior vaginal wall, he found that retroversion had resulted, and he attributed the success of the operation to the displacement caused. He believed that the most useful pessaries were those which pressed upwards the anterior vaginal pouch, and thereby caused slight retroversion. Displacement posteriorly to the extent of fifty degrees he believed to be sufficient to prevent prolapsus.—Dr. ROUTH doubted whether Dr. Aveling's was really a case of procidentia. Many of the cases of so-called procidentia were really examples of elongation, described by Huguier. In these cases, Huguier performed the perineal operation; which, he believed, was successful through the loss of blood. Dr. Routh thought that, if retroflexion were produced by Dr. Aveling's method, it would give rise to trouble.—Dr. BARNES said that, although Huguier's view was correct in the majority of cases, there were instances where the whole uterus could be felt outside the vulva. In these cases, the organ was generally retroflexed.—The PRESIDENT thought that the retroflexion must have existed before the operation.—Dr. W. ROGERS thought that procidentia uteri was not uncommon. He had successfully operated on several cases according to Dr. Marion Sims's plan.—Dr. AVELING said that he did not propose his plan of treatment for elongation of the cervix.

Dr. BARNES read a paper on Uterine Hæmorrhage after Labour. He endeavoured to define the conditions on which arrest of hæmorrhage after labour depended; the action of the common remedies; and the indications for particular remedies. The ordinary remedies excited contraction of the uterus; this presupposed nerve-force enough to respond to excitation; but, when this was exhausted, remedies failed. It became then necessary to seek a new power. This was found in styptics, like perchloride of iron, which coagulated the blood in the mouths of the open vessels, and corrugated the inner surface of the uterus. Ergot, compression of the uterus, and cold, should not be trusted if

they failed to act quickly. If persevered in beyond this point, they did harm. Ergot and cold added to the depression; kneading might bruise the uterus; all were apt to occasion puerperal fever. The perchloride had, in several cases, been followed by death when used for injecting nævi; but this was essentially different from injecting the uterus. In his practice, he had observed three orders of cases: in the first, all recovered well, the hæmorrhage being immediately stopped. In the second series, recovery occurred, phlegmasia dolens supervening; but this was not unusual after severe hæmorrhage. In the third, death followed; but the patients were moribund when the remedy was applied. Here the remedy was transfusion. The practical lesson was not to persist too long in the use of cold, kneading, and other remedies, but to resort to the perchloride before collapse had set in. Dr. BARNES showed a convenient case, constructed by Krohne and Sesemann, containing a set of his dilators, a Higginson's syringe with uterine tube, and a bottle for perchloride of iron.—Dr. ROGERS had used the perchloride of iron in five or six cases during the last fifteen years—always with success. He thought Dr. Barnes had omitted to mention galvanism.—Dr. CLEVELAND referred to the difficulty of determining when the application of the ordinary means should cease, and of leaving the patient in order to prepare an injection. An India-rubber bottle, attached to a small catheter, was more easily used than Higginson's syringe. He had seen vomiting do good on one or two occasions. He asked whether the use of stimulants was not open to objection.—Dr. WYNN WILLIAMS had for a long time used the perchloride of iron, applying it by means of a sponge to the interior of the uterus; the sponge was left in the uterus with a string attached.—Dr. BRAXTON HICKS said that there was much difference in the state of the interior of the uterus after the removal of the placenta. Sometimes the large apertures of the sinuses described by authors were absent. In other cases the sinuses, in their oblique passage through the uterine walls, abutted on the line of separation of the placental decidua; and when the placenta was removed, severe hæmorrhage would result. In the former case, the perchloride would readily act; in the latter, probably even it would fail to arrest hæmorrhage.—Dr. HALL DAVIS had for several years employed iron solutions with success. He found the permanganate, the persulphate, and the perchloride, about equally successful.—Dr. PLAYFAIR urged the importance of the prevention of uterine hæmorrhage by carefully following up the contracting uterus with the hand. He confirmed the remarks of previous speakers as to the perchloride of iron.—Dr. TYLER SMITH thought that a full dose of ergot immediately after the birth of the child would in most cases prevent dangerous flooding. The forceps should be substituted for ergot during labour, and the ergot given at the moment of birth, or while the head was passing the vulva.—Dr. AVELING feared that the styptic fluid might enter the circulation and produce thrombosis.

After some remarks from the President, Dr. BARNES replied; and the meeting adjourned.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, NOVEMBER 2ND, 1869.

RICHARD QUAIN, M.D., President, in the Chair.

Mr. FAIRLIE CLARKE showed a boy who had recovered from a severe Fracture of the Skull. Several pieces of bone had come away; and a hernia of the brain, of the size of a fist, had ensued, which was entirely cured by pressure. There were no symptoms of paralysis.—Mr. HULKE had seen two similar cases—one of a boy under the care of Mr. Lawson, who recovered, but who came to the Middlesex Hospital some months afterwards with a tumour containing fluid in the situation of the hernia; and a second case, of a man with the right parietal bone much shattered, and the brain-substance hanging out, some of which was adhering to the man's fingers. He, however, recovered.

Dr. ANDREW showed a Malignant Tumour of the Cerebellum from a woman aged 45, whose chief symptoms were violent sickness and headache. There were two tumours found in the cerebellum, and several in the cerebrum, presenting the ordinary appearances of cancer.

Dr. ANDREW also exhibited what he supposed to be Cysticercus of the Brain, from a man aged 32, who suffered from violent pain in the back of the head and vomiting. There was no paralysis. He had for ten years, up to three days before his death, suffered from a discharge from the ear. After death, he found, at the site of the medulla, a membranous mass, which came out upon the fourth ventricle, and in which small corpuscular matter was found.

Dr. ANDREW next exhibited a Tumour of the Pons Varolii from a boy.

Mr. MARSH exhibited a Pharyngeal Polypus, which stretched into both nostrils, from a child nine years old. It was gelatinous, except at the base, where the tissue was more of a fibrous character.

Mr. COUPER showed a Stricture of the Rectum from a case of Colotomy in a woman who died with chloroform-vomiting. The stricture had followed suppurating inflammation of the ovaries, causing contraction and numerous sinuses in the neighbourhood of the rectum, uterus, and vagina.

Dr. PAYNE presented a specimen taken from a woman aged 37, in which a Pin had become imbedded in the Vermiform Appendix. About a fourth of the pin's length projected; the remainder was surrounded by concretion. There were several abscesses in the liver; but no relation between these and any of the systems of the hepatic vessels was discovered. A second case was brought forward by Dr. Payne, in which there were marks of mischief in the cæcum and appendix, without the presence of any foreign body, and in which were numerous hepatic abscesses connected with the branches of the portal vein, and in the neighbourhood of the pancreas, behind the peritoneum.—Mr. DE MORGAN related the case of a man in whom a pin appeared outside, probably from the cæcum or the appendix. He recovered.—Dr. DICKINSON thought that cherry-stones, which were so frequently spoken of as being found in the appendix, were more often mere concretions. In Switzerland, where the fæces are often found full of cherry-stones, they seem to pass through without producing mischief. He then related the case of a child two and a half years old who had swallowed a pin, which appeared shortly afterwards at the anus.—Mr. HULKE had extracted from the anus a stout needle and thread which had been swallowed.—Dr. COOPER ROSE had met with a patient who swallowed some false teeth, which, however, were passed intact.—Dr. MURCHISON believed that foreign bodies were frequently the cause of mischief in the appendix. Concretions had generally some foreign body as a nucleus.—Dr. DICKINSON had found, in some cases, that the nucleus was formed of hair.—Mr. HOGG raised the question as to the propriety of surgical interference in these cases.—Mr. HENRY ARNOTT referred to a case of a woman under the care of Sir William Jenner, in whom the presence of cherry-stones, which were retained in her intestines for many years, was demonstrated by succussion during life, and found at the *post mortem* examination.

Mr. MAUNDER exhibited an Enormous Tumour of the Left Thigh, for which he amputated the limb, taken from a female aged 28. She had suffered for five years from discomfort in the knee. Two years ago, the circumference of this knee was only one inch greater than that of the opposite side. It measured now twenty-eight inches in circumference, as compared with twenty-three on the right side. There was no evidence of malignant disease elsewhere.—Mr. COUPER had operated in two similar cases, in each of which there was a history of six or eight months' disease. One patient was eighteen years old, and the other twenty. One died a year afterwards, of cancer of the lung; the other, of malignant disease of the stomach.

Mr. THOMAS SMITH exhibited a Congenital Fatty Tumour simulating Spina Bifida, which he had removed from a child four months old. It was, at birth, of the size of a hen's egg, and now of a foetal head.

Mr. SMITH also exhibited an unusual form of Double Spina Bifida, which had been removed from a child fourteen months old. It was situated over the upper part of the sacrum and lower part of the lumbar regions. It was a congenital cystic hygroma. Eight ounces of clear fluid were drawn off from the cyst. The child died a fortnight afterwards, of spinal meningitis. The specimen consisted of two sacs—a small anterior, which had not been tapped; and a large posterior, which had been tapped. The larger one communicated with the arachnoid space, and the other with the posterior axis canal of the spine.

Dr. CAYLEY showed the Larynx and Pharynx of a man who had been suffocated by Spasm of the Glottis, caused by the presence of particles of tobacco in the larynx.

WESTERN MEDICAL AND SURGICAL SOCIETY.

FRIDAY, OCTOBER 15TH, 1869.

JAMES LANE, Esq., President, in the Chair.

THE PRESIDENT having given a short address, exhibited a Fibro-cellular Tumour, weighing five ounces, which he had removed from the scrotum of a child two and a half years old. The tumour was first noticed when the boy was two months old, and enlarged rapidly, but for the last six months it had not increased in size. The testis was perfectly sound, and situated behind the tumour, but not involved in it. The case was one of considerable interest, from the extreme rarity of the growth in such a situation, at so early an age, and of the difficulty, before the operation, of forming a correct idea of its nature, and of ascertaining whether the testicle was or was not implicated in it. That

organ was in no way injured in dissecting away the tumour. The wound in the scrotum rapidly healed.

Dr. DANIELL exhibited some Extract of Beef Suppositories which he had used successfully in a case of obstruction of the intestines, when beef-tea, etc., could not be retained.

Dr. MARTYN mentioned the case of a child (to whom he was called) who was found dying of some obscure affection of the throat. The sub-maxillary glands were swollen. There had been no scarlet-fever rash.

MEDICAL SOCIETY OF LONDON.

NOVEMBER 8TH, 1869.

PETER MARSHALL, Esq., President, in the Chair.

Dr. SANSOM read notes of a case of Cardiac Disease, with Cerebral Complications, illustrating certain difficulties of diagnosis.

Mr. WILLIAM ADAMS read a paper on the Treatment of Hip-joint Disease. The author divided hip-joint disease, in its ordinary form, as it usually occurs in children from four to fourteen years of age, into three stages: first, extending from the commencement of the symptoms to the formation of abscess; second, extending from the formation of abscess to its bursting or opening; third, complete destruction of the joint, more or less extensive disease of the bone, dislocation, etc. He referred to the different views entertained of the pathology of the disease, with respect to its commencement as a primary affection in the cancellous tissue of the bone, or in the articular cartilage, the synovial membrane, or the round ligament; and alluded to the difficulty of determining this point by *post mortem* examinations. Mr. Adams believed that hip-joint disease usually commences in the round ligament, as the result of an accident in which this ligament is violently strained or partly torn; and that from this spot, as a centre, the disease extends to the rest of the synovial membrane, the articular cartilage, and, at a later period, to the bone. In some cases, other structures might be primarily involved; the morbid process then being primary necrosis affecting the cancellous tissue at the head of the bone. Considering the destructive character of the disease to depend upon a low form of chronic inflammation, with constitutional debility, occurring generally in a strumous diathesis, Mr. Adams was opposed to the application of leeches, and to all severe counterirritation; also to antiphlogistics and to what is called alterative treatment. He relied upon rest to the joint, with warmth and moisture constantly applied, together with tonics, with cod-liver oil, hypophosphite of lime, and iron. Complete recumbency he thought necessary only for a short time during the more acute symptoms, with severe pain, when he used either the straight splint or the more modern plan of extension, by weights attached to the leg. Generally, Mr. Adams employed a leather or gutta-percha splint of larger size than ordinarily used, and moulded to the side of the body and limb whilst the latter was held in the straight position, so as to overcome all muscular contraction; chloroform being administered, in some instances, whilst this was being done. The first effect of such a splint, when properly made, was generally to relieve the pain, and this it did completely in most instances. The patient was then enabled to move about with crutches; this, Mr. Adams considered, materially improved the general health.

HARVEIAN SOCIETY OF LONDON.

OCTOBER 21ST, 1869.

E. HEADLAM GREENHOW, M.D., in the chair.

Varicocele. By GEORGE G. GASCOYEN, F.R.C.S.—The author gave a somewhat full description of the spermatic circulation, shewing that the dilated or *varicose* condition of the veins which normally exists within the scrotum, and the peculiar anatomical disposition of the spermatic vessels, offer difficulties to the flow of blood from the testes, which necessitate other auxiliaries, in addition to those met with elsewhere, to insure the venous return. The extraordinary means provided to accomplish this object, are the dartos tissue, the cremaster muscle, the arrangement of the abdominal muscles around the cord in the inguinal canal, the relation of the spermatic vessels within the abdomen to large arterial trunks, the compression to which they are subjected between the psoas muscle and the intestines, and the powerful influence exerted upon them by the movements of respiration. The more frequent occurrence of a varicocele on the left side was accounted for by the greater length of the left spermatic vein, which hangs lower in the scrotum, and joins the venous system at as much higher level than the right, so that there is a difference of nearly two inches between them. If, therefore, the spermatic circulation become defective, the resulting congestion and its consequences will be much greater and earlier recognised on the left

side than on the other. The different direction in which the blood from the left spermatic vein joins that from the renal, conduces to the formation of a varicocele. If this arrangement were such as to favour congestion of the spermatic vein, its entrance would be guarded by a valve to prevent regurgitation, as is always the case on the right side. And, though general venous congestion may exist, sufficient to occasion dropsy, or a varicose condition of the lower extremities, it very rarely produces a varicocele; nor does kidney disease, even though of old standing and attended with much engorgement of the renal vessels. The junction at a right angle of long veins with larger trunks, is not an unusual or an unfavourable mode of termination. Mr. Gascoyen did not think that a collection of fæces within the sigmoid flexure can operate in the production of a varicocele; since, when this gut is distended, its loose peritoneal attachment allows it to float forwards into the abdominal cavity. The various causes of the disease, and several other subjects connected with it, including its diagnosis and results, were then described. The author had never known the atrophied testicle to be restored, the diminished sexual power to be improved, or, when lost, to be regained by any operative procedure. As the spermatic veins, when permanently dilated, cannot be made to resume their natural size by any method of treatment, a varicocele cannot be *cured*, although much may be done to relieve it; and, in the vast majority of cases, the so-called *palliative* treatment is sufficient to accomplish this, and should, therefore, always be carefully tried. After the veins have been emptied, and the swelling of the scrotum has subsided, a well fitting suspensory bandage can nearly always be worn. The very few instances in which an operation may be required, are: when the veins are so large and elongated, and the scrotum is so much stretched and attenuated, that the pressure of a bandage cannot be tolerated; or, in the case of a labouring man who is unable to retain any kind of support in position during work; or when, without obvious reason, there is constant and severe pain in the cord; or when, without much physical pain, the mental distress of the patient is great. The objections raised to the *operative* or *radical* method of treatment, are the fatal results which have occurred in some cases, and the very formidable complications which have arisen in others; as well as the unsatisfactory condition of many of the patients after submitting to operation. Many require to wear a suspensory bandage permanently, afterwards; in a certain number, the varicose condition returns to a greater or less extent; in some, nervous pains continue along the cord for an indefinite length of time; and, in nearly all, complete atrophy of the gland ensues. The author was of opinion, that only in very exceptional cases is it justifiable to risk life by operation. Of the various operative proceedings, compression of the veins by means of harelip pins and twisted sutures, as practised by Velpeau, Liston, and others, was recommended as offering the best result and, perhaps, the least danger.

CORRESPONDENCE.

THE CONTAGIOUS DISEASES ACT.

SIR,—I regret that I should have inadvertently overlooked a letter in your issue of October 23rd, signed "H. H. P." Your correspondent states that the majority who concurred in passing a motion at the Social Science Congress, Bristol, strongly condemning the Contagious Diseases Act, were clergymen. This is an error. The meeting was composed of a few clergymen of the Church of England, a few dissenting ministers of various denominations, professional gentlemen, a considerable number of members of the Bristol town council, leading men of business, and other prominent citizens of Bristol, and a considerable number of gentlemen of the same status from other parts of the country to the number, probably, of upwards of two hundred. A company of gentlemen more influential, more intelligent, or of more practical good sense, and greater ability to arrive at a sound conclusion from the evidence given, it would be difficult, if not impossible, to bring together on any subject whatever.

The meeting very properly insisted on its right to put the resolution, at the close of a long debate and most impartial discussion of both sides of the question; and it was entirely owing to the persistent efforts of the supporters of the Act to ignore or misrepresent that feeling, and avoid passing any resolution at all, that it became necessary on the part of the opponents of the Act to protest against such improper interference. The resolution which was ultimately put and carried by a very large majority, was as follows:—

"That this meeting protests against the secret legislation which has marked the progress of the Contagious Diseases Act in all its phases; deploras its extension to many towns, in no sense garrison towns, which has been recently legalised without the knowledge or consent

of the people, and without any public or proper discussion of the subject; and considers its extension to the civil population, will not only fail in its professed object of repressing disease, but will also be fraught with the utmost injury to the best interests of society."

Your correspondent says, that the Contagious Diseases Act does not license prostitutes. That it does so, however, and that to do so is its real intention, no one can doubt. It reduces the old laws against prostitution to a dead letter, and inflicts penalties only for "harbouring" diseased prostitutes. Any Act which forbids prostitution, and makes it illegal unless certain conditions are complied with, sanctions it, and makes it legal if they are complied with. Dr. Balfour, when asked before the Commons' Committee whether the placing of lavatories in soldiers' brothels did not seem like legalising prostitution? answered—"You have legalised it by this Act."

No one can have seen the working of this law abroad without dreading the application of such a curse to our own land. It debases women, debauches men, sanctions the introduction of spies into our social system, destroys the liberty of the subject of which we so proudly boast, and not only fails to check disease, but also (for reasons which space will not permit me to detail,) tends to increase it. At all the military stations where it has been applied, disease has increased; a fact which I can prove from statistical tables supplied to the Parliamentary Committee.

One of the most recent investigators of the subject, Dr. Drysdale, stated a few weeks ago—"I am much interested in seeing that plague of modern days (syphilis) abated in its ravages, and were this plan of our *confrères* likely to accomplish this end, I would support it. But, is it likely to do so? Let us see. I told you that I had visited frequently the two hospitals in Paris, L'Oursine and the Midi, each of which was full, and each of which contained three hundred beds, and that one hundred out-patients daily come to the Midi for advice. But I found at the Hôpital St. Louis that an immense proportion of the in and the out patients were venereal cases. At the other hospitals also I found the same thing. So that I asked myself 'Is it true that the Parisian system, so much talked of, has really the effect in large towns of lessening the spread of venereal contagion?'

"And, sir, I had no hesitation in replying in the negative to this question. Well, then, if it does not lessen venereal contagion, has it no evils of itself? It has! The women of the Dispensaire may be compared to white slaves. They have no liberty, but are as completely under the *espionage* of the police as a galley slave is. The Habeas Corpus Act, of which we boast, can have no meaning for these women. They can be shut up in a gloomy prison, St. Lazaire, at any moment, for any length of time the physician pleases. I would not like to be that physician. If you call that equality of rights, what is inequality?" Commending these facts to the notice of your readers.

I am, etc., ONE WHO WAS THERE.

THE SOHO SQUARE HOSPITAL.

SIR,—Your remarks on the Paying Wing at the Soho Square Hospital are well timed, and deserve the thanks of the profession. I have one fault, however, to find with them. They are not sufficiently decided. Soho Square Hospital, from its foundation to this very day, has borne a character far from enviable, and which has very properly caused it to be shunned by the profession. It has tried to make a position, as in the present instance, not by honest professional work, but by enlarging its influence almost entirely through the purse of the charitable but unthinking public. The new paying wing, so far as it has gone, savours much of the same spirit; and, until its administration is changed as you suggest, the profession must discourage the hospital without flinching.

November 1869.

I am, etc.,
A MEMBER OF THE ASSOCIATION.

THE APOTHECARIES' HALL, DUBLIN.

SIR,—With reference to your leader in the JOURNAL for October 23rd, with the sentiments of which I cordially agree, I beg leave to state that, in the system of examinations pursued at the Apothecaries' Hall, Dublin, there seems to be a very near approximation to your suggestions. These examinations are spread over seven days. Three days are given to the subjects included in the first part of the medical course, after the expiration of the first two years of professional study; and three days also to the subjects comprised in the second part, at the termination of the fourth year of study. The examinations are carried on by means of written and *viva voce* questions. Each subject has an hour devoted to it, and practical and demonstrative tests are resorted to in every case; the whole being wound up by a day's clinical

examination on a variety of cases in hospital and on out-dispensary patients.

The examinations are thus not only comprehensive, but are also conducted in the practical and digestive manner which you have recommended.

I am, etc.,

C. H. LEET, M.D.,

Member of the Court of Examiners.

Dublin, October 1869.

N.B. The liniment in "the alleged poisoning case in Dublin", referred to in your JOURNAL of October 23rd, was not compounded by the Apothecaries' Hall, but was supplied from another establishment.

C. H. L.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

NATURAL SCIENCE SCHOLARSHIP.—St. John's College offers an exhibition for Natural Science of the value of £50 a year. The examination will be on April 29th, 1870, and will be open to all persons who are not members of the University, as well as to undergraduates in their first term. The necessary particulars may be obtained from the Rev. T. Bonney, St. John's College.

OBITUARY.

RICHARD GRIFFIN, J.P., M.R.C.S., L.S.A.

ALTHOUGH resident, and practising in Weymouth for more than a quarter of a century, the subject of this memoir was a native of Norwich, where his father had settled, when the troubles of the French Revolution compelled him to leave Passy. Mr. Griffin, sen., lived to the age of 81, and had a very large family, of which Richard, who was born in 1806, when his father was 70 years of age, was the youngest. He received his education in Norwich, and was a pupil, and afterwards house-surgeon, of the Norwich Hospital. To this he considered himself indebted for the most valuable part of his medical education, and has left legacies both for the Museum and the Hospital. He afterwards entered as a pupil of St. Bartholomew's Hospital; and soon afterwards obtaining his diploma, commenced practice in Norwich. It is perhaps not out of place to mention that Dr. Robert Barnes was one of his pupils, and regards him with an almost filial reverence and affection, having dedicated the pages of his forthcoming volume to the subject of our sketch.

Further details of his life in Norwich and Weymouth, and of his public labour in connection with the Poor-law Medical Service, will be found in Ernest Edwards' *Biographical Photographs* (Churchill; and Bennett, Bishopsgate Street). It is not too much to say that these labours, undertaken for no personal motives of gain or aggrandisement, were greatly the cause of those repeated attacks of paralysis which terminated his useful life at the age of 63. Some short time ago a testimonial, recognising the value of these services, was presented to him, and in the February following he had an attack of right hemiplegia, with loss of speech. From this he recovered sufficiently to partly resume his practice, although his powers of expression were much impaired, but not, apparently, his intellectual faculties. So active a mind could not but chafe and fret against the forced inactivity to which he was thus subjected.

In January last the paralysis again increased, and in August he had several convulsive attacks, whilst about a month ago he was seized with paralysis on the other (left) side; and so, with gradually weakened and failing powers, succumbed at last, and died on Friday, November 12th, 1869.

In addition to numerous papers, chiefly on Uterine Pathology—published in the medical journals—and a host of pamphlets and memoirs on the Poor-law question, he was no mean ornithologist, and had collected all the materials for a *magnum opus* on British birds, including paintings of the male, female, and eggs, of every known variety, which he was only deterred from publishing by assurances, on the best authority, that the cost would be ruinous. A paper of his on the "Mammary Glands of the Duck-billed Platypus", read before the Royal Society in 1831, will be found in the *Lancet* for 1846. Of such a man we are not surprised to hear that he was the friend and companion of his children, sharing their sports "as if he, too, were a boy", and guiding their studies—himself helping to make their toys—teaching them to stuff the birds and beasts they had shot or collected, and to make the cabinets and cases in which they were to be stored.

Whether as the father or the friend, the magistrate or the benefactor

of the poor, the practitioner of medicine or the man of science, the private gentleman or the public agitator of the wrongs of the Poor-law Medical Service, few lives have had more of completeness than Richard Griffin; and he has shown that "sweetness and light" are not necessarily excluded by earnestness and the hate of wrong-doing.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on November 16th:—

Barrett, Ashley William, Stepney (London)
Brodie, Edward Fitzgerald, Dublin (Dublin School)
Christian, John Griffith, Rhyl, North Wales (St. George's)
Crisp, James Luke, South Shields (Newcastle School)
Davies, Francis Pritchard, Birmingham (Edinburgh and Birmingham Schools)
Durham, Frederick, Northampton (Guy's)
Elphick, Edward, Adelaide, South Australia (Guy's)
Gaitskill, Edward Forbes, Streatham (Guy's)
Harris, James Alfred, Audley, Staffordshire (Edinburgh School)
Hiron, John Hickman, Studley, Warwickshire (Birmingham School)
Hobley, Simon Halford, Carnarvon (King's College)
Hutton, Robert James, Lever Street, Islington (St. Bartholomew's)
Joy, Frederick William, Northwold, Brandon (University College)
Laslett, Frederick William, Old Charlton, Kent (Guy's)
Little, Charles Edward, Lynn, Norfolk (Charing Cross)
Mallam, William Prior, Kidlington, Oxon (Guy's)
Page, Herbert William, Carlisle (Cambridge and London)
Rowland, Edward Roger, Send Woking (St. George's)
Saunders, William Egerton, Peckham (Guy's)
Seaton, Edward, Surbiton (St. Thomas's)
Simon, Maximilian Frank, Blackheath (St. Thomas's)
Smith, Richard Thomas, Hebden Bridge, Yorkshire (University College)
Snell, Enoch, Leeds (University College)
Solly, Stephen Francis, St. George's Circus, S.E. (Westminster)
Symons, Henry Edward, Stoke Newington (St. Bartholomew's)
Stables, Walter William Godfrey, Wandsworth (St. Bartholomew's)
Taylor, Frederick Eyres, Norwich (King's College)
Thompson, Philip, Penshaw, Durham (Manchester School)
Walpole, Arthur Herbert, Norwich (Newcastle School)

Admitted members on November 17th:—

Barker, Richard Henry, Hungerford, Berkshire (St. George's)
Bennett, Frederick Charles, Salisbury (University College)
Bolton, John George Elliott, Mauritius (University College)
Brooks, Samuel Brewer, Kirton, Lincolnshire (University College)
Clark, Andrew, Greenford, Middlesex (University College)
Davies, William Bowen, Llandovery (St. Bartholomew's)
Derbyshire, Francis, Manchester (Middlesex and Manchester)
Fisher, Frederick Alfred, Holloway (St. Bartholomew's)
Gill, William, Torquay (London)
Harris, Henry, Denmark Hill (St. Thomas's)
Harrison, Henry Frank Egbert, Fareham, Hants (St. Mary's)
Hodges, William, Bristol (Bristol School)
P'Anson, William Andrew, Newcastle (Newcastle School)
Lawrence, Charles Hinds, Adelaide, South Australia (University College)
Ley, John William, South Moulton (London)
Mayhew, Charles Henry, Kingston, Jamaica (King's College)
Mitchell, Joseph, Leicester (St. Thomas's)
Norton, Herbert, Forest Hill (St. Bartholomew's)
Risdon, Alfred, Dolton, North Devon (St. George's)
Roberts, Richard Lawton, Ruabon, North Wales (University College)
Rosser, Walter, Risca, Monmouthshire (St. Thomas's)
Towt, George Frederick Ewens, Crewkerne, Somerset (Charing Cross)
Vachell, Charles Tanfield, Cardiff (King's College)

It is stated that only three candidates were referred the first day, and it is deserving honourable mention that all passed on the 17th inst.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, November 11th, 1869.

Fenton, George, Great Smith Street, Westminster
Sers, Robert Hanslip, Epperstone, near Southwell

The following gentleman also on the same day passed his first professional examination.

Sleman, John, St. Mary's Hospital

UNIVERSITY OF LONDON.—The following is a list of the candidates who have passed the Second M.B. Examination. Pass Examination.

First Division.

Baxter, Evan Buchanan, King's College
Buck, Thomas Alpheus, Guy's Hospital
Dessé, Ethelrid, University College
Dukes, Clement, St. Thomas's Hospital
Gowers, William Richard, University College
Hall, Francis De Havilland, St. Bartholomew's Hospital
Marshall, Henry Flamank, Birmingham General Hospital and University Coll.
Rayner, Edwin, B.A., Paris and University College
Snow, Herbert Lumley, Queen's College, Birmingham
Stocker, James Reginald, Guy's Hospital

Thomas, John Davies, University College
Willoughby, Edward Francis, University College

Second Division.

Black, John Gordon, College of Medicine, Newcastle-upon-Tyne
Blackley, John Galley, Royal Manchester School of Medicine
James, John, University College
Secombe, Edward Hepburne, King's College
Smith, Charles James Hardy, University College

MEDICAL VACANCIES.

The following vacancies are declared:—

- BRIGHTON AND HOVE DISPENSARY—Resident House-Surgeon: applications, 30th November; election, 7th December.
CENTRAL LONDON OPHTHALMIC HOSPITAL, Gray's Inn Road—Two Assistant-Surgeons.
CHARING CROSS HOSPITAL—Physician-Accoucheur: applications, 30th. Lecturer on Botany: applications, 27th.
CHOLSEY (Berkshire) NEW PAUPER LUNATIC ASYLUM—Resident Medical Superintendent: applications, 16th Dec.
COLERAINE UNION, Co. Londonderry—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Articlave Dispensary District: election, December 7th.
EAST WARD UNION, Westmoreland—Medical Officer and Public Vaccinator for the Workhouse at Kirkby Stephen and the Kirkby Stephen District: applications, 4th Dec.; election, 6th Dec.
HOLYHEAD UNION—Medical Officer for the Workhouse: applications, 29th; election, 30th.
HOXNE UNION, Suffolk—Medical Officer for the Hoxne District.
IRVINE, Ayrshire—Medical Officer and Public Vaccinator for parish of.
KILMUIR, Parish of, and part of the Parish of Snizort, Isle of Skye—Medical Officer.
LINCOLN COUNTY HOSPITAL—Physician: applications, 20th Nov.; election, 22nd Nov.
LIVERPOOL BOROUGH PRISON—Surgeon: applications, 10th Dec.
LIVERPOOL ROYAL INFIRMARY—Medical Superintendent: Dec. 6th.
MIDDLESEX HOSPITAL—Resident Obstetric Assistant: 25th.
NORFOLK AND NORWICH HOSPITAL—Assistant-Surgeon.
NOTTINGHAM UNION—Medical Officer and Public Vaccinator for District No. 2: applications, 20th; election, 23rd.
RAMSGATE AND ST. LAWRENCE ROYAL DISPENSARY—Resident Medical Officer: applications, 4th Dec.; election, 6th Dec.
ROYAL FREE HOSPITAL—Junior House-Surgeon.
ROYAL INFIRMARY LUNATIC ASYLUM, Liverpool—Resident Medical Superintendent: applications, 6th Dec.
ROYAL SOUTH LONDON DISPENSARY—District Surgeon.
ST. GEORGE (Hanover Square) DISPENSARY—Physician-Accoucheur: 29th.
ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Resident Medical and Surgical Officer: applications, 30th.
ST. PANCRAS AND NORTHERN DISPENSARY—Resident Medical Officer: vacancy, 25th December.
SOUTH SHIELDS DISPENSARY—House-Surgeon: applications, 25th.
STOCKTON SURGICAL HOSPITAL—Medical Officer.
SWANSEA INFIRMARY—House-Surgeon: applications, 24th Nov.; election, 1st Dec.
UNIVERSITY COLLEGE HOSPITAL—Assistant-Physician: 1st Dec.
WESTMINSTER GENERAL DISPENSARY, Gerrard Street, Soho—Surgeon: applications, 22nd; election, 25th.
WORCESTER INFIRMARY—House-Surgeon: applications, 10th Dec.; vacancy, 11th January.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

- BURROUGHS, G. E. E., appointed Resident Obstetrical Officer to Charing Cross Hospital.
GOSSE, Charles, Esq., appointed House-Surgeon to the Royal Westminster Ophthalmic Hospital.
LITTLE, C. E., Esq., appointed Resident Medical Officer to Charing Cross Hospital.
*THOMPSON, E. Symes, M.D., appointed Physician to the Hospital for Consumption, Brompton.
TOWL, G. F. E., Esq., appointed House-Surgeon to Charing Cross Hospital.

BIRTHS.

- BURROUGHS.—On November 13th, at Horley, Surrey, the wife of T. J. Burroughs, Esq., of a son.
CHESTERMAN.—On November 10th, at Banbury, the wife of *Shearman Chesterman, Esq., Surgeon, of twin daughters, still-born.
GRIFFITHS.—On October 24th, at Swansea, the wife of *T. D. Griffiths, M.B., of a daughter.
JOYCE.—On November 10th, at Rolvenden, Kent, the wife of *Thomas Joyce, M.D., of a son.
MAGGOWAN.—On November 12th, at Kingswood, near Bristol, the wife of *Alexander T. Maggowan, Esq., Surgeon, of a son.
MILLER.—On Nov. 9th, at Blackheath, the wife of *J. N. Miller, M.D., of a son.

MARRIAGES.

- BRADLEY, S. Messenger, Esq., Surgeon, Longsight, Manchester, to Annie Gertrude, eldest daughter of Richard COPE, Esq., of Sale.
BRYANT, William H., Esq., Surgeon, to Sophia, second daughter of the Rev. Wm. A. WILLCOCK, M.D., rector of Cleenish, county Fermanagh, at St. Mark's Church, St. John's Wood, on November 9th.
COATES, William, M.D., of Malvern, to Mary Agatha, eldest daughter of the Rev. Charles F. SMITH, M.A., Vicar of Crediton and Prebendary of Exeter, at Crediton, on November 11th.
DEAS, P. Maury, M.B., Medical Superintendent of the New Cheshire Lunatic Asylum, to Margaret Ann, daughter of Colonel MACPHERSON, Staff Officer, Belfast, on November 5th.

- CROFT, John Henry, Esq., Surgeon, to Liddy, sixth daughter of Jonas PAXTON, Esq., of Bicester, Oxon, on November 10th.
FALKNER, Henry, Esq., of Dublin, to Elizabeth, eldest daughter of G. G. CODD, Esq., Surgeon, of Rickmansworth, Herts, on November 10th.
GRAVES, William, Esq., Army Medical Staff, to Mary Theodora, eldest daughter of George S. BEATSON, M.D., Inspector-General of Hospitals, at Hound Church, Hants, on November 9th.
GREAVES, Charles H., Esq., Surgeon, of Stafford, to Helen Sidney, third daughter of the late C. WADDELL, Esq., Surgeon, Stafford, at Ferebridge, on Nov. 4th.
*MILLER, R. M., M.D., of Wolverhampton, to Theresa, third daughter of the late Geo. YOUNG, Esq., of Saverley House, Staffordshire, at Stafford, on Nov. 11th.
NEW, George W., Esq., Surgeon, of Harrington Square, London, to Elizabeth, youngest child of John WALKER, Esq., of Halifax, on October 28th.
NOTTER, James Lane, M.B., Staff-Assistant-Surgeon, of Carrigew, county Cork, to Fanny, eldest daughter of J. D. M'ILLREB, Esq., Inspector-General of Hospitals, at Montreal, on October 21st.
OGILVY, John Francis, Esq., of Corrimony, Inverness-shire, to Annie Louise, eldest daughter of John WHITE, Esq., Civil Surgeon, of Moorshedabad, Bengal, at Calcutta, on October 12th.
RATTRAY, James Clark, M.D., of Coral Bank, Rattray, to Jessie Louisa, elder daughter of John STUART, Esq., late of Bombay, at Altamont, Blairgowrie, on November 9th.

DEATHS.

- GRIFFIN, Richard, Esq., Surgeon, at Weymouth, aged 63, on November 12th.
LODGE.—On November 7th, at Penge, Catherine, widow of the late Charles Lodge, M.D., formerly of Camberwell.
THOMPSON.—On November 14th, at Blackheath, Elizabeth Maria, widow of I. Bowen Thompson, M.D.

DONATION.—A donation of £1,000, in aid of the funds of University College Hospital, has been forwarded to Edward Enfield, Esq., treasurer, by an anonymous benefactor.

BEQUESTS.—The late Mr. Alexander Boetefeur, of Bayswater, has left to the Idiot Asylum at Earlswood, and the Royal Hospital for Incurables, each £2,000. The legacies are payable after the death of his widow.

TO ANTITOBACCONISTS.—A curious case, which ought to command due attention from the Antitobacco Society, was lately brought before the notice of the Pathological Society of London by Dr. Cayley. A man in good health was observed to stagger and fall down in the street. He was taken to the Middlesex Hospital, but on arrival was found to be quite dead. On examination, a quid of shag tobacco was found behind the tongue, resting on the epiglottis, and the larynx was found choked up with viscid mucus, in which were embedded several small pieces of tobacco. The lungs presented the appearances found in suffocation. There was no other apparent cause for death.

BOOKS, ETC., RECEIVED.

- Descriptive Anatomy of the Horse and Domestic Animals, chiefly compiled from the Manuscripts of Thomas Strangeways, LL.D., M.R.C.V.S., and the late Professor Goodsir, F.R.S.S.L. & E. By J. W. Johnston, M.D., F.R.S.E., and T. J. Call, L.R.C.P. Ed. Edinburgh and London: 1870.
An Address delivered before the Medical Society of the State of Pennsylvania at its Annual Session, June 1869. By J. Curwen, M.D. Philadelphia: 1869.
Transactions of the Clinical Society of London. Vol. II. London: 1869.
Report of the Local Board of Health of Merthyr Tydfil for the year ending 30th September. Merthyr Tydfil: 1869.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

- Dr. Land, Hull; Mr. J. B. Blackett, London; Dr. Bryan, Northampton; Dr. Wade, Birmingham; Mr. R. S. Fowler, Bath; Mr. P. Miall, Bradford; Mr. E. Lee, London; Dr. Duckworth, London; Dr. J. T. Dickson, London; D. P. H., Clifton, Bristol; Mr. Lister, Edinburgh; Dr. Griffin, Weymouth; Mr. W. Ed-
dowes, jun., Shrewsbury; Mr. Woodcock, Longsight, Manchester; Mr. Sidebot-
tom, Mottram in Longendale; Mr. Savage, Bordesley, Birmingham; Mr. J. W.
Barnes, London; Dr. Alexander Ogston, Aberdeen; Mr. George Farrant, London;
Mr. C. E. Little, London; Mr. James Sewell, Caterham; Dr. Michael Foster,
Bickley; Mr. Creighton, Aberdeen; Sir Dominic Corrigan, Dublin; etc.

LETTERS, ETC. (with enclosures) from:—

- Dr. C. J. B. Williams, London; Dr. R. Hibbert Taylor, Liverpool; Dr. T. J. Walker, Peterborough; Mr. Wasdale Watson, Newport; A Member of the British Medical Association; Dr. F. Rhodes, Great Horton; Dr. G. H. Philipson, New-
castle-upon-Tyne; Dr. W. Haining, Chester; Mr. T. L. Gregson, Newcastle-
upon-Tyne; Mr. J. H. Bartlett, London; Dr. J. Milner Fothergill, Morland;
The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The
Registrar-General of England; Mr. T. M. Stone, London; Dr. Treutler, Kew;
The Registrar of the Medical Society of London; The Honorary Secretary of
St. Peter's Hospital, London; Dr. T. Brown, Fortune Bay, Newfoundland; Mr.
C. W. Brown, Stockenstrom, Cape Colony; Dr. J. Hardie, Manchester; Dr.
Thorowgood, London; Dr. Gervis, London; Dr. Kennedy, Dublin; Dr. B. W.
Foster, Birmingham; Dr. Phillips, London; The Honorary Secretary of the
Royal Medical and Chirurgical Society; Dr. J. Matthews Duncan, Edinburgh;
Dr. Balmanno Squire, London; Dr. Wickham Legg, London; etc.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
 TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.
 WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.
 THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
 FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
 SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Mr. De Méric, "Syphilitic Elephantiasis"; Mr. Henry Lee, "On some unusual Cases in Surgery".
 TUESDAY.—Ethnological Society of London, 8 P.M. Sir George Grey, Bart., "On some Quartzite Implements of Palæolithic Type from the Drift of the Cape of Good Hope"; Dr. Leitner, "On the Races and Languages of Dardistan hitherto undescribed".—Royal Medical and Chirurgical Society, 8.30 P.M. Dr. Wm. Meyer (of Copenhagen), "On Adenoid Vegetations in the Nasopharyngeal Cavity."
 WEDNESDAY.—Hunterian Society, 8 P.M. Dr. Moxon, "On a Case of Paraplegia".—Geological Society.
 FRIDAY.—Clinical Society of London, 8 P.M. Dr. Cholmeley, "Case showing a peculiar Eruption appearing during the Exhibition of Bromide of Potassium"; Mr. Cooper Forster, "Cases in which Torsion has been employed"; Dr. Osborn, "Cases illustrative of the Treatment of Syphilis by Hypodermic Injection".—Royal Society.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

DR. THURSFIELD (Leamington) is thanked.

THE ST. PANCRAS INFIRMARY.

SIR,—I cannot but feel pained that you have commented rather severely upon my conduct before having heard both sides of the question. I will, however, suspend my defence until the Poor-law inquiry has terminated. Trusting that, in the interim, your readers will withhold their judgment, I am, etc.,
 Nov. 18th, 1869. J. WICKHAM BARNES, F.R.C.S.

CHESELDEN.—The tomb of this great surgeon, in the old military burial-ground of Chelsea, is about to be restored, with others, by the Government.

THE UNFOUNDED CHARGES AGAINST MR. O. W. BERRY.

SIR,—The remarks which appeared in your paper a few months since, upon the iniquitous charge brought against me by a woman, whom I afterwards prosecuted for perjury, have been followed by numerous letters of sympathy and condolence, addressed to me not only by personal friends, but also by others to whom I am perfectly unknown. I felt bound to prosecute the wretched woman, not on personal grounds, but as a duty to the profession to which I belong, some members of which have marked their appreciation of the course I pursued by contributing to reimburse me with a portion of the heavy expenses it entailed. I have to acknowledge the receipt of the fund, amounting to £36:16; and to offer my best thanks to the gentlemen who formed the Committee for the trouble they have taken, and to the contributors for their sympathy and support. I am, etc.,
 Wimbledon, Nov. 17th, 1869. O. W. BERRY, M.R.C.S., L.S.A.

WE shall feel obliged if members will forward prospectuses containing the regulations of clubs, paying and provident hospitals and dispensaries, with which they may be connected.

SEA-WEED CHARCOAL.—Sea-weed charcoal is said to be a cheaper and more exhaustive absorbent of sewage gases than other charcoals. Mr. Stanford has been trying it on the coast of Scotland. When saturated with "night soil", it can be reburnt or distilled, by which it yields up a large amount of ammonia for manure, and a considerable quantity of gas, which possesses illuminating power.

MEDICAL CHARGES.—A Dorsetshire labourer's wife is said to have stated, in evidence before Mr. Stanhope, Assistant Commissioner (Women and Children's Employment Commission), that "her husband had been ill for a fortnight, and the doctor's bill was £7:1. We paid it by degrees." This is surely not correct. Would any country practitioner charge a labourer ten shillings a day for attendance for a fortnight? We think not.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

A CHEAP INFIRMARY.—In a notice in your last number, I observe that "an Infirmary" has been opened at Chesham, the erection of which has cost only £835. Will any of those connected with it, inform me, through your pages, as to the size and character of the building which has been obtained for this very moderate cost.

THE MEDICAL DIRECTORIES.

SIR,—In the JOURNAL of October 23rd, there is a paragraph on "The London and Provincial Medical Directories", in which is pointed out how errors creep into the Register from copying from the Directories. One seeming inaccuracy regarding qualification, I am able to explain. The name Whymper, Geo. H., M.R.C.S. Eng. 1838, appears in the *Calendar* as Whimper. I am, etc.,
 November 1869. D. P. H.

COUNTY ADMINISTRATION BILL.

[We submit the proposals subjoined to the consideration of those of our readers whom they may interest. They have been forwarded to us confidentially by a correspondent, who, for the present, wishes his name to be withheld.—ED.]

The following draft of a statement, relating to the position of gentlemen practising in the Lunacy Medical Service, is submitted for publication as the basis of a petition to the Legislature.

1. That the Lunacy Medical Service, authorised and consolidated under the Lunatic Asylums' Acts of 1853, forms a public department of officers employed by the State, and provided for out of the public rates and taxes.

2. That the medical officers of public lunatic asylums in England have not the same rights and privileges as their brethren who have the charge of the sane poor in workhouses and elsewhere under the Poor-Law Amendment Acts.

3. That a committee of visitors, delegated by the Sessions, have the power of removing the medical officer, and of appointing some other person in his place, as in their discretion they may think fit (16 and 17 Vict., cap. 97, sect. 55), there being no provision made for appeal to the Secretary of State, the Lunacy Commissioners, or the Poor-Law Board.

4. That no distinction in this respect is made between the chief medical officers of asylums and the servants employed therein; that this omission is derogatory to them as members of a liberal profession, subversive of their legitimate authority as skilled advisers of the committees, and engenders a sense of inferiority and subjection.

5. That the dependency occasioned by uncertainty of tenure and want of recognised public status, is unjust to the individual officer as it is detrimental to the public service; and that it is unreasonable to combine the responsibility of an officer with the insecurity of a servant.

6. That the Court of Common Pleas having ruled that officers of public institutions occupy them as servants, and not as lodgers or tenants, thus disallowing their claims for the franchise and depriving them of civil and municipal rights, the assistance of Parliament is imperatively called for.

7. That, as it is proposed to perpetuate this condition of things by transferring the power of dismissal of the medical officer to a secret and delegated committee under the County Administration Bill, it is prayed that no medical officer of any asylum maintained out of the public rates shall be liable to dismissal, without the authority of the Secretary of State being first obtained, and that after an impartial inquiry into the officer's alleged incapacity or misconduct.

FOOT-AND-MOUTH EXANTHEM.—A Forres correspondent of the *Dundee Advertiser* writes:—A woman in this neighbourhood, who had been a good deal in connection with cattle infected with foot-and-mouth disease lately, was last week attacked with the malady herself, and laboured under a decided outbreak of it for four or five days. The woman was bad for several days with some sort of disease about the mouth. On examination by the inspector and others, the disease was pronounced to be murrain.

MEDICAL WITNESSES.

SIR,—Can you inform me where the opinions given by certain medical and legal authorities upon the deficiencies of medical witnesses may be found?

I am, etc.,

CRITERION.

** Our correspondent should consult Dr. Taylor's *Principles and Practice of Medical Jurisprudence* (the Introduction); and Dr. Symonds' paper on Medical Evidence in Relation to State Medicine, read at the meeting of the British Medical Association in 1865, and published in the JOURNAL for September 2nd of that year. The third volume of Casper's *Forensic Medicine* (New Sydenham Society) contains also some pertinent remarks.

A MEMBER writes:—"Would you kindly inform me what work or works I must study in order to obtain a knowledge of the adulterations of food and drink, and how to detect these adulterations?"

** Dr. Hassall's work on Adulteration of Food may be used. It is not brought down to the latest date; but we are not aware of a more recent work.

A FACT FOR THE ANTIVACCINATORS.

SIR,—Your correspondent, Mr. W. F. Morgan of Bristol, under the heading of Notices to Correspondents, at page 525, alludes to the circumstance of the mother of a late Physician to the Bristol Infirmary having had thirty-four children. I presume Mr. Morgan refers to the mother of the late Dr. Howell; if so, I beg to state that he informed me, about twenty-nine years since, that he was one of thirty-six children by the same father and mother, and that for a period of fourteen years his parents were in constant mourning, thirty-two out of the thirty-six having died during that time from small-pox alone.

As the subject of vaccination is now being so freely discussed by the public as well as by some members of the medical profession, in a periodical brought out at Manchester under the auspices of the Antivaccination League, I make no apology for the sake of humanity for divulging the name of Dr. Howell, more particularly as he related the above mentioned facts to me without any reserve.

7, Circus, Bath, Nov. 8th, 1869.

I am, etc., WILLIAM BUSH.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Nov. 10th; The New York Medical Gazette, Oct. 30th; The Parochial Critic, Nov. 10th; The New York Medical Record, Oct. 30th; The Boston Medical and Surgical Journal, Oct. 28th; The Madras Mail, Sept. 8th; The Indian Medical Gazette, Oct. 11th; The Harrogate Advertiser, Nov. 13th; The Lincolnshire Chronicle, Nov. 12th; The Maidstone and Kentish Gazette, Nov. 8th.

Results of Meteorological Observations, for the week ending Saturday, November 13th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.							Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	WIND.										RAIN.		
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.			Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell.	Amount in inches.
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm, etc.				
BATH	30.056	0.672	43.5	40.6	37.2	78	57.3	25.5	31.8	50.4	36.9	92.0	..	5.7	6	..	..	..	..	..	2.3	1.3	1.4	2	4*	6	0.17	
Dr. Barter, F.M.S.																												
BOURNEMOUTH	30.141	0.600	43.2	41.0	38.4	83	56.3	25.7	30.6	51.6	35.3	95.0	24.0	2.7	2.1	0.7	..	..	..	..	2.3	1.3	2.3	0.3	2.1	1	0.02	
Dr. Compton, F.M.S.																												
DOVER	29.975	1.398	42.1	39.9	37.2	83	55.0	21.0	34.0	48.1	26.5	..	..	4.2	..	1	..	..	..	..	0.3	3.3	2.3	..	3.2	3	0.14	
Dr. Parsons.																												
DUBLIN	30.040	0.675	43.1	40.8	38.0	82	58.0	31.0	27.0	48.3	38.0	..	26.0	4.9	..	0.6	..	..	..	..	1.4	3.5	1	0.5	3.6	4	0.50	
Dr. J. W. Moore.																												
Kew	30.075	0.744	41.3	38.4	34.8	78	54.9	25.5	29.4	48.8	32.9	85.7	19.8	5.2	0.3	0.3	..	..	..	..	2	1	2.3	1.3	3.0	1	0.07	
Dr. Treutler, F.L.S., etc.																												
LLANDUDNO	29.985	0.630	44.9	41.6	37.8	76	55.7	34.0	21.7	49.7	40.0	..	..	6.6	..	1	..	..	..	..	3.7	2.3	..	3.0	6	1.54		
Drs. Nicol and Dalton.																												
MALVERN	30.043	0.710	42.7	40.2	37.2	81	55.6	30.2	25.4	49.5	35.5	96.0	23.2	5.2	5.1	..	..	..	..	..	0.7	2	4.3	..	7.3*	4	0.29	
Messrs. W. and J. Burrow.																												
NORWICH (BETHEL STREET)	29.957	0.788	39.5	37.1	34.0	81	52.3	30.0	22.3	45.2	33.4	..	30.0	..	..	..	..	..	..	..	3	2	2	..	10.8	4	0.61	
C. M. Gibson, Esq.																												
SCARBOROUGH	29.849	0.838	40.0	38.5	36.5	88	56.0	30.4	25.6	49.5	34.4	88.9	25.1	6.4	5	1.3	..	..	..	..	0.3	3.3	0	5.1	4	1.08		
Dr. Fox, M.R.C.P.																												
SIDMOUTH	30.114	0.586	43.6	42.0	40.1	87	57.4	29.3	28.1	52.1	36.5	..	..	4.1	4.4	2	..	..	..	..	3	2	..	0.7	2	0.02		
Dr. Mackenzie, F.M.S.																												
VENTNOR, I. OF WIGHT	30.064	0.537	47.2	44.5	41.2	81	55.2	32.0	23.2	52.5	39.5	..	..	3.6	6.4	1.7	1	..	..	..	0.7	1.3	2.3	..	4	1	0.01	
J. B. Martin, Esq., M.R.C.S.E.																												
WORTHING	30.087	0.681	43.3	40.6	37.3	79	58.6	27.3	31.3	50.4	34.3	94.4	20.3	4.7	1.1	0.7	..	..	..	..	1	2.3	1	2	1.9	3	0.10	
W. J. Harris, Esq., M.R.C.S.E.																												

* Mean hourly velocity in miles.

REMARKS.—Atmospheric pressure has undergone a slight but general increase during the week, while its range has been on the whole rather less than during the week before; the fluctuations of pressure have been very irregular, amounting to 0.537 at Ventnor, and to 1.398 at Dover. Temperature has been considerably lower, and, with the exception of Llandudno, all the minima have been below the freezing point. The range of temperature has been considerable. Winds have still ranged between S.W. and N.,—W. and N.W. being the prevailing direction; their force has been generally moderate,—or fresh at Scarborough and Ventnor. The sky has been more free from clouds. Rain has fallen at all stations, but the quantity has been variable, amounting at Scarborough and Llandudno to more than one inch, and not exceeding .01 inch at Ventnor. The weather of the past week has been exceedingly variable. Its commencement was unsettled and stormy, and on the 10th snow and hail showers occurred in Dublin about noon, at Llandudno, Malvern, and Scarborough, in the afternoon, and at Kew about 6 p.m. At the same time temperature fell rapidly, attaining its minimum on the night of the 11th. On the morning of the 12th a rapid rise commenced, which continued to the end of the week; temperature on the 13th being 58 degs. at 9 p.m. in Dublin: and 53.1 degs. at 10 p.m. at Kew. At Worthing scarlatina is again on the increase, the type of cases being more severe, and the disease threatens to put on an epidemic character. It prevails chiefly amongst the poorer classes of the people. Mr. Harris is inclined to connect the prevalence of scarlatina with the prevailing absence of ozone in any quantity at Worthing. Otherwise the public health is good.

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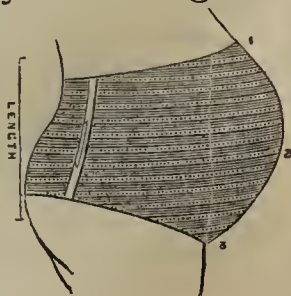
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NOTES

ON

ALPINE SUMMER QUARTERS FOR
INVALIDS IN 1869.*

By CHARLES J. B. WILLIAMS, M.D., F.R.S.

WHEN it is authentically stated that several consumptive patients have passed the winter in the upper Engadine, not merely without suffering, but with considerable benefit to their general health, and with marked diminution of the symptoms and signs of disease in the lungs, the matter becomes one of fact, not of reasoning or opinion. But it is of the utmost importance to test the accuracy of the fact by adequate investigation. I have had no opportunity of personally examining any of the patients who are said to have benefited by passing the winter in the Engadine. Dr. Berry, the intelligent resident physician at St. Moritz, informed me that he had the history of ten or twelve such cases, several of which had been formerly under my care. My recollection of most of these is imperfect, but the following I have been able to identify.

Mr. S., aged 20, consulted me on August 2nd, 1865. At the age of ten, he had glandular swellings in the neck, which gathered and remained open for twelve months. Last autumn, he was much reduced by a local inflammation, and leeching for it; and remained weakly through the winter, with a slight cough. In May, he coughed up three ounces of blood; and, a few days afterwards, half a pint. He was treated with lead first, and subsequently with iron. The bowels were often costive. I found some dulness and rough breath-sound in the upper right back. There was slight bronchophony above the right scapula. I prescribed for him cod-liver oil in a mixture containing phosphoric acid, hypophosphite of lime, and strychnia; an occasional aloetic pill; and tincture of iodine externally. To winter at Torquay.

I heard nothing more of him till August 1869, when his father called on me at Samaden, and told me that his son had continued my treatment with considerable benefit, and passed the winter at Torquay. He had little cough; but there were occasional recurrences of hæmoptysis, and he several times expectorated calcareous matter.

In June 1866, he went to Silvaplana, in the upper Engadine; and from that time there was no recurrence of hæmorrhage. The pulse gradually was reduced from 108 to 70, and the respirations from 28 to 18, with a corresponding improvement of strength and activity. The three subsequent winters he has passed at St. Moritz, going out daily, and enjoying skating, sledging, and other winter exercises, with impunity.

In this case, there had never been much cough or other symptoms of bronchial or pulmonary irritation. The disease was in a quiescent state when he first went to the Engadine; and, going there in the summer season, there was time for acclimatisation before the severe weather set in. Such, in truth, seem to me to be the chief conditions most favourable to safety and success in trials of the *Alpine cure* of consumption. To send patients in advanced, or even recent, *active* disease, with its attendant local inflammations and congestions, and with the general weakness of circulation and no power of resistance against cold, to such a climate as that of the Engadine in the beginning of winter, does seem most rash and irrational. But, in cases where the pulmonary deposits are moderate in amount, and attended with little vascular irritation, and especially when the system is relaxed, and there is a consciousness of refreshment and invigoration in a dry cool air—under such circumstances, a mountain residence offers the best promise.

Such a condition, favourable for the *mountain cure*, is not unfrequently presented by pulmonary invalids who have passed the winter in a warm situation, such as Mentone, Cimiez, Hyères, or Pau. By these means, and by appropriate treatment, the disease has been brought into a quiet state; but the patient may have become more or less relaxed and weakened by the increasing heat of May and June. Then, with proper precautions in the way of clothing and choice of weather, the ascent to the higher region may be made with great probable benefit; and, should that benefit continue during the summer months, with improved strength and breath, and power to endure the changes of temperature occurring even at that season, there will be encouragement to

prolong the stay through the winter, and thus prove the further efficacy of the mountain abode.

And now a few words as to the selection of this mountain residence; for other points besides altitude require consideration. What absolute height—whether at 6,000 or 5,000 feet above the level of the sea—may be best, is yet to be determined by experience; but there can be little doubt that *shelter from the coldest winds, an aspect favourable to receive all the sunshine obtainable in the winter, a dry unswampy soil, and a comfortable house, with well regulated stoves to warm, and a well supplied larder to feed, the winter inmates—will be essential to their well-doing.*

Of the villages in the upper Engadine—St. Moritz, Samaden, Campfer, Silvaplana, and Pontresina—all have hotels and boarding-houses; but the latter three of these are open only during the short summer season of three months. Pontresina, from its exposed situation, open to north and east, and its proximity to the snow-mountains and glaciers of the Bernina range, is wholly unsuited to invalids even in summer. Silvaplana and Campfer are sheltered from the north; but, being higher up the valley than St. Moritz, and between the lakes of the Inn, they are draughty, and liable to evening chills from the sheets of cold water. The Kurhaus of St. Moritz is in even a worse position; for it stands on a flat ground, very little above the lake. In fact, when I first visited it, seven years ago, this ground was little better than a swamp. Part of it has since been raised, and converted into a garden and croquet-ground; but the whole establishment is so far from the mountains which protect the village of St. Moritz to the north, is so much under the shade of the huge pine-clad Piz Rosatch to the south, and so open over the lake to the east and up the valley to the west, that it may be said to be open to every wind that blows; and, even in the summer, it must be both damp and draughty. The village of St. Moritz is much more favourably placed, being 400 feet above the lake, and 6,085 above the sea, and considerably sheltered to the north by the mountains of the Julier pass, and to the east by a wooded hillock, which bars the valley, and forms the east bank of the lake. The hotels and boarding-houses here have more or less the advantage of this shelter, and of a declivity fully facing the south. The Rev. Mr. Stretzell has built a comfortable house above any of the others on this slope, and he believes it to be the highest gentleman's residence in Europe. He told me that so warm are the sun's rays, even in winter, in this high yet sheltered spot, that the inmates have sometimes been able to sit with open windows, and even in the open air. The rooms are well warmed by means of the ordinary German stove; but this causes an excessive dryness and close feeling in the air, which is neither healthy nor agreeable. It is said that ventilation may be safely supplied by occasionally opening a window; and the extreme dryness may be prevented by placing on the stove shallow vessels of water. It appears, however, that as yet only one of the hotels has been kept open during the winter; and, as there have been hardly enough guests to make it profitable, it is doubtful whether any will be available for the coming winter.

The remaining village in the upper Engadine is Samaden, which stands at the height of 5,600 feet above the sea, and about 100 feet above the valley of the Inn. It is well sheltered by the grassy slopes of high mountains to the north, and less completely to the east; and has the advantage of a fine view of the Bernina range to the west, which, being distant, does not shut out the Inn so much as the nearer mountains to the south of St. Moritz. Still there is a high range due south of Samaden; and this is the common disadvantage of the whole Engadine during the winter, that high mountains to the south shut out much of the sun's light and heat. Another objection to Samaden is the somewhat marshy character of the valley at this part, the waters of the Inn sometimes spreading over its flat alluvium. I have seen, in the early morning, a thin stratum of fog brooding over this, like that on the lake and flat about the Kurhaus of St. Moritz. Still the Bernina Hotel stands sufficiently high above this not to suffer materially from its influence. I have already spoken favourably of this hotel and its manager, M. Franconi; and, as it is the only hotel which is constantly kept open during the winter, it must be considered the head-quarters of those who intend to make a long sojourn in the upper Engadine. I found in the *livre des voyageurs* several testimonials from those who had wintered there, speaking in strong terms of the benefit which they had gained in their health, and of their entire satisfaction with the care and attention bestowed on them by M. and Mme. Franconi.

I have already adduced many proofs that the upper Engadine is too high and too cold even in the summer for the comfort and well-being of delicate invalids, and even of some persons in health; and it becomes a question whether sufficiently cool and bracing summer resorts may not be found at a somewhat lower elevation, and so accessible, and with such comfortable accommodation, as to make them available.

* Continued from page 552 of last number.

Lower down in the valley of the Engadine, at an elevation of 4,000 feet, is the large newly built bathing establishment of Tarasp-Schuls, with accommodation for three hundred persons. The mineral waters, both for drinking and for baths, saline, chalybeate, and sulphurous, are the great attraction; the saline, which are also alkaline, being stronger than those of Carlsbad or Kissingen. But the situation may also be recommended as a cool summer residence, being shaded by lofty and well wooded mountains to the south, with varied walks and drives on a dry soil, and with pure air. The high southern screen, however, unfits it for a winter abode; and it has no protection from the eastern blasts which come up the valley.

There is a considerable hotel, or Kurhaus, at Davos am Platz, situated in a high valley to the north of the Engadine, near the Strela pass. It stands about 5,000 feet above the sea, and is much frequented, on account of its cool pure air, and the whey-cure which is carried on there. I have passed some days there, and found the air pure and invigorating, where not contaminated by the effluvia of *liquid manure*, so profusely laid on the pastures in many parts of Switzerland—no doubt very good for the vegetation, but wholly spoiling the fragrance of the mountain breeze. How the composts or cesspools for these manures haunt you wherever you go among the high Alps! Even at Zermatt, that village of glaciers, at Brenil, on the other side of the Matterhorn—places from six to seven thousand feet high—and at most of the high mountain *châlets*, where you might expect to be above such nuisances, and to breathe the pure air of heaven, you find it poisoned by the stench from these cloacæ, in which purity and health are sacrificed on the altar of utilisation! However, although I happened to encounter this nuisance at Davos, it might have been accidental. The place has a repute for great purity of air. One of my phthisical patients spent six weeks there this summer, and improved in appetite and general health, but without change for the better in the lungs; and he complained much of the dulness of the place. It is not likely to be suitable for winter-residence, as it has little or no shelter from cold winds.*

It was a chief object of my present tour to find a high site for summer sojourn, less in extremes than the Engadine, better sheltered from the bleak north and eastern winds; and the new baths of Bormio, on the south ascent of the Stelvio pass, seemed likely to answer to this description. The pamphlet of my friend Dr. Fedeli (*Sulle Acque Termali e Fanghi di Bormio*), and the fuller treatise of Drs. Meyer-Ahrens and Brügger (*Die Thermen von Bormio*), both published in the present year, had directed my attention to this place; and to these I must refer for details respecting the composition and properties of the waters, and their sundry applications for the cure of disease. My concern was chiefly with the situation as a mountain-residence for the many in summer, and possibly for the few in winter also.

I may as well take the reader with us in our way from the Engadine. On the 23rd of August, we left Samaden at five o'clock, to cross the Bernina, on a fine morning, with not a cloud to be seen; but the valley of the Inn and the grass-fields of Pontresina were white with frost. And, mounted on the *banquette* of the diligence, and whilst gazing with admiration on the magnificent views of mountain-peaks, pine-woods, snow-fields, and glaciers, which the zigzags command in such variety, I was right glad to rise above the cold shade of the Piz Languard group into the sunshine of the little valley in which lie, side by side, the Lago Nero and Lago Bianco—the one pouring its waters into the Adriatic, the other into the Black Sea. Above these, near the summit of the pass, at a height of 7,600 feet, stands the new Bernina Hotel, with fair accommodation, to tempt those aspiring individuals who do not find the Engadine high enough. It is a bleak dreary spot, more suitable to Alpine Club men than to invalids.

Beautiful as are the views in the ascent of the Bernina pass from Pontresina, those on the descent to Poschiavo are even more striking, from the greater depth and steepness of the valley into which the zigzag and serpentine versatility of the road carried us. At first, from the giddy heights of savage mountain-tops, diversified only with snow-peaks and glaciers, we gaze down into the blue haze beneath, and, in the far distance, discern the tracery of a rich valley, speckled here and there with buildings and towers, looking like a fairy-land below us. Not many minutes elapse, as we are rapidly whirled down, before we find ourselves among trees and shrubs—quite novelties, after the scanty silva of the Engadine. Birch, beech, ash, elm, oak, and chestnut, now appeared in succession; then acacias, contrasting their varied hues of verdure with the sombre pine and dark brown rocks; and soon the vine, the gourd, and other luxuriant creepers, gave tokens of the entire change of climate which we had made in this rapid descent. Poschiavo, the first town in the valley, is only 3,300 feet above the sea; so that, in little more than an hour, we had made a descent of more than 4,000 feet.

* Dr. Mayer-Ahrens gives the mean temperature of the whole year at Davos at 37° Fahr.

Poschiavo is not a good halting-place; but three miles beyond, on the brink of the lovely little lake of the Posciavino, stands the very comfortable hotel and bathing establishment of Le Prese, in the manager of which I was pleased to recognise an old acquaintance, M. Mella, formerly the proprietor of the Grande Bretagne at Bellagio, on Lake Como, who had made that delightful hotel so attractive to travellers. The mineral water is alkaline, sulphurous, and very slightly chalybeate. It is a cold spring; but there is a steam apparatus for heating the water for the baths, which are newly constructed of Italian marble. The waters are said to be particularly efficacious in dyspepsia, skin-diseases, chronic rheumatism, and scrofula.

The moderate height of Le Prese—about 3,000 feet—and its situation in a narrow valley flanked on either side with lofty mountains, would prevent us from considering it a very bracing or invigorating place; but it is much cooler than the Italian lakes generally, and presents a pleasant intermedium for spring and early summer, between those and the higher stations, and may prove cool enough in summer for many who have passed their winter in the Riviera or in South Italy.

From Le Prese the road descends 1,500 feet in ten miles, to the opening of the Val di Poschiavino into the Valtelline at Tirano, a thoroughly Italian town. From this the road gradually ascends all the way to Bormio; and the sooner travellers can get up the Valtelline, the better; for, like all the low Italian valleys, it is as malarious and unhealthy to animal life, as it is luxuriant and rich in vegetation. The tumultuous Adda, fed by a thousand mountain-torrents, is continually depositing an alluvium of mud on all the flatter parts of its course, which, forming a rich swampy soil, becomes, in the summer-heat, a hotbed for vegetable growth, but a reeking source of miasmata to man. It is, indeed, a sad and striking contrast to see under luxuriant vines, hanging in rich clusters among the gigantic maize-stalks, all teeming with fertility, the sallow peasants, with haggard faces and goitrous necks, many stunted and deformed, and very few presenting the complexion or configuration of health. This remark applies more to the lower Valtelline, from Tirano to Colico, than to the upper portion; and the improvement in the aspect of the inhabitants as we ascended the valley was very remarkable. At Bolladore, the flat part of the valley, with its exuberant fertility, ceases; and, after passing through a fine grove of Spanish chestnuts, the road enters the narrow defile of La Serra, with its stupendous walls of perpendicular rock, separating the rich Valtelline from the *paese freddo*, as the upper or Bormio end of this valley is termed. This, although bounded on every side by lofty mountains or savage rocks, is not wanting in brightness or fertility. The valley, emerging from the gorge, is first narrow, with wooded knolls beneath the towering mountains, but above expands into an undulating plateau of green fields, beyond which, on the right front, stands the dilapidated little city of Bormio; and to the left, on a rocky slope, the large establishment of the Bagni Nuovi, with the irregular buildings of the Bagni Vecchi beyond, at a greater height; niched at the foot of the great rocky barrier of the Stelvio mountains, which here terminate in perpendicular cliffs, as rugged and savage as weather-scarred limestone can make them.

[To be concluded.]

TWO CASES OF SUDDEN BLINDNESS: OPACITIES IN VITREOUS HUMOUR.

By ROBERT P. OGLESBY, Esq.,

Assistant Demonstrator of Anatomy in the Leeds School of Medicine.

THE following cases will, I think, prove interesting from the peculiarity of their history. After diligent search, I have failed to find the record of any similar case.

CASE I.—A woman, who had the appearance of enjoying good health, and who stated that she was only 45 years of age (although she seemed considerably older), gave the following history.

On March 6th, 1867, when in the enjoyment of perfect vision, she looked for a length of time through a piece of smoked glass at the sun (eclipse). Directly afterwards, she commenced washing some clothes, when, much to her surprise, they appeared black and yellow. This curious condition of coloured vision lasted an hour; then her sight again became normal, and continued so three days. Early on the fourth day, she experienced "a curious sensation in the head", and immediately afterwards the left eye became dark, and remained so up to the time of examination (March 19th).

The eye was well formed, the cornea was bright, and the anterior chamber normal in size. The iris was healthy, but the pupil was fully dilated and motionless. Tension,—1. The movements of the eye were well performed. The ophthalmoscope showed a large floating body in

the vitreous humour. It was pear-shaped in form, and barely altered its position after the patient had moved the eye quickly up and down, and from side to side. It appeared to be attached by its pointed extremity somewhat firmly, the base floating in the vitreous humour immediately behind the lens. It was impossible to get a glimpse of the disk. The opacity was extremely dense, resembling a piece of thick crape. There were not any vessels near it. Now and again, as the film moved slightly, a retinal vessel could be seen. The retina and choroid appeared healthy, and the eye was free from pain. There was no history of syphilis. The heart was healthy, the urine was normal, and there was no suspicion of brain-mischief. Vision was limited to shadows.

Mercury had no effect; for, after mildly keeping up its specific action for a fortnight, the film remained unaltered in character, and vision had not improved. Iodide of potassium, given in increasing doses, produced a marked change. Vision in a few days so far improved that fingers could be counted. Unfortunately, at this stage she ceased to attend. Some months afterwards, I accidentally heard that she recovered a fair amount of vision.

CASE II.—A healthy-looking young man, by trade a mechanic, assured me that he had enjoyed good vision. On April 25th last, he accompanied a militia regiment from their barracks to a church at some considerable distance. The sun was shining brightly at the time, and the red cloth of the soldiers' tunics sadly dazzled his eyes. As he continued to stare at the soldiers, the left eye suddenly "went quite dark." He had no pain in the head, nor any other distressing symptom at the time, and was in excellent health. On his arrival at home, his mother noticed that the pupil of the now blind eye was much too large.

I first saw him on May 3rd. He then, and subsequently, enjoyed perfect health.

His previous history was perfectly satisfactory. His family history was also good. He did not inherit syphilis, nor had he ever contracted it. He did not smoke tobacco; he abstained entirely from spirituous liquors. No symptoms of organic mischief were present; the lungs, heart, urine, etc., on examination, being found healthy.

He suffered from converging strabismus and a slight degree of hypermetropia. The eyes performed their movements properly, though there was slight weakness of the external rectus of the right eye, which converged more strongly than its fellow; but the weakness was not due to any central nerve-mischief. The cornea of the ailing eye was bright; the anterior chamber of a normal size; and the iris, which was of a dark brown colour, presented no appearance of disease. The pupil was dilated, and acted sluggishly, and qualitative perception of light was absent. Tension was normal. He could just discern letters of 20 Jäger with the damaged eye; the healthy eye read No. 1. The eye was free from vascularity, intolerance of light, and pain. There was great centripetal contraction of the field of vision. The form of the field, at eight inches, was nearly round, and measured only one inch and a-half by one inch and three-quarters.

Ophthalmoscopic Examination.—A large dark body, the lower half of which resembled in appearance a piece of dark crape, the upper half being more translucent, and not unlike a piece of muslin, as the eye diverged, floated through the vitreous humour behind the lens, and entirely prevented any reflection from the fundus. Its base had an attachment at the lower and outer side. As the eye converged, it receded, and I saw the disk, retina, and choroid. The disk was hyperæmic, but the retinal vessels presented no abnormal appearance. The pigment of the choroid was so abundant that I could not see its vessels. The retina had the appearance of health.

An interesting feature in the case was the peculiarity of the floating membrane. As the eye diverged, and it slowly floated through the vitreous humour, it could be seen to unfurl by degrees until it was completely stretched out, as if it had been lying in folds one above the other. No vessel was to be seen near it. He was ordered to take ten grains of iodide of potassium three times a day.

On May 5th, vision had so far improved that No. 10 Jäger could be read. The ophthalmoscope showed an unaltered condition within the eye. On May 7th, the pupil was less dilated, and acted more readily. Vision had improved to No. 6 Jäger, and the field of vision had increased, at eight inches measuring four and a half by five inches. Both qualitative and quantitative perception of light were moderately good. The opacity was less dark, and there was a slight reflection from the fundus through it. The disk remained hyperæmic. On May 10th, he could read No. 6 Jäger. The film could hardly be seen. The disk looked healthy. On May 12th, the field of vision was perfect; the film could not be seen; he read No. 4 Jäger. On May 17th, he read No. 1 Jäger; the film was gone.

The hypothesis that a large membranous opacity should be suddenly formed, and in a few hours give rise to total blindness, is, I think, untenable. A more reasonable supposition is, that such membrane has

been slowly formed, that during the time of growth it has been firmly attached, and, from some unknown cause, a large portion has become detached, and, floating through vitreous humour behind the lens, caused sudden loss of vision.

HOSPITAL VERSUS HOME PRACTICE.

By J. MATTHEWS DUNCAN, M.D.

[Continued from page 464 of No. for Oct. 30th.]

THE comparison of hospital and home practice would, of course, be quite easy if satisfactory data were obtainable. The difficulty lies mainly in getting good data of home practice. This difficulty is greater, I believe, if amputations are made the special subject of comparison, than if deliveries are used for the purpose. I have already given reasons which, added to those of Messrs. Holmes (*Lancet*, August 7th, 1869) and Callender (*St. Bartholomew's Hospital Reports*, vol. v.) are sufficient to demonstrate the unsatisfactory and incomplete character of the amputation data which have been recently used to shew the superiority of home practice. Now, I propose to try what can be done, with the view of contrasting hospital and home practice, if we use confinements for the purpose.

There is no difficulty in getting good hospital data. I shall use those of the Dublin Hospital alone. It is the largest and the oldest lying-in hospital in the British empire, and it has a vast mass of reliable experience to present in a statistical form—above 190,000 cases in the course of above 100 years. Here, it is well worth while to remark, that the data of a hospital with well kept records are far more valuable than those of home practice. If the hospital be large enough, its unmixed data, being sufficient alone, have an unity that cannot exist in a mass of little scraps of private practice sewed together to make a whole for fit comparison. Further, the whole of the hospital's results are to be got. A private practitioner may not be able to give the whole even of his small experience. The bad times of the hospital are recorded as well as the good. The private practitioner, who has had bad times in practice, has an indisputable tendency and an inalienable right to maintain reticence regarding them. The practitioner with fine results is not unlikely to give them to the world, whether he be asked to do so or not. The practitioner with bad results is not unlikely to keep them to himself, even when asked by a friend to give them up.

The results of the home practice of midwifery may be arrived at in several ways. I shall describe them. They are all indirect and inexact when compared with the scrutiny of hospital books.

First: A lower limit can be got; that is, a figure which certainly indicates a less mortality than the real one. The value of this is easily shewn; for, if an author make the mortality of his own practice, or of lying-in generally, under the lower limit, then it is certain that his own practice has been erroneously given, or is quite exceptional, or that his estimate of the mortality of lying-in generally is erroneous.

This lower limit is obtained by reference to the reports of the Registrar-General. Under the heads metria and childbirth can be got a number of deaths of childbed, which, it is known, do not comprehend nearly all the deaths *in* childbed, which last is the figure that is wanted. The deliveries can be nearly exactly estimated from the number of children born, and the proportion struck. No doubt, there are various sources of inexactness and inaccuracy in all this, but still the value of the figure obtained in this way is generally admitted, and it is certainly nearly as valuable as any used in the whole of this inquiry.

Many grave errors would have been avoided in the discussion of the question now before us, if the value of this lower limit had been known. I shall illustrate this by reference to the work of Dr. Evory Kennedy on Hospitalism, etc. Dr. Kennedy is a Dublin practitioner. The Registrar-General's reports shew that the Dublin practitioners generally have had a mortality in their confinement cases of at least 1 in 114. That is the lower limit. Metria and childbirth deaths alone bring the mortality up to 1 in 114. As there are many deaths in childbed not included in either of these categories, it is quite certain that the mortality in childbed in Dublin is higher than this lower limit, 1 in 114. Now, Dr. Kennedy, in the work referred to (p. 78), states his belief that 1 in 256 may be held to be the mortality in childbed, a figure to be contrasted with the mortality in the Dublin Hospital—a manifest and great error. The hospital is naturally expected to have a higher mortality in lying-in than that of the city generally. The city generally has a mortality above 1 in 114. The figure therefore suited for comparison with the hospital mortality is considerably above 1 in 114. 1 in 256 is thus shewn to be an utterly misleading figure for any comparison or use.

Now, the lower limit for Edinburgh, as obtained from the Registrar-

General's reports, is 1 in 160. For the towns of Scotland it is 1 in 178 (from returns of 1860-64).

Whatever may be the mortality of lying-in in private practice in Edinburgh, it must be above 1 in 160. In the towns of Scotland it must be above 1 in 178.

Second: The Registrar's reports may be corrected so as to bring up their statements of deaths of childbed (metria and childbirth) to the statements wanted—namely, deaths *in* childbed (from all causes). If this can be satisfactorily done, then we will have a statement of the mortality in childbed in home practice.

Now, this has already been done in two ways. Dr. McClintock (*Dublin Quarterly Journal of Medicine*, August 1869) has ingeniously suggested that it should be done on the following plan. He finds the figure indicating the excess of the mortality *in* childbed above the mortality of childbed (metria and childbirth deaths) and adds this to the mortality of childbed. In other words, he finds how many lying-in women die of other causes than metria and childbirth, and adds the figure to that indicating the deaths from these causes. I have no objection to this method of calculating when no better is available. But I have used a more direct and safer plan, that is, to search the public records for all deaths of lying-in women from whatever cause. I, some years ago, had this carefully done for Edinburgh and Glasgow in 1855. I did not limit the search for deaths to four weeks after delivery, but extended it to six weeks; and this is unfortunate, as four weeks is the usual time understood to be adhered to in inquiries like the present. But the error thus introduced must be very trifling and unimportant.

Now, this search shewed that the home practitioners of Edinburgh and Glasgow in 1855 had, among lying-in women, a mortality of 1 in 107.

Third: The third source of knowledge of the mortality in private practice is spontaneously published records. These form, for reasons already given, a source of data that is not very valuable. "There", says M. Danyau (*Fièvre Puerpérale*, 1858, p. 177), "there are secrets which every one keeps carefully to himself. If all the world were sincere" (he adds), perhaps "we would find that the results are less favourable than is generally supposed." Accordingly, in the discussion in which Danyau took part, neither he nor any one else said what was the mortality in his private practice, although everyone wished to know. Some darkly hinted at the greatness of the mortality, and there can be no doubt that the restraint arose from fear of revealing a high figure of deaths. The great Dublin discussion revealed some speakers bold enough to state the figure wanted. But the originator of the discussion satisfied himself with observing that he lost only 1 in 1200 from puerperal fever in his private practice; a statement equally valueless and misleading, hiding facts, not revealing them. To conclude, there can be no doubt that records of private practice will have a strong tendency to error in the way of representing the mortality as smaller than it really is. The data of unfortunate practice will come to light in unduly small proportion.

In private practice that is not exceptional and in the records of which we have reason to think all deaths are included, I find such mortalities as the following (*Edinburgh Medical Journal*, November 1869, etc.): 1 in 45, 1 in 56, 1 in 105, 1 in 108, 1 in 121, 1 in 159, and so on.

If we had the mortality of the practice of the practitioner who in 1852 flourished in Brackel, or the figures of those gentlemen who have had what is called an epidemic of puerperal fever, we should have high mortalities compared with those just recorded.

Now, let us come to a conclusion in regard to the mortality of lying-in women in private practice. I cannot, after all the care taken, be otherwise than indefinite. I can see no reason to suppose that the figure in private practice is far from 1 in 100. It may be worse. It may be better.

This has to be contrasted with the total mortality in the Dublin Hospital, 1 in 72; or with the mortality of large periods, as that of Collins, 1 in 100.

Considering the extraordinary aggregation of cases of difficulty and danger in such an hospital as that of Dublin, I can find room for no astonishment at its mortality. I can find no sufficient grounds on which to lay any blame at its door. I can find no reason to believe that the mortality among its lying-in would have been less had they been confined in their own homes; while I am certain that the loss in comfort and other valuable objects would have been immense.

The eminent Dr. Stokes has summed up the whole case of hospital *versus* home practice, in a few words, and in favour of hospitals. "The mortality in private practice is, he believes (*Dublin Quarterly Journal of Medical Science*, August 1869, p. 313), with all its favourable circumstances, as great as or greater than in lying-in hospitals.

Whatever may be the exact truth on this point, the history of the Dublin Hospital makes it plain that metria is an awful invader of its beneficent precincts. There is every reason to suppose that its attacks

may be prevented or their baneful effects reduced in amount. To attain to this supremely desirable object, the efforts of science and art should be laboriously and incessantly directed.

AN AID TO PARTURITION, AND TO THE TREATMENT OF DISPLACEMENTS OF THE UTERUS BY A NEW MECHANICAL APPLIANCE.*

By PROTHEROE SMITH, M.D.,

Physician to the Hospital for Women, etc.

WHAT makes the contrast between the easy and rapid childbirth of the savage state, and the painful and lingering process in civilised life?

In answering this inquiry, I shall endeavour to elucidate the chief reason of this obvious difference, and thence to show what gives the advantage to the savage. I shall endeavour to prove that a force, which exists in the one, and is deficient in the other, explains to a great extent the dissimilarity of the two instances. I hope then to propose a remedy for the defect, and to give my experience of its efficacy. The same question applied to uterine ailments is capable of a similar explanation, and its solution will, I venture to say, elucidate an important cause of the frequency of diseases of women in civilised life.

Man being erect, it necessarily follows that the structure of the pelvis and abdominal muscles must be such as to retain the viscera in their proper position, and to make the necessary expulsive efforts, which defæcation and parturition require, with impunity.

The spinal column thrown into a series of waves, not only lessens shock from concussion, but by its lumbar curve the plane of the pelvis is rendered oblique, constituting that graceful form, which, when absent, is artificially supplied by a pad or bustle, and which is so designed as to support the abdominal viscera on the pubes, aided by the abdominal muscular walls and spine, and to retain them within the pelvis. But when the plane of the pelvis becomes horizontal by the obliteration of the lumbo-spinal curvature, or, as it is called, the Grecian bend, the abdominal viscera tend to prolapse towards or beyond its outlet, and to displace the pelvic contents.

This lumbar curve being absent at the extremes of life, the infant is found to be straight-backed; whilst the common evidence of old age is the obliteration of the double antero-posterior curves, going on to the bowed back and drooping form of those who are well-stricken in years. But the deficiency of the natural spinal curves is more or less known in early adult life; it may be from disease of the bodies of the vertebrae, with which we have at present nothing to do, but its chief cause may be found to be defective muscular power, which, in its cause and effect, forms the chief subject of the present paper.

Unlike the ancients, who suspended their garments from the shoulders, the usages of modern society impose upon females, more or less from the period of birth, the habit of wearing a cincture round the waist. From this are suspended all the clothes, which, by their weight, keep up considerable pressure on the thoracic, lumbar, spinal, and abdominal muscles; and this persistent pressure often leads to degeneration of the tissue of these muscles. Thus the muscles used in diaphragmatic respiration, and for fixing the chest in forced efforts of expulsion, as well as those of the spine and abdomen, are enfeebled by absorption or degeneration of muscular fibre, and so their functions are impaired. This alteration in the muscular tissue is well known to all who have witnessed the result of tight lacing in the deadhouse, in the muscular atrophy which marks such cases, and attenuates the abdominal walls. The consequent obliteration of the lumbar curve, and the levelling of the plane of the pelvis, destroy the natural lines of the female figure, and open the door to all those maladies, which result from the above-named deformity of the spinal column, and of the pelvic outlet.

Two great canals are lodged within the pelvis, viz., the alimentary and the generative. For the expulsion of the contents of the one, in the act of defæcation, there are necessarily: 1. The involuntary contractile force of the bowels; and 2. The voluntary force supplied by the spino-abdominal muscles.

In this act the direction of the pelvis is altered, so as to facilitate the passage of the fæces by means of an inclined plane, over which they are readily expelled.

In parturition, the expulsion of the child through the pelvic canal is protracted, in like manner, for lack of muscular power; and the process at times seems almost left to the unaided force of the womb. Hence this organ is overtaxed, and sometimes fails in its efforts till helped by instrumental traction.

* Read before the Midwifery Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

Of the two uses now claimed for the pelvic band, the first is to supply artificially that force, which may be deteriorated by dress, or suspended by anæsthetics; and, by so doing, to aid the overtaxed uterus by curtailing the period, and so to lessen the risks of ordinary labour; the second, to aid the treatment of uterine maladies.

I will now briefly describe the instrument, showing wherein it differs from, and in what way, I believe, it is superior to any that have hitherto been brought before the profession. The advantages of it, when used as an aid to parturition, are the following. 1. A fixed point is secured for the exercise of mechanical force by means of, as it were, an artificial skeleton; the immobility of which is secured by two pads, one sacral, the other pubic, retained in their respective places by lateral springs, which embrace the pelvis below the *cristæ iliorum*. 2. Then, a fixed point having been gained, attached to the sacral pad are two vertical levers, and one horizontal, the former (vertical springs) end each in a costal spring, embracing the thorax, and united by a sternal pad, so arranged as not to incommode the chest in respiration; the latter or horizontal is a powerful spring, buckled to a belt closely adjusted to the abdominal walls, and connected above to the costal springs and below to the pelvic band by elastic rings. It is thus constructed, so as to act in the manner of the abdominal muscles. During the parturient pains, this belt is readily tightened at will to assist, or supply the place of the voluntary muscular contractions, and is as readily relaxed in the intervals of pain. When required, it may be made to maintain a steady uniform pressure, as is often needed *post partum*. This force, reacting upon the sacral pad, affords to the patient that support in the lumbar region which is so much called-for during labour, and which is usually supplied by the hands of the nurse.

In the catalogue and report of instruments, published by the Obstetrical Society in 1867, there is, at page 5, an ingenious contrivance of Dr. Woodward of Worcester, which seems to answer the purpose just referred to, and which he accordingly names an "Obstetrical Back-Supporter." When the power of the abdominal muscles has been impaired by the constraint of dress, or rendered deficient under the influence of anæsthetics, the instrument which I now exhibit supplies artificially a force which simulates that of the abdominal muscles, when in a normal state. In this way I have found it of the greatest value in cases of anteversion of the gravid uterus, at the period of parturition. Only a few weeks since, I quickly and easily rectified the abnormal position in a patient I have attended with four children. The ease and rapidity of birth offered a great contrast to her former labours, and the patient appeared herself to be better than on any previous occasion. Her subsequent getting up "was satisfactory in every respect," and she has regained her strength in a manner so superior to that which has happened in her other confinements as to elicit voluntary expressions of satisfaction and surprise from herself and friends.

For the mechanical treatment of uterine ailments, this instrument acts in the following way. The pubic and sacral pads fixed by the lateral connecting springs tend by their mutual reaction to alter the plane of the pelvis, if too horizontal, to one more oblique, and therefore more natural. The costal springs and sternal pad attached to the end of the perpendicular springs, help still further to increase the lumbar pressure, to throw the sacrum backwards, and at the same time to fix the whole apparatus. From the pubic pad, and attached to it by a moveable rackwork, is a curved steel spring, which bent to the shape of the vagina, is passed into it, whilst it is made to carry at its extremity any form of pessary or support that may be required.

The advantage of an uterine support adjusted by these means, is that its *point d'appui*, being the pelvis itself, in ordinary movements of the body, it is not liable to displacement.

Without attempting here to enter into the pathology of misplacements of the womb, further than by referring to the cause already mentioned, viz., that of a too horizontal position of the pelvis, I would state that in order to rectify this, the prone position of the patient for a longer or shorter time has often been adopted by practitioners, and this mode of treatment was strongly advocated by my late friend and former colleague, Dr. Rigby. To counteract such derangements, I have made many experiments, which have at length resulted in the production of this instrument.

A standpoint is thus obtained, whereby force can be gradually applied to the lumbar region, so as to alter the position of the pelvis from the horizontal to a more oblique plane. The same advantage is thus gained by the pelvic band without the confinement and constraint of the prone position, and of many other ingenious appliances, which nevertheless are much more complicated and irksome to be borne.

The principal feature of the pelvic band is, that it forms an artificial skeleton, and so supplies all the chief *points d'appui* by which the complicated muscular system engaged in the acts of expulsion harmonise and effect their purpose; and it is one with the pelvis itself as to offer

a stability and comfort that no appliance depending chiefly on abdominal, and therefore unstable pressure, can possibly afford.

Enough, I trust, has now been said to warrant the hope that members of our profession will not be wanting to test its merits. Should this instrument obtain the approval of the distinguished physician, who now occupies the chair—should it prove to be, as I hope, an aid to midwifery, by lessening the pains and perils of childbirth, as well as by curtailing the often protracted attendance of the accoucheur—and should it likewise tend to facilitate the treatment of uterine dislocations, my object in bringing the subject before the Association will be fully gained.

ON THE EXTENSION OF THE CONTAGIOUS DISEASES ACT TO COMMERCIAL PORTS, AND OTHER MEASURES FOR IMPROVING THE SANITARY CONDITION OF THE MERCANTILE MARINE.*

By WALTER DICKSON, M.D., R.N.,
Medical Inspector of H.M. Customs.

Two years ago, an Act was passed by Parliament to amend existing sanitary laws relating to merchant seamen, to supply omissions in former Acts, and thereby to mitigate, if not entirely obviate, those preventable diseases which had been incontestably proved to have seriously crippled the mercantile marine of this country; for not only was the amount of sickness and mortality at sea much greater than it ought to have been, but the service had, in the public mind, become associated with so much hardship, misery, and degradation, that it ceased to present attractions to the adventurous youth of our poorer classes. Few of the worthier sort were tempted to the sea; and so it came to pass that the ships of our commercial navy were, in many cases, chiefly manned by foreigners. Most shipowners and shipmasters will admit that, among their best and most trustworthy seamen, there is now, and has been for some years, a large proportion of German or Scandinavian origin. For this change in the *personnel* of ships, there are, no doubt, other causes—such as the impetus given to emigration, and the higher wages that can now be obtained by young men, without privation, at home. With a view of reviving and developing the old nautical spirit which has done so much to enrich and aggrandise this country, and of ensuring for the sailor greater consideration and better treatment than had been accorded to him, several measures, both voluntary and compulsory, have been discussed. The Act of 1867 took cognisance of two important defects of common occurrence in the hygiene of ships, and effectual means were adopted to secure for the future a sufficient supply of trustworthy antiscorbutics, and also to provide better quarters for the men in regard to space, ventilation, and privy accommodation. An improved medicine-chest and book of instructions were also issued for such vessels as carried no medical officer; and special care was taken that the sick should not starve, as had sometimes happened, from want of suitable articles of diet. So essential a matter as the medical inspection of seamen, before embarking on long voyages, was recommended and regulated for, but was left to be adopted or not at the discretion of the local marine boards, and has shared the usual fate of permissive legislation in becoming, so far as I am aware, a dead letter.

In my official capacity I have inspected, for the Board of Trade, a great number of vessels of every class, and have examined minutely the sanitary condition of their crews. The details of these inquiries were published *in extenso* in a series of Parliamentary returns, and they showed conclusively the necessity of Government interference, which had been for some time urged in reference to antiscorbutics by the medical officer of the Privy Council, the physicians of the *Dreadnought*, and others interested in the health of seamen. The result was the Act of 1867, or Duke of Richmond's Act, as it is sometimes called after the then President of the Board of Trade.

In my representations, deduced from searching investigations into the health of many individual seamen, I gave a prominent place to venereal disease, as calling for immediate measures of repression. No malady is more prevalent among this class of men; and although it does not figure largely as a cause of mortality, yet, as we are all aware, hardly any disease proves more harassing, or is more tediously destructive of strength and comfort. It is now, as scurvy was, the main agent in keeping vessels undermanned. It is no uncommon thing to find a large proportion of a crew to be more or less disabled from this cause, as soon as they have got into what is technically called "blue water." The less acute cases do not, of course, desist from work, and, consequently, make slow and imperfect recoveries. But those more severely affected, as with slough-

* Read in the Public Medicine Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

ing ulcers of the penis, large open suppurating buboes, and the resulting sores, or acute orchitis, are necessarily incapacitated for all active duty. They become a serious burden (1) to themselves, as they lose part of their wages; (2) to their captains and owners, who lose their labour; and (3) to their shipmates, who are compelled to do additional work without compensation. A stoppage is made from men's pay on account of such illness; but this has often the effect of preventing their disclosing it till concealment is impossible, and so rendering the cure more difficult and protracted. In some cases they make no avowal, and dispense with all treatment; or, if they have discovered they were diseased before leaving port, they obtain medicine chiefly from chemists, herbalists, and other irregular practitioners, who are always to be found in the low thoroughfares of sea-port towns, and who, to the discredit of our present system of medical police, flourish unchecked, and reap abundant harvests from those who are able and willing to pay moderate fees, but have no means of distinguishing the true from the *soi-disant* doctor. These medicines are often strong mercurials or other hazardous drugs; and I have met several instances in which serious and lasting mischief has resulted from their use. The high reputation which mercury has enjoyed for several generations, and which, in the majority of truly syphilitic cases, is, I believe, justly deserved, had become a deep-rooted tradition among mariners; and captains and mates of ships, on whom, in the absence of surgeons, the duty of attending to the sick devolved, were in the habit of administering it lavishly in almost every case of venereal sore that presented itself. It is, therefore, enjoined in the official Medical Guide that mercury should not be given at all by unprofessional persons. Black-wash is to be used, or nitrate of silver and other external applications; and, if the chancres be hard or persistent, and other secondary symptoms appear, iodide of potassium in five-grain doses, three times a day, is ordered to be given for some weeks. This is, perhaps, receding to the non-mercurial extreme; but there is no doubt that, in the hands of the unwary, and more especially in the peculiar circumstances of diet, labour, and exposure, incident to the seaman's vocation, it is much the safer mode of treatment. In the scorbutic condition in which, unfortunately, too many men are still to be found, mercury has seemed to act with poisonous virulence; and the combination of these three evils was one of the severest trials to which the human frame could be subjected. We may, therefore, remark with satisfaction the alteration which, by precept and example, is being effected in the treatment of fresh cases of venereal sore.

With regard to the more remote indications of the disease, nothing need be said, except to remind you that much of the so-called rheumatism, ulcer, and bone-disease, which are extraordinarily prevalent among seamen, are probably, in many cases, the sequelæ of ancient syphilis. Various diseases of the viscera are also sometimes traceable to the same cause; and stricture of the urethra is one of the commonest, as it is one of the most distressing, complaints that affect this class of men.

Having in these practical inquiries obtained abundant proof of the ravages of this class of diseases among our merchant seamen, I have, for the last five years, urged the necessity of extending to them the same protection which the State has more or less afforded, through the Contagious Diseases Act, to the seamen of the Royal Navy in the home ports and arsenals, and to the troops in our garrison towns. The reasons for this appear to be as cogent in one case as the other. It may be said that the national forces should be more peculiarly the object of public care and solicitude. But the seamen of the mercantile marine, although almost imperceptibly, are rapidly attaining the same position. The progress of political events, both at home and abroad, point to this conclusion. The sudden appearance on the stage of a new great maritime power—that of North Germany—may materially modify the large supply of excellent seamen we have annually derived from that and the neighbouring countries. The great reduction of our armaments, which is now being made, must inevitably lead to the extension and development of the naval reserve, as the only source whence, on emergency, a skilled and trained force may be drawn to cope, should the necessity arise, with the other great powers at sea. Already several thousands of excellent seamen of the Northern British ports are enrolled in the reserve, and their claims to State pay and recognition are fully admitted. Their position in other matters, as compared with the working classes, is quite exceptional; for it must be borne in mind that seamen are compulsorily celibate. Like the soldier and the man-of-war's man, sailors on ocean-service are so rarely at home that marriage, in their case, is an evil and discomfort rather than a blessing, and, in their earlier years at least, is in no way desirable. But at their age (for sailors of middle and advanced life are comparatively few), the sexual passion is strongest; and debarred, as they often are, for many months from the society of women, it is not surprising or otherwise than natural that when they have the opportunity they should rush into ex-

cess. We know the results; and I, therefore, contend that, being all more or less directly the servants of the State, they are entitled to the same safe-guard as the law has provided for the Royal forces. In a professional or philanthropic point of view, their claims would seem to be even stronger, for the vast majority are destitute of the skilled medical aid which the army and fleet always and everywhere enjoy; and they, therefore, suffer much more from venereal and its consequences.

Were the medical inspection of seamen, provided but not enforced by the existing law, satisfactorily carried out, no small progress would be made in this direction. The pecuniary interests of shipowners, and the physical well-being of crews, would be alike benefited, and the requisite clue obtained for tracing the mischief to its source. At present it is chiefly on the evidence of infected men that the police in the towns where the Act is in force rely, in order to detect diseased women, and prevent their doing further harm. But the system is confessedly imperfect, and its operation is limited and uncertain. Yet, notwithstanding this hindrance, the measure has been successful in sensibly diminishing disease in all the dockyard ports and garrisons where the experiment has been tried; and in some, as Sheerness and Plymouth, to a very remarkable extent.

To ensure a thoroughly efficient control over the public women of the commercial ports, an advance must be made on the existing practice. 1. All women who are suspected, on sufficient grounds, by the police, or are known to be avowed prostitutes, should be registered and placed under permanent surveillance. 2. Their attendance, at stated times, for medical examination, should be made compulsory. 3. When found to be diseased, they should be sent immediately to hospital, and there legally detained until the medical authorities should consider their release unlikely to injure the community. 4. Their migration and movements should be known to the police, and regulated by passports or certificates, so that they may not, as is now often the case, evade the operation of the Act by change of residence.

In carrying out this system of repression, it is believed that no practical difficulties of insurmountable character would be met. In large sea-ports, as is well known, this order of women is a class apart, for the most part stationary, recognised by the police as having no other vocation, and physically and morally debased to such a degree that restraint and discipline of the kind indicated would probably be, in some cases, the first step to reformation.

The accommodation provided for them, as well as the diet and surroundings, should be of the plainest and most inexpensive character consistent with the successful treatment of their diseases. It is probable that the handiest and most economical form of special hospitals would be hulks, of which the Admiralty have great store, and which could, without much outlay, be fitted up in a way to secure isolation, cleanliness, good order, and discipline, more readily and cheaply than establishments on shore. In towns where no existing building could be conveniently obtained for the purpose, these would answer at all events temporarily, till the probable number of patients, etc., was ascertained. I would suggest that the duties of the medical staff should not be divided, as at present, into an inspector's or examiner's, to detect disease, and a hospital surgeon's to cure it; but that both these duties should be intrusted to the same hands. I am given to understand that inconvenience has arisen from occasional collision of opinion with regard to the admission or discharge of patients, in the double *régime* that now obtains. As the treatment of such cases is far from agreeable, and in no way likely to advance a practitioner's interest in private practice, but, on the contrary, may possibly injure him, the remuneration of the medical officer charged with the working of the scheme should not only be adequate, but liberal. At present the treatment, like most other hospital work in this country, is undertaken gratuitously; but I contend that the State has no right to expect or enjoy the services of medical men on such terms.

That the labour will not be light may be supposed, for it is computed the hospital accommodation required for the prostitutes of the more important commercial ports, including London, would amount to 2000 or 3000 beds, and necessitate an annual expenditure of from £60,000 to £90,000. Whether the great advantages which would doubtless accrue to this valuable class of men (about a quarter of a million in number) from this State expenditure on their behalf, would be cheaply or dearly purchased, is subject-matter for the consideration of political economists. But no doubt can be entertained of the necessity that exists for active interference, of its practical feasibility, and of the satisfactory results that, judging from the experience of our own and other countries, must inevitably attend it.

Without disputing the expediency of a general application of preventive measures to the whole kingdom, as has been for some time discussed and recommended by many eminent persons, I would respectfully submit that it would, perhaps, be premature to enter on so large

a scheme till more conclusive evidence were obtained of its harmony with our institutions. A preliminary trial in those commercial ports, which, I have endeavoured to show, possess strong claims as holding an intermediate position between arsenals and ordinary municipalities, would go far, I believe, to solve the problem; and, if thoroughly successful, would afford the best encouragement for the further expansion of the system.

In the records of the army, navy, and mercantile marine, we possess much more definite and correct information as to the success or failure of sanitary experiments than we can ever hope to find in those relating to the civil population; and a few years' tentative experience in these three branches of the service would decide the question.

I have, I fear, dwelt too long on this topic; but at this important meeting, comprising, doubtless, several medical representatives of the ports in question, we may hope to have the advantage of hearing the opinions of gentlemen who have great practical experience, and who have probably bestowed much thoughtful consideration on the subject.

[The length of the debate on Hospitalism in the Public Medicine Section prevented any discussion on this question.]

CASE OF STRANGULATED INGUINAL HERNIA: OPERATION: RECOVERY: UNION OF THE WOUND BY FIRST INTENTION.

By ARTHUR EVERSLED, Esq., L.R.C.P., Amptill.

THE following notes of a case of herniotomy may at the present time be of some interest, since they show that perfect repair of the injury inflicted by the knife in this operation may occur under the simplest treatment, without the formation of a single drop of pus.

William Cook, aged 34, a healthy farm-labourer, had been subject to an inguinal hernia on the right side for four years. It came down almost daily (for he never wore a truss), and he could always return the protrusion himself, until a few days before the operation, when the hernia having come down, a portion of it could not be reduced; still, he had no inconvenience until the next day, Wednesday, October 7th, when he was cleaning some harness, and felt the intestine descend still more; he had then considerable pain about the umbilicus. This occurred at 10 A.M.; and in the evening, at 8 P.M., finding, after repeated efforts, he could not get the bowel back, he sent for assistance. The tumour at this time was of the size of a pigeon's egg, situated at the junction of the scrotum with the pubes, being half in the scrotum; it was very tense and elastic, tender to the touch, and it received no impulse on coughing.

All attempts to reduce the hernia failed, so opium was given, and cold applied. At 9 P.M., vomiting commenced, and continued through the night.

October 8th, 11 A.M. He had now stercoraceous vomiting; his tongue was becoming coated; his pulse 76, rather weak; he had some anxiety of expression. There was now more tenderness about the tumour. The taxis was again tried, unavailingly, so also was pressure made upwards and backwards, when the man was standing, the operator also standing behind the patient. Chloroform was then given, and the taxis again tried; but as it failed to give relief, the operation for dividing the obstruction was performed by me, assisted by Mr. Montague Evershed. An incision, two inches long, was made over the seat of obstruction—the external ring—in a direction almost parallel with the linea alba. The several coverings of the hernia (excepting the sac) were divided, so also was the obstruction, and the strangulation relieved. Two wire sutures were put in, the edges being brought neatly together, and any protruding fat was cut away. A pad of lint was then placed over the wound, and maintained there by strapping and bandages; the knee was bent, and a pillow placed beneath the ham. He was strictly enjoined to take only a fluid diet, and to keep perfectly quiet. A pill, containing one grain of opium, was given every three hours. The patient went on favourably from the first. The opium was discontinued on October 11th; on the 12th, the wound had entirely healed, without the formation of a drop of pus. On the 13th, the bowels had relieved themselves naturally by a perfectly healthy evacuation. He was allowed to have some mutton. On October 15th, the sutures were removed. A day or two after this he was wearing a truss quite comfortably; and in less than a fortnight from the time of operation, he walked nearly a mile, and was able to wear the truss all day.

In this case, the urgent symptoms of strangulation were manifested early—i.e., within twelve hours, and fecal vomiting occurred within twenty-four hours of the time when the strangulation took place. The satisfactory termination was due, in part (most probably), to the early performance of the operation; and that, too, on the spot, in the pa-

tient's cottage, far away from other surgical cases and various sources of disturbance. The patient himself also is a man of most temperate habits; his life has been spent out of doors; and his health had, up to his recent illness, been uninterruptedly good.

FEMORAL ANEURISM: LIGATURE OF EXTERNAL ILIAC ARTERY: RECOVERY.*

By R. T. LAND, M.D.,

Lecturer on Anatomy in the School of Medicine, Leeds.

THE case was one of aneurism of the right femoral artery occurring in a woman, aged thirty-three, a weaver. About six or seven weeks before my seeing her, the patient had much heavier pieces of cloth to lift than usual; this was followed by a weak, numb feeling in the right leg, and a difficulty in standing, to such an extent, that she was compelled to give up work. At this time, she noticed, in the upper part of the thigh, a lump, which gradually increased in size, and to relieve the pain of which she had recourse to frequent rubbing with the hand. There was now unmistakably distinct aneurism of the femoral artery. The skin covering it was of a bluish-white colour, glazed, and very tense, and presented all the appearance of giving way externally. In conjunction with my father, and my friend Mr. Jessop, it was determined to ligature the external iliac artery. This was accordingly done, under chloroform, on November 24th, 1868. Nothing unusual occurred in the course of the operation, until, after carefully dividing the various strata of the abdominal wall, it became a question whether the structure exposed was peritoneum or simply transversalis fascia. The opinion seemed to be, that the lining membrane of the abdomen had yet not been exposed, and that the structure was transversalis fascia. This was therefore slit up to the full extent of the external wound, when it was at once discovered that the peritoneal cavity was opened. The cut edges were held together by Mr. Jessop; and, without anything further untoward taking place, the operation was completed. All went on well until December 4th, when, from the patient having had a restless night or two, and considerable pain in the right hip, on which she was lying, I was induced to examine that part, and found a very large sloughing bed-sore, which had been considerably aggravated by the patient persistently urinating into the bed, and which, unknown to me, had existed before the operation. With the view to get over this second complication, I now had the patient placed on a water-bed, and the sore dressed, in the first instance, with carbolic acid lotion, and afterwards with zinc ointment, until it was completely healed. Means were adapted to keep up and improve the general condition of the patient; and all went on satisfactorily, with the exception of one or two points which I shall presently mention, to a complete and satisfactory recovery. The ligature came away, with a little assistance, on December 31st—the thirty-eighth day.

I would now shortly draw your attention to two or three points in this case.

1. Here is an aneurism, of rapid growth, occurring in a woman (a rare occurrence), and on the point of bursting externally, arrested completely by ligature above the part.

2. As to the cause of this aneurism; the woman was rather weakly looking; no history of syphilis could be made out; and it seemed to me, as the patient had suffered some time before from acute rheumatism, that some impairment of the nutrition of the vessel therefrom had taken place, and that the condition was excited by the increased exertion to which she was subjected, of lifting heavy pieces of cloth, using, at the same time, the right leg as a lever.

3. The slitting up of the peritoneum was done deliberately; and how this membrane was mistaken for transversalis fascia, seems difficult to understand, except that the light was bad, and the transversalis fascia not so readily distinguishable in the female as in the male. The edges of the wound were stitched together after the ligature had been placed around the vessel; and this ultimately came away through the opening in the abdominal wall. Not the slightest indication of peritonitis presented itself.

4. The complication of bed-sore was treated, in the first instance, by a lotion composed of one part of carbolic acid to eight of olive oil, up to December 14th, a period of ten days, when the patient was seized with severe bilious vomiting, and pain in the epigastrium, and passed dark coloured urine, noticed in cases of poisoning by carbolic acid. This dressing was, therefore, discontinued for three days, and the symptoms thus related ceased; and, with a view to ascertain whether the carbolic lotion was the cause of this disturbance, I re-applied it as before, with the same result.

* Read in the Surgical Section before the Annual Meeting of the British Medical Association in Leeds, July 1869.

5. Although the disappearance of the swelling was no doubt partly effected by absorption, yet the bulk of its removal was owing at a small valvular opening taking place in it, which gradually, and now and then, allowed the more fluid parts to drain away—I need not say, a most desirable result.

Thus, gentlemen, you will see, complications existed in this case likely enough to discourage and damp the ardour of any, more particularly of a young surgeon. Still, as each complication arose, it was grappled with; and, by the assiduous help of the nurses who had charge of the case, overcome; and the patient was restored to her friends comparatively sound and strong.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

UNIVERSITY COLLEGE HOSPITAL.

REMOVAL OF THE WHOLE TONGUE BY REGNOLI'S OR THE SUB-MENTAL OPERATION: PLEUROPNEUMONIA: DEATH.

(Under the care of Mr. ERICHSEN.)

THE following interesting case is from notes by Mr. Smith, House-Surgeon.

Henry Pearce, a road-sweeper, aged 53, was admitted on October 5th, 1869, for extensive epithelioma of the tongue. He had been very healthy, never having been laid up with any illness. He had smoked a good deal, always using a clay pipe. His wife stated that he had been a hard drinker. He had had gonorrhoea two or three times but never a sore of any kind. He had had sufficiency of food and clothing. Three months before admission, the tongue was perfectly sound, as far as the patient knew. About that time, one of his left upper molar teeth, having been broken, irritated the tongue, causing it to bleed several times. This was followed by a lump, which enlarged rapidly, and shortly afterwards ulcerated near the tip of the organ. His appetite had remained good; but he had not been able to chew his food, and had lost flesh slightly. The mass caused him no pain beyond the soreness and smarting of the ulcerated portion of it. His general health had not been much impaired since the appearance of the tumour.

When admitted, he was fairly nourished. There was no anæmia, nor cough. His digestion was good. Pulse 78. He had only one tooth—an upper incisor. He could not put out his tongue. The anterior two-thirds of this organ were hard; and on the dorsum was a hard somewhat nodulated mass, which extended backwards to the hyoid bone on the right side, but not so far by half an inch on the left. The anterior part was ulcerated.

On October 6th, Mr. Erichsen removed the whole tongue by Regnoli's operation, in the following way. An incision was made from the symphysis of the lower jaw directly downwards to the hyoid bone. From the upper part of this, a cut, running obliquely upwards and outwards, was made on each side and along the base of the lower jaw. The incision under the jaw was kept within the facial arteries. The flaps of skin having been turned back, the muscles forming the floor of the mouth, and those between the jaw and hyoid bone, were divided close to the bone; and the cavity of the mouth opened. This aperture was enlarged by a blunt-pointed bistoury. The tongue was then seized with three strong hooks, and drawn through the opening. The chain-*écraseur* was now applied as far back as possible, and then tightened one link every half-minute for ten minutes. Three more workings of it, at a minute's interval, succeeded in separating the diseased part. Rather smart hæmorrhage now occurred from the right lingual artery; this was easily arrested by passing the finger well back, and compressing the structures between finger and thumb. The patient was put to bed with his shoulders well raised, the central incision of the wound being left open. As he could not swallow, an enema of two ounces of beef-tea, with thirty minims of tincture of opium, was given.

About 5 P.M., there was some oozing of blood. Plugs of lint, wrung out of ice-water, were inserted; these proved effectual. Pulse 104.—At 8 P.M., an enema of half an ounce of brandy, an egg, and two ounces of beef-tea, was given.

Oct. 7th. He had about two hours' sleep during the night. He had not complained of pain, but lay very quiet. The enemata were repeated every four hours.—About 6 A.M., his pulse was so weak that an extra enema, with an ounce of brandy in it, was given.—At noon, he was better. Pulse 94. The flaps of lint were removed, and the longitudinal incision closed with silver sutures.

Oct. 8th. He had slept pretty well. The enemata were continued as before. The mouth was washed out several times a day with Condyl's fluid. The discharge was very offensive. The external wound was dressed with lint soaked in carbolic acid lotion. The patient could not swallow.—10 A.M. Pulse 98.—11 P.M. Pulse 96; temperature 100 deg. The patient was cheerful; he sat up in bed, and asked for ice to suck.

Oct. 9th. Mr. Poore passed the stomach-pump tube, and administered half a pint of strong beef-tea, with an ounce of brandy and an egg. By the aid of a mirror, the tube was easily passed, the *prominence* of the epiglottis being the only difficulty. In the evening, the house-surgeon repeated this. The patient seemed stronger.—11 P.M. Pulse 96; temperature 99 deg.

Oct. 10th. He had had a good night. He was fed this morning with the stomach-pump. As he complained of pain in the œsophagus, he was to have enemata in the evening. There was no union in the longitudinal incision; large sloughs and much discharge came through the opening. The patient had some Condyl's fluid by his side, and washed out his mouth frequently with it. He could not, however, swallow. The fœtor was much less offensive. Temperature in the morning, 99.2 deg.; in the evening, 99.4 deg. Pulse 84. The patient was bright and cheerful.

On the 13th, he complained of pains in his chest, but there was no cough. His temperature had risen in the morning to 101 deg., and his pulse to 100; it was weak and intermittent. In the evening, he complained of pain in the right side, two inches below the nipple, which in an hour or two became very severe. He had a tickling cough, quick and shallow breathing, and was constantly moaning. He was given enemata of strong beef-tea with brandy every two hours, and (as deglutition was impossible) an inhalation with a drachm of tincture of conium and twenty-five minims of spirit of chloroform. The latter relieved the cough, and also the pain for a short time; but this soon returned as bad as ever.—At 11 P.M., the temperature was 103.3 deg., and the pulse 116. Tincture of opium was given in the enemata, to relieve pain. During the night, he never slept a moment, but gradually became worse, and died at 8.30 A.M., October 14th.

Autopsy on Oct. 15th.—The body was greatly emaciated. Both tibiae were affected by angular curvature. The tongue was found to have been very cleanly excised close to the hyoid bone. No diseased structure remained. The wound at the seat of separation looked healthy. Some effused lymph was found on the pleura over the pericardium (right side) and diaphragm. Near the anterior edge of the right lung was an abscess about an inch long. Several other abscesses were found in both lungs, and patches of grey pneumonia.

Dr. Legg examined the tongue and found the following conditions. The entire right half of the tongue seemed to be the seat of a morbid growth. This formation was of cartilaginous hardness, and under the knife creaked and offered considerable resistance. On microscopical examination of the growth, it was found to consist of—*a*, fibres; *b*, epithelial cells—spheroidal, caudate, rectangular, and multipolar, with one or two nuclei and granular contents, disappearing under the influence of acetic acid; *c*, concentric globes, in great number and of considerable size. From these appearances, it was clear that the tumour must be classed among the epithelial cancers.

In his clinical remarks on the case, Mr. Erichsen pointed out the following advantages that this operation appeared to present. 1. It enabled the surgeon to obtain a thorough view of the diseased organ to its very root. 2. It admitted the easy application of the *écraseur* or knife. 3. No blood-vessels, except those of the tongue itself, were endangered, and it obviated the necessity of dividing the lower jaw. The fatal result in this particular case was scarcely attributable to the operation, but rather to the weakened state to which the patient had been reduced by his disease, together with the sudden change in the weather.

LIVERPOOL NORTHERN HOSPITAL.

CASES OF INJURY TO THE HEAD.

(Under the care of REGINALD HARRISON, F.R.C.S., Assistant-Surgeon to the Liverpool Royal Infirmary, and Lecturer on Anatomy at the Liverpool School of Medicine.)

THE following cases came under my care at the Liverpool Northern Hospital during the time when I was surgeon to that institution. They are selected as presenting some features of practical interest in the study of these affections.

CASE 1. *Concussion: Death*.—A middle aged dock labourer was admitted under my care in May 1866, in consequence of an injury caused by the falling of a ship's block. On admission, there was a contusion over the left side of the head. The symptoms were those of concussion. In the course of forty-eight hours, he had almost completely recovered;

but, being feverish and complaining of headache, rest in bed, with low diet, was enjoined. On the eighth day, feeling quite well, disregarding of orders, he got up, and, whilst walking about the ward, was seized with a fit; he rapidly became insensible, and died. At a *post mortem* examination, no fracture was discovered, but a rent in the dura mater, of about two inches in length, and corresponding in position to the left temple. There was a large extravasation of fresh semi-coagulated blood beneath the membrane extending over the side to the base of the brain.

This case furnishes us with a striking example of the very serious complications that may be concealed by concussion. Doubtless, hæmorrhage at the time of the accident was prevented by the collapse so immediately produced; but, whilst the clot was still imperfectly organised, the heart's action, aroused by the exertion of getting out of bed and walking, forced it out, and hence the untoward result—a result which a few days' longer rest and quiet would almost assuredly have prevented. I need hardly remark that the chance of such an occurrence should make us at all times careful in giving a prognosis, though the case may appear to be a very ordinary one of concussion.

CASE II. Fracture of the Skull: Epileptiform Convulsions: Recovery.—A foreign sailor boy, aged 14, was admitted under my care in July 1867, for injuries received by falling from aloft. On admission, he was concussed. There was a scalp-wound leading down to a detached piece of bone, corresponding to the left parietal eminence. This was removed, and found only to involve the outer table. On the tenth day after his admission, he was seized with a severe convulsion of an epileptic character, and, almost immediately afterwards, he passed a motion, containing a large round worm. An explanation was thus at once afforded. A good dose of calomel and santonin was the means of expelling four others. Before the medicine operated, he had several attacks of a similar nature, though slighter. The patient shortly afterwards left the hospital quite well.

Convulsions or fits of any kind coming on in the course of injuries to the head, are always calculated to excite the gravest apprehensions, as, in the great majority of instances, they are directly associated with the lesion, and are oftentimes the foreboders of the most serious consequences. In this instance, circumstances precluded us from obtaining any previous history; but, the clue being so speedily afforded, all sources of difficulty or doubt were at once removed.

CASE III. Fracture of the Skull involving the Frontal Sinus: Emphysema: Recovery.—A boy, aged 15, was admitted under my care in November 1867, having fallen down a ship's hold. On admission, he was suffering from symptoms of concussion. The right forearm was fractured just above the wrist, and the forehead severely contused. When I saw him the following day, he had partially recovered his sensibility. The swelling extended from the root of the nose beyond the frontal eminences; the margins of the swelling gave on pressure the peculiar crackling sensation characteristic of emphysema, whilst the centre was extremely tense and tympanitic. In the course of three weeks, he was sufficiently recovered to be able to leave the hospital; the swelling had materially lessened, and we were able to feel very distinctly the aperture by which the air had escaped from the sinus. The anterior wall of the right sinus had been completely driven in, leaving a well defined circular opening, into which the tip of the little finger very nearly fitted, and through which, on each expiration, a visible impulse was given to the air still remaining beneath the skin.

I have noted this case, as it is, I believe, comparatively rare to meet with such a condition at so early an age.

CASE IV. Contusion of the Brain: Death: Diffuse Ecchymoses.—A dock labourer, aged 43, was admitted under my care in November 1867. He had fallen head-foremost down a ship's hold, a distance of about thirty feet. On admission, he was insensible, cold, and almost pulseless; breathing quiet. There was a wound over the eye; but, with the exception of a broken nose, no other fracture could be detected. In the course of the afternoon, he partially recovered his sensibility, but, on being aroused, he became exceedingly riotous. On the day following his admission, he was in a semi-conscious state. The breathing was noisy but not stertorous. Pulse 60; skin warm. It was necessary to draw off his urine. On speaking to him, he endeavoured to answer, but became exceedingly noisy and riotous. On the third day, his condition remained much the same. He became so excited and violent during the night that at times it required two attendants to restrain him. His circulation was quite natural and free from any febrile excitement. On the fifth day, he gradually became completely insensible, and died on the tenth.

POST MORTEM EXAMINATION thirty-six hours after death. On removing the skull-cap, there were no indications of an unusual amount of congestion. There was almost an ounce of straw-coloured serum, perfectly pellucid. The pia mater was unusually congested at the base,

and small patches of blood were found extravasated between its meshes. The middle lobes at the base were of a dark olive colour, gradually fading into the normal appearance. As traced upwards, they were also much softer than natural, in some parts almost diffuent. The posterior lobes alone appeared to have escaped injury, the remainder of the base of the brain being more or less altered, either in colour or consistence. On section, the two anterior lobes generally presented a number of small extravasations, varying in size from a pin's head to a pea. On examining some of the larger extravasations, I noticed that there was a distinct margin of a yellowish colour fading down to the natural appearance, whilst the cerebral substance round others was blood stained. The other portions of the cerebro-spinal axis, viz., the cerebellum, pons, medulla oblongata, as well as the upper portion of the spinal cord, presented a natural appearance. No further examination was permitted.

This case furnishes us with a well marked example of general concussion of the brain, a condition which there is good reason for believing to be present, more or less, in all cases of concussion; but as the disintegration that takes place is frequently of a molecular character, it may readily escape observation in making the examination, unless carefully looked for. The term "concussion", in the general sense in which it is used, is not free from objection, inasmuch as use has associated it almost solely with a suspension of function, and not with the lesion upon which such suspension depends.

ST. MARY'S HOSPITAL, MANCHESTER.

CASE OF LEUCOCYTHÆMIA.

(Under the care of DR. LLOYD ROBERTS.)

WE are indebted for the following report to Dr. WM. LEONARD, Senior Resident Medical Officer.

A. S., aged 26, unmarried, became an out-patient of St. Mary's Hospital on May 23rd. Menstruation commenced when she was fifteen years old; since which time, the periodical flow had been always scanty, never lasting longer than one or two days. She had never been subject to leucorrhœa. Habitual constipation and occasional bilious attacks had been the rule with her.

On admission, her complexion was of a peculiar yellowish hue, a kind of waxy pallor, different from the blanched appearance exhibited by the subject of simple anæmia. The lips were bluish-white; and there was an anxious expression of countenance. The patient was not emaciated; respiration was short and quick. There were frequent sighing, and great difficulty in walking, especially in ascending any elevation, owing to the extreme dyspnoea, and the violent palpitation produced by the exertion. To such a degree, she explained, did this at length become the case, that she had to be carried up stairs each night, and was obliged to give up her usual avocation as waitress at a music-hall restaurant. There was total loss of appetite. She was very carefully examined, but no organic disease of the heart existed, nor were there any signs of pulmonary tubercular mischief. She did not suffer from piles. There was no splenic, and but slight hepatic, enlargement, and none of the external lymphatic glands. During the last three months, she had noticed a swelling about the ankles towards night, and a slight puffy bulging under each eye in the morning. A drop of her blood was examined under the microscope. In the spaces between the rouleaux of red corpuscles appeared a great number of white cells, which exhibited the characteristic changes on the addition of acetic acid, and a very few free nuclei could be discerned. The proportion of the white to the red corpuscles appeared as one of the former to two of the latter. A mixture, containing tincture of perchloride of iron, in doses of ten minims thrice daily, was prescribed, and the colocynth and mercury pill of the hospital occasionally at bed time.

On June 1st, the blood was again examined, and the number of white corpuscles seemed somewhat less. The patient's symptoms were not so urgent, and she considered herself a little better. The first urine passed that morning was of a pale amber or primrose colour, remarkably clear, and contained no albumen, no sugar, nor colouring matter of bile; its specific gravity was 1.007, and its reaction alkaline. The bowels had acted much better since taking the pills.

On June 3rd, the specific gravity of a specimen of the urine obtained from the whole amount passed in the twenty-four hours, was 1.004. There was no sediment.

On June 11th, she was much improved. A faint redness of the cheeks was perceptible, and the tint of the skin generally more natural; there was less dyspnoea, and the number of respirations and pulsations per minute was nearly normal. No change was apparent in the character of the urine. There was greater regularity in the action of the bowels, and the appetite was becoming more natural. On carefully examining a drop of the blood, comparatively only a few white cells were discernible

the proportion between these and the red corpuscles being certainly no higher than one to thirty. She was now able to partially resume her duties, and could walk, even run, upstairs without experiencing any ill effect.

On June 13th, the specific gravity of the urine was 1,010, the reaction neutral, and the colour decidedly deeper.

On June 22nd, she continued to take her medicine. She went to the country occasionally, with benefit. The peculiar pallor was fast disappearing, the dyspnoea scarcely noticeable, and the countenance wore a pleasant expression in place of the anxious look which characterised it on her admission. Ten days afterwards, the specific gravity of the urine was 1,009; no coagulation on applying heat and adding nitric acid.

On July 6th, on examination of the blood, the proportion existing between the two sets of corpuscles appeared normal. She now seemed quite well.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Paris, Monday, November 23rd, 1869.

1. *Paracentesis of the Chest: Trousseau and Peter.*—2. *The Female Anatomist.*—3. *Health of Lying-in Women.*

1. *Paracentesis of the Chest: Trousseau and Peter.*—During the summer and autumn, I have had several opportunities of seeing Professor Michel Peter perform paracentesis of the chest; and I have also, both in conversation and in his clinical lectures at La Pitié, heard him give very able expositions of the subject. His practice strongly corroborates the teaching of the late Dr. Trousseau, his illustrious master.

Professor Peter, in his clinical lectures at La Pitié, laid great stress upon the fact, that a continuance of the febrile state is ordinarily opposed to the absolute and immediate success of the operation. In such cases, from the inflammation not being extinct, reproduction of the effusion almost invariably takes place; and it may be necessary, according to the quantity of the effused fluid, to tap again or apply blisters. It sometimes happens that the new effusion becomes purulent, and that the original opening in the thoracic walls becomes a fistulous opening. The patient may live, retaining this fistula for an indefinite period, or he may be speedily carried off by hectic fever. This latter termination, Dr. Peter has only seen three times in the very large number of cases in which he has performed thoracic paracentesis. In two of the three cases, the patients were highly lymphatic, though not tuberculous subjects. In the other case, the patient was rheumatic. These are facts which ought to be known.

Besides the flow of bloody serosity of which Dr. Trousseau speaks in his thirty-second clinical lecture—his lecture on pleurisy and paracentesis of the chest—and which, he says, is characteristic of cancerous pleurisy, Dr. Peter, in his clinical lectures, remarked that the tapping itself might occasion the issue of bloody or sanguinolent serosity. Dr. Peter has twice met with this form of hæmorrhage: both patients made complete recoveries. He attributes the bleeding in these cases to the trocar having torn some vessels belonging to very vascular false membranes. Blood is consequently discharged into the pleura, which renders bloody the fluid issuing from the cannula. It is obvious, therefore, that there is no great cause for alarm when the fluid drawn off is bloody, provided the patient is otherwise in good health.

Since I called attention to paracentesis of the chest, on the 25th of October (JOURNAL, 30th October, p. 475), I have seen Dr. Peter perform the operation in a case of peculiar interest. The case is still under observation; and, as a little delay will increase the value of the short report of it which I intend to communicate, I postpone noticing it till a future occasion.

2. *The Female Anatomist.*—A young woman—I cannot bring myself to say a young lady—may be seen daily, at half-past twelve, and for some hours thereafter, dissecting in one of the pavilions of the Ecole Pratique. She seems to be about twenty-five years of age, and wears (when seated at the dissecting-table) a lady's round hat, and a blue garment having the general effect of a Frenchman's blouse. On Friday last, she was dissecting the thigh of a female subject, while at the same time a male fellow-student was dissecting the opposite limb. Several young men were engaged in dissecting other parts of the same subject.

The anatomical scene now described takes place daily in Dr. Fort's pavilion. A punning friend, when there with me the other day, said—pointing to the professor—“*C'est Fort*”; and then added—pointing to

the mixed dissecting group—“*Et c'est trop fort*”; and another of our party added, “*Et le tout est dégoûtant.*”

The female anatomist is said to be an *étrangère*—American, Prussian, or Scottish.

3. *Health of Lying-in Women.*—At the Maternité, and some other establishments in Paris, where lying-in women are collected, puerperal affections are at present rife; in fact, the Maternité is almost closed for the time being. With a view to ascertain the state of matters in the obstetric wards of the Hôpital Clinique de la Faculté (opposite the Ecole de Médecine), I accompanied Professor Depaul and his class in their clinical visit on Saturday morning; and, at the close of a very interestingly conducted series of bed-side short examinations and discourses, heard a clinical lecture in the amphitheatre. In the course of his lecture, the professor referred to the state of the Maternity, and called attention to—without attempting to explain—the remarkable fact, that in his own wards no untoward puerperal symptoms had shown themselves. All the cases, he stated, were going on favourably, and in a perfectly normal manner. This favourable condition certainly does not depend on the excellence of the ventilation, for the heavy peculiar odour of puerperal wards was most oppressive; nor on absence of crowding, for beds, with their adjoining cradles containing stiff, mummy-like parcels—in reality infants—seemed far too numerous for the space. The complete absence of puerperal disease, under all the circumstances, is a fact important to state, and impossible to explain.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

NOVEMBER 15TH, 1869.

PETER MARSHALL, Esq., President, in the Chair.

Mr. TEEVAN exhibited a Calculus, weighing two and a half ounces, composed of lithic acid and the phosphates, covered with spicula, which he had extracted from the bladder of a patient who had walked from Birkenhead to London (208 miles) in twelve consecutive days; the last day having walked thirty-three miles in the greatest agony. Mr. Teevan, finding the stone large and the bladder irritable, performed lithotomy. In answer to Mr. Hainworth as to the limit in regard to the size of the stone in relation to the operation of lithotripsy, Mr. Teevan stated he was guided more by the state of the bladder and constitution of the patient, performing lithotomy in preference to lithotripsy in irritable subjects. In one case of lithotripsy under his care, the *débris* amounted to three ounces in sixteen sittings.

Dr. DICK exhibited a Knife suitable for all operations where two knives are required; the cutting blade being covered at will by a sliding sheath, secured by a spring in the handle.

Dr. HAWKSLEY read a paper on the Stethosphygmograph, as an aid to the physiological and pathological investigation of respiration and circulation. He pointed out the use of taking a large and careful series of observations before the work of tabulation and comparison of facts could be usefully carried out. He exhibited the practical application of the instrument on a case of phthisis pulmonalis, and on one of well marked mitral regurgitation. In every case, three simultaneous and synchronous tracings of moving organs were taken; as, for example, the two lungs and the radial pulse; or the heart, the radial pulse, and that of the carotid or the femoral artery. The tracings would shew any disparity in the action of the two lungs, also the relation of inspirations and expirations; and, associated with the pulse-tracing, this afforded the opportunity of observing not only the peculiarities or modifications of the circulation, as with Marey's sphygmograph, but, in addition, their relation to the respiratory process. By the aid of this instrument, any question as to relative time in the transmission of the blood-wave through the arteries might be solved; as, for example, the time occupied in transmission to the radial, the carotid, or the femoral artery; and this might be found to have important connection with the diagnosis of aneurisms and tumours, as well as with diseased states of the arteries and with chronic disease of organs. The author gave a *résumé* of the facts on which the science of stethography is built, illustrated by drawings, diagrams, and an experiment, which was very successful in demonstrating the aid that elasticity in tubes affords to the passage of fluids, and the comparative impediment of rigidity.—Dr. SEMPLE observed that it might be a matter of question whether the results obtained by the sphygmograph might not be obtained by the other and simpler modes of diagnosis; but, in a philosophical point of view, it was impossible to withhold admiration from the ingenuity which had devised the instrument, and the great mechanical skill which had brought it to perfection. In a physiological, pathological, and therapeutical light, Marey's

invention, as modified by Dr. Hawksley, would, no doubt, in time produce most important benefits to medical science and practice.

HARVEIAN SOCIETY OF LONDON.

NOVEMBER 4TH, 1869.

JOHN G. WESTMACOTT, M.D., in the Chair.

DR. MENZIES read a paper on Small-pox in connexion with Vaccination. The author commenced by giving a short history of small-pox, and the great mortality which had attended the disease. He did not go into the practice of inoculation; since that had been discontinued after the introduction of vaccination. He firmly believed in the protective power of vaccination; notwithstanding that small-pox sometimes followed that operation, although in a more modified form. This circumstance had not escaped the notice of Dr. Jenner; and he found that it was owing to the vaccine not having been taken when in an active state, and before it had undergone some decomposition. The author of the paper then spoke of the close analogy or relationship between small-pox and cow-pox, and illustrated this by cases where both diseases progressed together in the same individual. He also gave statistics of the efficacy of vaccination, and the great protection it afforded from the ravages of small-pox; and hoped the disease would, sooner or later, be entirely stamped out in this metropolis, by a more strict compliance with the Government Vaccination Act, with a proper system of isolation, and careful vaccination at an early period of life. Dr. Menzies objected to indiscriminate vaccination, more especially at a time when small-pox prevailed as an epidemic. He was led to form this opinion from the unfavourable results which attended some of the cases. He did not believe that the vaccine virus of the present day had become in the least degree deteriorated by its successive introduction into the system. It was only in cases where there were indistinct and doubtful marks of previous vaccination in the arm that he considered re-vaccination necessary. He also pointed out the great care necessary in selecting the lymph. The child to be vaccinated should also be in a favourable state of health, and free from all kinds of eruptions, dentition, etc. As a means of ascertaining whether the vaccination had been effective, he recommended the application of a test which had been put in practice by Mr. Bryce, and which he had found most useful in the course of his own experience in the public service.—Mr. BENSON BAKER regretted that the author had not spoken of the evils which by some were alleged to arise from vaccination. He thought that the anti-vaccination association would do good service by causing inquiry into those evils. It would also tend to make vaccination more carefully carried out.—Dr. SYMES THOMPSON could not admit that vaccination was undesirable, when small-pox was presumably incubating. Mr. Charteris's cases seemed to support this view; but the great mortality might have been due to the virulence of the commencing epidemic, and not to the co-existence of vaccinia and variola. He gave an instance in which small-pox had broken out on board of a man-of-war. All unprotected persons were at once vaccinated; but twenty-four cases of small-pox occurred, and in four of these, the variolous and vaccine vesicles underwent maturation *pari passu*. Of the twenty-four cases, eight died; one only of these deaths being a case in which the vaccine and variolous affections co-existed.—Dr. WYNN WILLIAMS referred to the last report on vaccination of the Poor-law Board, as carried on in Ireland; from which it appeared there were only four deaths in over six millions of inhabitants, and only one death this year. The report further proved that the vaccine virus had not deteriorated from the time when it was first introduced by Dr. Jenner. He (Dr. Williams) did not agree with the author of the paper, as to increased danger of the effects of small-pox, if vaccination were performed during an epidemic. He believed that vaccination, as now carried out in England, was anything but satisfactory. One of the great sources of contamination of the blood of young children was syphilis; he had had under his care at the same time, five cases of children thus affected, in whom the disease was traced to the parents. He believed that no other disease ever was introduced, or ever will be, by healthy transparent vaccine lymph.—Dr. HARDWICKE concurred with the author of the paper in believing that small-pox and vaccinia were more or less identical. As public vaccination officer for Paddington, he had remarked that it was mostly in the lower ranks that compulsory vaccination was objected to. He thought that public vaccination ought to be open to all qualified medical men. It would also be desirable to vaccinate children earlier than the third month. In all the cases he had inspected, no case of syphilis communicated by vaccination was observed.—Dr. DAY believed that the course and severity of small-pox was greatly modified by vaccination, and urged the necessity in all cases of looking to the general health of children before the operation of vaccination; assuming that the virus itself, being a poison, was especially prone to aggravate eruptions such as herpes, eczema, porrigo, and even

psoriasis, not infrequently arising in healthy children from the vaccine virus.—Mr. CURGENVEN was in favour of re-vaccination; more especially at the age of puberty, and found that eczema frequently appeared after vaccination.—Mr. TIMES asked whether scrofula, syphilis, or any other disease, had been communicated through vaccination.—The author of the paper replied briefly to the remarks made.

MANCHESTER MEDICAL SOCIETY.

WEDNESDAY, NOVEMBER 3RD, 1869.

HENRY SIMPSON, M.D., President, in the Chair.

Laryngeal Affections.—*Conical Cornea treated by Operation.*—*Cysticercus in the Vitreous Humour.*—*Poisoning by Carbolic Acid.*—*Specimens preserved in Antiseptic Cere-Cloth.*—*Aneurism of the Aorta.*—*Necrosis of Femur.*

THE PRESIDENT shewed, with the laryngoscope, the following cases of Laryngeal Disease:—1. An ulcer on the epiglottis, with thickening of the surrounding mucous membrane. 2. A woman who had formerly had a small polypus on the vocal cords, at their junction, anteriorly. It had lately disappeared; and this was probably due to local treatment with nitrate of silver. 3. A case of congestion of the cords.

DR. SAMELSON shewed the following:—1. Conical Cornea, treated by Operation. The eye affected was the right one in a weaver, aged 30. The conicity was still perceptible on a side view; and there was an opaque spot on the summit, surrounded by a nebulous zone. This had resulted from the operation, which consisted, after the plan of Von Graefe, in the removal of a minute flap from the apex of the cornea, and subsequent cauterisation with nitrate of silver. The patient now read No. 6, and, through a stereopic slit, No. 2 of the modified types, at one and a half inch distance. Before the operation, which was performed about three months ago, he could only read No. 20 and, stereopically, No. 10 of the above types. 2. Cysticercus in the Vitreous Humour. This case was first presented to the Society in January last (JOURNAL, 1869, vol. i, p. 261). The bottom of the greyish-white cyst appears still to be attached to the fundus; while at its front aspect is seen a short, vertical, darkish line, marking the spot where the head and neck of the entozoon lie inverted in the cavity of the cyst. At varying, and often very short intervals, these parts are found to be stretched forward, and, as it were, groping about in the vitreous humour. The head, with its suckers, sometimes approaches close to the lens, so as to be easily recognised through the sight-hole of the ophthalmoscope without the aid of a convex glass. From the first, there remained but faint perception of light in the eye. For some months past, occasional obscurations of sight in the left eye, as well as frequently recurring headaches have been complained of, warranting the suspicion of the presence of the entozoon in the brain.

DR. BARLOW exhibited the stomach from a case of Poisoning by Carbolic Acid. Death had resulted in less than ten minutes after the drinking of the fluid, apparently from the sudden shock to the nervous system. On opening the abdomen, the stomach was found contracted and hard. It contained only an ounce of fluid, and smelled strongly of carbolic acid. The mucous membrane about the oesophageal orifice was hard and corrugated, while the pyloric extremity was unaffected. The brain was pale and bloodless, and the ventricles contained scarcely any fluid. The heart was empty, and the lungs were congested. Dr. Barlow had subsequently poisoned a dog with strong acid, but it had had food shortly before. It took fifteen minutes to die. In its case, the brain was congested and the heart full. It was in strong convulsions all the time. The kidneys were fresh when removed, but on the following day were quite purple.

MR. LUND shewed several Pathological Specimens which had been preserved, for a varying number of months, in small wire cages, surrounded by Antiseptic Cere-cloth. The muscular tissue was hardened and dry, but there was not the slightest putrefactive odour. He thought that the preservative influence of carbolic acid was owing simply to its destroying zymotic germs, and not to any chemical action on the tissues.

MR. LUND also exhibited the pedicle from a case of Ovariectomy enclosed in the clamp, which had been wrapped up in cere-cloth at the time of the operation, some weeks ago. There had been no pus, and the case did well.

MR. BRADDON shewed a specimen of Aneurism of the Descending Aorta. The patient had had both femorals tied for popliteal aneurism; the first in 1856, the second in the following year. He died from pain and exhaustion. The femoral arteries could not be examined.

MR. CLEMENTS exhibited a specimen of Necrosis of the Femur. A sequestrum was lodged behind, a little above the condyles, in a large hole, from which it was curiously prevented from escaping by a delicate bridge of new bone. Amputation had been performed.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, NOVEMBER 27TH, 1869.

THE TREASURER OF ST. BARTHOLOMEW'S.

THERE is, we trust, not a member of the English profession who does not feel his share of pride in the reputation of St. Bartholomew's Hospital. The oldest of our medical Institutions, a Hospital which covers an entire parish, and which in time past has perhaps educated half the profession, she has claims on our respect with which no rival can compete. We can afford to put aside the minstrel Rahere, and to forget King Henry VIII, if we remember only that here Harvey practised and taught, and that after him there followed such men as Pott, Abernethy, Lawrence, Stanley, Latham, Baly, and Paget. If indeed we had to mention any source of anxiety on her account, it would be to express a fear lest she had been burdened with the load of "too much honour." With a guaranteed income of royal proportions, and an unrivalled prestige, she has been, perhaps, more than was for her good, exempted from the healthy influences of competition. Students have come to her unsought, and a position on her staff has been a road to wealth and fame, but too easy and too certain. In spite, however, of any little disadvantage in this direction, she has well maintained her place both in public and professional esteem. If St. Bartholomew's Hospital should have been mismanaged, the whole profession would have felt aggrieved; and few subjects have indeed attracted more general interest than the charges against her which have recently been made.

After a long and perhaps not very judicious silence, those charges have at length been met; and last Monday, in a full meeting of Governors, with the Royal President in the chair, and twenty reporters present, the Treasurer made his exculpatory statement. Of that statement we may say briefly that it is, on the whole, satisfactory, but with some considerable drawbacks. There is no reason for thinking that there has been either gross waste or disgraceful parsimony; and that many improvements have been gradually introduced during the time that Mr. Foster White has held the office of treasurer, is very evident. Fifty years ago his management would have been deemed most excellent; and the worst that can be said of it now is that, in some respects, it is behind the day. Without making any invidious comparisons, we may say for the present Treasurer that he has at least equalled any of his predecessors. The present age is, however, a very exacting one. It claims from men not only that they shall do their duty, but it defines for them that their duty shall include the most rigorous exercise of conscience and intellect. In the olden time, a far lower service sufficed. To have meant well, and to have acted honestly, was sufficient. Now-a-days, however, unless you have an intelligence fully abreast with your age, and energy sufficient to keep well up in the race, you had far better give way. It matters not at all that your wishes are most benevolent; if you have not business vigour, what the Yankees sum up in the word "go-a-head-iveness", you had better resign your place to some one who has. Private life will be the best for you.

We most sincerely sympathise with Mr. Foster White in the annoyances to which he has recently been subjected. We have no doubt that they have come upon him very unexpectedly, and that to him they appear to be the results of ingratitude and wilful misconception. He has, indeed, fallen on evil days. Such a treasurership as his a century

ago—unpaid, held laboriously for fifteen years, without a hint of malversation of funds—would have earned him a baronetcy, and been rewarded by plaudits on all sides. Let us mark the difference which the progress of radicalism has brought about. He has given his services gratuitously, and he is now told that they have been dear at the price. After so many years of hard work, it is hinted to him—not very vaguely—that he is welcome to a long holiday. This, to one who believed that he was the presiding genius of the first institution of its kind in our metropolis, and that he was in all respects the zealous promoter of its prosperity, is very hard. There has been no strike amongst the out-patients or the casuals. On the contrary, they have flocked in more and more numerously. What deduction more obvious than that they were well attended to and well satisfied? With the single exception of the ever-turbulent students, it is probable that Mr. White has always received from the Hospital frequenters every mark of respect. The medical and surgical staff would appear to have given him trouble only very occasionally, and in a very mild way. No nurse ever bearded him on the staircase, and asked him to look into the closet in which she was required to sleep, or complained that she did not like to be compelled to enact *Box and Cox* with a fellow-servant. The heir to the throne accepted the Presidency, and Royal visits to the wards were frequent. For anything that might be apparent to Mr. White, all was prosperous, and, students excepted, everybody satisfied.

When Dr. Mayo first complained that he could not do justice to the shoals for whom he was compelled to prescribe, his remonstrance, we have no doubt, seemed ridiculous; and when he persisted and resorted to practical measures, the suggestion probably occurred that he had learnt ill-manners and insubordination during his American sojourn. Mr. White's astonishment when the press took up the matter may be easily understood. That he should ever be called upon to explain or defend his conduct before a meeting of the Governors must have seemed, twelve months ago, wildly improbable. And yet the thing has happened; and, after all has been said that can be said, there is left a general impression that, although Mr. White has been zealous in his trust, well-intentioned, and to some extent energetic, yet, on the whole, his management has not been a success. He has, for instance, admitted that for years the surgical staff have been asking for means for the treatment of patients suffering from diseases of the eye, and that he has hitherto declined to provide them. Shade of the Minstrel! spirit of the King! what is it that your almoner tells us? The Manager of your Royal Charity admits that it has been urged upon him that a new science, rich in power for human blessing, has sprung up; that he has been told that the poor who resort to your waiting-halls ought to be allowed the advantage of it; and that the students who are there trained ought to be instructed in the new knowledge; and he, your representative, has pleaded poverty as his excuse, and has refused to act! This, too, has happened at a time when a rival Hospital, under no higher patronage than that of a benevolent bookseller, has for near half a century done the thing efficiently; at a time, indeed, when a number of other institutions—mushrooms in comparison with yours—are doing it also. In such a case, the plea "We cannot afford it", "we cannot do everything at once", from the mouth of the Treasurer of St. Bartholomew's Hospital, was surely pitiful.

Another very weak point in the Treasurer's defence is his admission that the hospital accounts are never audited. He disclaims the imputation of having £48,000 a year to spend. But that a sum not much short of that is concerned, is tolerably clear, and that the vouchers respecting its expenditure ought to be carefully and systematically examined, no man of business can deny. The Treasurer owes it to himself and to every clerk about his establishment, no less than to the governors and to the public, that a careful annual audit should be made. To assert that each several account is examined before it is paid is nothing. Such examination is a matter of course, and can by no means

supersede the necessity for systematic scrutiny into the whole at the end of the year.

The Treasurer's contrast between the expenditure on patients at St. Bartholomew's and at the London Hospital is, we think, fairly satisfactory. St. Bartholomew's has the advantage of being able to afford tea, sugar, and butter, which are not furnished at the London; and, although it has spent much less in certain extras of diet (eggs, fish, mutton-chops, etc.), yet, as it has spent much more in butcher's meat, the average cost of each patient per day has been, we believe, almost the same at the two. Nor is there any reason to think that the staff of nurses has been smaller than usual, or that they have been, in comparison with those of other institutions, under-paid, or over-worked. The popularity of the St. Bartholomew's wards, both amongst patients and nurses, is, we believe, an admitted fact.

In making his comparison as to the expenditure on patients at the London Hospital and at St. Bartholomew's, Mr. White asserts that the number of out-patients and casuals at the latter is much greater than at the former. We have reason to believe that the difference is very much less than he puts it. But we are quite willing for the present to accept his statement, since we wish to draw his attention to the great difference in the provision made for doing the work. The London Hospital, with its asserted much smaller number of patients, has five assistant-physicians, an assistant obstetric physician, five assistant-surgeons, and four salaried clinical assistants; whilst the whole staff of St. Bartholomew's available for out-patients' work consisted, we believe, before Dr. Mayo's agitation, of but four assistant-physicians, and the like number of assistant-surgeons, who were helped in their otherwise impossible task by certain resident medical officers, whose duties ought to have been confined to the wards. Here, as we have repeatedly indicated, is a matter urgently requiring attention.

We may glance at the prospects of improvement held out by the Treasurer and Governors. In spite of an absurd remonstrance from Alderman Sir William Rose, an important resolution was carried, which suggests the provision of better sleeping accommodation for the nurses, and a reduction of their hours of labour; and in a vague way hints at a possible increase of staff, for the more effective relief of casual patients. The fourth and last of the subjects mentioned in this resolution—that of the provision of a Convalescent Hospital—is wholly beside the mark, and its introduction smacks somewhat of artifice. This project has no relation whatever to the charges which had been made, and one cannot help suspecting that it has been put into its present position in order to divert attention. As regards an ophthalmic department, we are informed that it has already been commenced; and that, when the building is completed, one or two additional officers will be appointed to take charge of it. So far, well; but the increase of staff ought not to end here; and we trust that the press will not allow the matter to drop until the out-patients' department, in all its divisions, is suitably supplied.

As a chief practical outcome of Monday's meeting, we may expect that, in the future, the Prince of Wales's concluding suggestion will be carried out, and that the Governors will take a larger share in the management. If this be done—if men like Sir Sidney Waterlow and Mr. C. Reed attend the meetings, and put their shoulders to the work—St. Bartholomew's will soon escape from the reproach of trying to stand still amidst surrounding activity. We shall hear no more of such excuses as want of funds when proposals of such improvements as that of an eye-department are sent up by the staff. It is, perhaps, not too much to hope that we may have wards for other specialities also, and particularly for skin-diseases, and thus see supplied a want which no London school has yet adequately met. The necessary additions to the junior staff will be made forthwith; and, with liberal arrangements in regard to it, St. Bartholomew's will no doubt soon regain the position which was her old boast—that she could supply her vacancies from

her own school. We shall hear no more nonsense about the uselessness of an audit of accounts; nor will the Treasurer of the institution ever again reply to the charge that some of his nurses have to sleep in closets, by the sapient observation that the average cubic space for the others is abundant. If it could be brought about that the audit should in future be a Government one, and that the same system should be extended to other hospitals, and an uniform plan of keeping accounts be adopted, the recent agitation will have yielded invaluable fruit.

We have made the above remarks, in no spirit of depreciation of Mr. Foster White, or of the institution over which he presides. Mr. White's defence must have left it evident to all that it is high time that his autocracy is helped out by counsellors. As regards the institution, our single wish is not only to know St. Bartholomew's as a royal and noble charity, but to see her develop in royal and noble attributes up to the very highest point of worth. We ask from her not alone the good, but the very best.

CHLOROFORM ACCIDENTS.

RECENT facts have been by no means encouraging as to any diminution in the dangers of anæsthetics. We have had deaths from chloroform almost every week. Nor have the zealous efforts of Dr. Richardson and others to provide us with a safer agent been rewarded by success. The bichloride of methylene, although as yet employed on but a very small scale, has had its victim, and has been so frequently the cause of very alarming symptoms, that most impartial observers of its effects have, we believe, come to the opinion that, whatever its other advantages, it is at least as dangerous as chloroform. We are not among those who think it well to try to explain away all occurrences of this kind, to impute them to unavoidable peculiarities in the patient, or to want of dexterity or care in the administrator. It is absurd to count, in the practice of surgery, on always having robust patients to deal with; nor is it wise to expect from ourselves more than a fair average of caution and skill. A plank bridge across the Thames might be perfectly safe to steady heads, and to those who had practised, but could scarcely be recommended for general use. Within the last few months, at one hospital alone, where the bichloride has been used, three different exhibitors have each had a very narrow escape of a death; and, in the face of such a fact, it avails but little for Dr. Richardson and Mr. Rendle to assert that they have met with none such. Those who urge the general employment of dangerous remedies on the plea that, in their own hands, they have hitherto proved safe, remind us of the quibble of the Scotch judge, who had never, he asserted, known any one die of drinking, though he had, he acknowledged, known many lost whilst learning the art. Bichloride of methylene may, possibly, be safe to those who have carefully learnt its use; but, if it be very dangerous to those of but little practice, it will not do to recommend it for general adoption.

So far as we have yet gone, it seems very probable that chloroform will hold its place with the British profession as being the safest anæsthetic, which combines the recommendations of durable effect, rapidity of influence, suitability to all ages and states of health, freedom from after-consequences, and ease of administration. Indeed, we may suggest that it is, *à priori*, improbable that we shall ever find any agent which can rapidly extinguish almost all the functions of the nervous system, without any risk that it may now and then do more than we wish, and put into abeyance those we wish to spare, as well as the others. In this matter, speed is probably inseparable from danger.

It becomes, then, of the utmost consequence to try if the lamentable accidents which occasionally happen from chloroform can be reduced in number. In order to place ourselves fairly in the direction towards this most desirable end, we must recognise candidly the facts. We must admit first that, in almost all the cases in which death occurs during chloroform-sleep, it is caused by the anæsthetic; and that facts prove that it is impossible to predicate anything as regards the individuals to whom such accidents are likely to happen. A "fatty heart"

does very well to mention to a coroner's jury, and may possibly now and then afford some comfort to the unfortunate administrator; but, beyond these purposes, we must not use it. Chloroform-deaths have occurred in sufficient numbers to young persons in unexceptionable health, whilst, on the other hand, such hosts of the feeble have passed safely through the ordeal, that it is impossible to believe that the lesions occasionally found have any definite connexion with the untoward event. Events seem to have proved, too, that we must abandon all trust in inhalers, and acknowledge what our Scotch *confrères* have long been telling us—and enforcing by an unusual run of immunity—that the simplest are the best. The use of the minim measure as a means of security must also be put quite aside. Those who have been accustomed to pour upon a handkerchief as much chloroform as seemed necessary, and then hold it closer or less close, according to judgment, must often have experienced melancholy amusement in noting the piteous way in which, at an inquest, the exhibitor will inform the coroner that he had “given only forty-five minims by measurement”. Such precision sounds very fairly on such an occasion, but we fear that it conduces nothing to the patient's safety. This and some and other fanciful precautions always look to us as if the exhibitor were making preparations for the witness-box, and remind us of the ready but impolite reply once made to a cross-examining counsel, who, asking the reason of his witness's minute accuracy as to distances, was told, “I thought some fool might ask me, and so I measured them.” We are even in doubt whether the tenor of this remark does not also apply to the custom of holding the patient's pulse. To this, and to all other supposed precautions, the strong objection applies, that, unless really useful, they are better let alone, for the reason that they distract attention from more important matters. If several surgeons are present, there is no kind of objection to the rule that one of them should take the patient's wrist; but it is somewhat different if that task is to fall to the exhibitor. It is not possible for the mind to give attention to many different things at once; and, if you are scrupulously watching the patient's face and breathing, you will often find yourself holding the pulse, it is true, but paying no real attention to the force of its beats. That the patient's countenance and breath-movements give more important information than his wrist-pulse, is tolerably certain. In saying this, however, we would guard ourselves most carefully against implying that the state of the circulation is to be neglected. What we mean is, that the state of the circulating forces is more accurately estimated by the appearance of the sleeper's cheeks, lips, and eyes, than by the force of the radial pulse.

Another point which must be kept constantly in mind by chloroform-administrators is, that no case is safe. It is just when danger is the least thought of, that it comes. To the most healthy person, the induction of profound anæsthesia is a state most on the borderland of death. Your design is to take a man to the edge of a precipice, and not let him drop over. The task will demand all your skill; and the fact that you have done it safely a thousand times does not make it certain that you may not yet have an accident. It is obvious that the administrator should give his whole attention to his task—should abstain from conversation, and from any attempt to observe the operation. From this it follows that it is very desirable, when possible, to have a qualified surgeon present, to whom this duty, and this alone, is entrusted. Under many circumstances, such may not be possible; but it is none the less to be recommended. The large number of accidents which have occurred in private practice, and often during preparation for trivial operations, makes it probable that in many the patient ran additional risk, owing to a short-handed staff. In making this remark, we by no means wish to ignore the fact that many accidents have happened in hospitals, with plenty of help at hand, and have occurred to experienced chloroformists. Want of assistants is, however, attended by danger in two ways: first, that the patient may be inefficiently watched; and secondly, that, in case of accident, the means of resuscitation may not be properly attended to. We half suspect that the latter point is the more influential. In hospital practice, many patients are saved after the occurrence of most alarming conditions,

and even after apparent death. Not a few of these cases, under other less favourable circumstances, would probably end otherwise.

Much discussion has taken place as to the precise way in which chloroform kills, and many experiments have been performed on the lower animals. The main debate has been as to whether the circulation or the breathing is the function first to fail. As the result of considerable observation in operating-theatres, we may venture to record our conviction that, in the human subject, the heart is the organ most frequently endangered. There are chiefly two symptoms of danger. One marks impediment to respiration, and is known by stertor and lividity of face; the other, failure of the heart's action, and is denoted by deathly pallor. The latter in some cases follows on the first; indeed, it almost always does so, if the patient dies. In many cases, however, the latter—extreme pallor—occurs without any preceding stage of lividity. The cases marked by stertor and lividity are always hopeful. You open the mouth, pull forward the tongue, and very often the danger is over. In other cases, you succeed by artificial respiration. The cases in which deathlike paleness denotes sudden cardiac syncope are much less hopeful. In some of these cases, gasping inspirations may continue many minutes after the heart's action has ended, and may even sometimes be renewed after long intermissions. In several cases, in which yet death ultimately ensued, inspiratory efforts occurred ten minutes or more after the first failure of the heart, and after artificial respiration had been begun.

The plan of treatment in cases in which impediment to respiration occurs is, as we have just hinted, obvious enough; that for heart-failure is less easy. The *prevention* of the latter is perhaps what should mainly claim attention. Its treatment should consist, in addition to efficient artificial respiration, in the employment of means to rouse the nervous system, and thus, in an indirect manner, re-excite the heart. The patient's surface—limbs, trunk, and face—should be “flipped” with the wet end of a towel most vigorously, and in the manner best calculated to cause sharp pain. This should be begun instantly that alarm is felt; and its importance can scarcely be exaggerated. Many a patient, under its influence, is roused at once; inspiratory sobs occur, and by degrees the pulse returns. At the same time, brandy should be introduced into the rectum. A grand point is, not to desist on slight evidences of recovery, but to persevere until no doubt remains. Several patients have relapsed and died after hopeful signs of returning life had occurred, and had induced the operators to remit their exertions. The precaution which seems chiefly reliable for the prevention of heart-failure is the administration of an alcoholic stimulant before beginning. Brandy is the best for this purpose, and should be given ten minutes or a quarter of an hour before the inhalation. It probably has much the same effect in sustaining the heart that the mixture of ether with the chloroform is believed to exert, whilst it is more convenient in practice.

Experience seems to have shown the following statements to be probably near the truth.

Very young children take chloroform well, and in them accidents are most rare.

Children from the age of eight and upwards are as liable to accidents as those older.

Very aged persons rarely die from chloroform; but, respecting these, the data are perhaps not large enough.

Those accustomed to the free use of stimulants take chloroform slowly, succumb to it with difficulty, rally early, and very seldom pass into a state of danger.

There is no special risk in cases in which the heart is known to be diseased.

Patients who are in a state of terror or extreme anxiety at the time of inhalation are in great risk of sudden action of the anæsthetic and collapse. In such, the administration of brandy should never be omitted.

Very hot weather renders patients more susceptible.

Debilitating influences generally, but especially such as act mainly on the nervous system, increase the risk. It is possible that in this way

the prevalence of epidemic catarrh (approaching perhaps to influenza) may make a large proportion of the community bad subjects for chloroform, and may thus bring about a group of accidents.

The profession is all but unanimous in the belief that there are no special circumstances in the health of the patient which forbid the use of chloroform when rendered necessary by circumstances. In other words, the risk from it never equals that from the shock of a painful operation. "A case for operation is a case for chloroform." At the same time, it is needless to point out that, for all minor operations in which it offers no special advantage beyond the avoidance of short or trivial pain, it is wise to abstain from its use.

So important does this subject seem at the present juncture, that we have ventured to draw up memoranda upon it, which will be given in our next number, and which we purpose to have printed off in the form of slips, for the supply of those of our readers who may wish for them. Our aim has been to make these hints concise and definite, and to omit everything not necessary. It is quite possible that some lives have been lost through want of due preparation for emergencies, and some through the over zealous attempt to employ many means of resuscitation at once. This latter remark applies especially to the use of galvanism, which has often been allowed to interrupt artificial respiration, probably to the great detriment of the patient.

MR. HENRY FENTON, Surgeon, has been elected Mayor of Shrewsbury.

THE Luton Board of Guardians have decided by a majority of one, after an exciting discussion, to enforce vaccination.

SMALL-POX is more general at Devizes than it has been for many years. It is stated that several amongst those who have it badly have been recently vaccinated.

A TELEGRAPHIC despatch from the Governor of Bombay to the Secretary of State for India, states that a letter of a satisfactory nature, dated Ujiji, May 13th, 1869, has been received from Dr. Livingstone.

WE regret to observe the death of Dr. Eastlake, which occurred at Paris on the 17th instant. Dr. Eastlake formerly held several obstetric appointments in London, and took an active share in the Obstetrical Society. He was a physician of much promise.

It is in contemplation to form at Lyons a Medico-Chirurgical Society, for the special purpose of considering statistics, prevalent diseases, hospital hygiene, and all other matters more especially relating to the treatment of patients in hospitals.

SIR RODERICK MURCHISON, at the ordinary meeting of the Royal Geographical Society last Monday, appealed for subscriptions towards the fund for erecting a suitable monument in St. Paul's Cathedral to the memory of the late Professor Faraday.

THE Workhouse Masters' Association is discussing the desirability of emigration for young persons of both sexes; and for this purpose the Association proposes to communicate with Emigration Societies and private individuals who are known to be favourable to the scheme. We wish every success to those who are trying to free the young from the horrors of pauperism.

ST. ANDREW'S MEDICAL GRADUATES' ASSOCIATION.

IT is announced that the Third Anniversary Session of the St. Andrew's Medical Graduates' Association will be held at the Freemasons' Tavern on December 1st and 2nd. Dr. Richardson will deliver the Anniversary Address, at 5 p.m., on December 2nd, on "The Science of Cure".

SALARIES OF PROFESSORS IN AUSTRIAN UNIVERSITIES.

THE annual salaries of the professors in the Universities of Austria are in future to be uniform—1,800 florins, with an increase of 200 florins every fifth year. Hitherto, the rate of salary has been very various; being at Innsbruck and Lemberg 945 florins, in Vienna 1,680, in Prague 1,635; with a decennial increase of 300 florins.

SUDDEN DEATH OF DR. STOKOE.

DR. STOKOE of South Shields died very suddenly last Friday. He was found dead in his bedroom, kneeling by the bedside, with his hands clasped. He had been previously suffering from bronchitis.

A NEEDLE TWENTY-TWO MONTHS IN THE HEART.

AT a recent meeting of the Scientific and Literary Institute of Milan, Dr. Biffi presented the heart of a lunatic, the left ventricular cavity of which contained a needle six *centimètres* (nearly two and a half inches) long. The point, after perforating the valve, projected for a *centimètre* into the left auricle. From inquiry, it appeared that the man had introduced the needle into his heart about twenty-two months before his death, and that the act was not followed by the least inconvenience.

THE MIDDLESEX HOSPITAL.

DR. JOHN BRUNTON has been appointed Lecturer on Materia Medica to the Middlesex Hospital, in the room of Dr. Henry Thompson. Judging by the high character of his recent work on the *Action of Digitalis*, we may expect from Dr. Brunton future valuable contributions to medical science. Dr. Divers, lately Professor of Materia Medica and Therapeutics in Queen's College, Birmingham, has been appointed joint Lecturer with Dr. Greenhow on Toxicology.

PEBBLE IN THE TRACHEA.

A LITTLE GIRL, four years old, living in Croydon, is said to have swallowed a small round pebble three months ago. No symptoms arose in connection with this; but about ten days ago she began to suffer from hooping-cough, and last Saturday she was seized with a fit of coughing so violent that a medical man was sent for. She was dead, however, before he arrived. A *post mortem* examination was made by Dr. Adams, who found the pebble in her "throat", and gave evidence that this was the cause of her death.

DR. BROADBENT ON RELAPSING FEVER.

AT the Harveian Society next Thursday, Dr. Broadbent will read a paper on Relapsing Fever. As the subject is one of special interest at the present moment, probably many of the profession, not members of the Society, may desire to be present; and they will, we believe, have no difficulty in obtaining admission. The meetings of the Society are held at the Stafford Rooms, Tichborne Street, Edgware Road, at 8 P.M.

PREVENTION OF INTEMPERANCE.

THOSE who are interested in the repression of the vice of intoxication will be glad to know of a plan which is said to have succeeded admirably in Göttenburg, a seaport in Sweden with 60,000 inhabitants. A full account is contained in the evidence of Dr. Alexander Wood of Edinburgh, before a select committee on the Scotch Poor-law, from the pen of Dr. Elias Heyman. The brandy generally sold in Sweden is of home manufacture, and cheap, and subjected to slight tax. On the other hand, the licences are subject to sale by auction, and given to the highest bidder. If, however, a company offers to take all the licences and work all the shops on contract, this arrangement is preferred. Hours of closing are strictly fixed and maintained. No brandy is allowed to be sold to a child or drunken person; and no money can be recovered in payment for spirits given on credit. These arrangements, which have, in recent years, been adopted throughout Sweden, have reduced the annual consumption from twenty-six millions of gallons to about six millions. Still, in populous towns like Göttenburg, it was found that drunkenness was increasing. It was now proposed to establish a company of wealthy individuals, who would find funds to start the selling of spirits on new principles, without a view to profit. The number of public houses was diminished; no liquor was to be sold except in large rooms—clean, airy, and wholesome; in every shop "warm, prepared food", with coffee and tea, was provided. The shops were under the management of servants, whose conduct was thoroughly supervised, and who were not allowed any profit on the spirits

sold, but a percentage on the sale of food, coffee, etc. No liquor was sold on credit. Dr. Heyman says nothing about the financial results of the scheme, but the moral results have been most striking. In 1865, 2,070 persons were fined for drunkenness; in 1868, 1,312. In 1865, there were 118 cases of delirium tremens treated in the hospitals; in 1868, only 54. A marvellous decrease has taken place in the tendency to drunkenness, and a concurrent improvement in the habits of the working classes. An intoxicated man is seldom or never seen in the streets. The worst neighbourhoods of the town have now, it is said, become quiet and peaceable; and the classes which were sunk in pauperism and vice have begun to raise themselves by steady industry.

INOCULATION IN PLEURO-PNEUMONIA.

ACCORDING to the *Chamber of Agriculture Journal*, Mr. Tollemache, M.P., has caused several healthy cattle to be inoculated with "virus" from an animal which had died of pleuro-pneumonia, for the purpose of testing the value of the process. We believe that English veterinarians have pretty generally agreed that pleuro-pneumonia cannot be communicated by inoculation; Mr. Tollemache's experiments will therefore be of interest if they should yield positive results.

THE ILLNESS OF THE KING OF ITALY.

L'Imparziale of the 16th instant, deriving its information from trustworthy private sources, says that the recent illness of King Victor Emmanuel commenced with pleuro-pneumonia. In consequence of the violence of the attack, the robust and plethoric constitution of the King, and his habits, it was treated at an early stage with three general blood-lettings and one application of leeches. Nevertheless, on the night between the seventh and eighth day of the disease, there was a marked aggravation of all the symptoms, with so much prostration of strength as to cause a fatal result to be feared. On the next day, however, there was an improvement, accompanied by an abundant miliar eruption; and from this time resolution proceeded rapidly. Dr. Adami, the King's physician, perceived the serious nature of the disease at an early period; and, at his desire, Drs. Fedeli and Landi of Pisa were called in consultation, together with Dr. Cipriano, who was sent from Florence by the Ministry, and, some days afterwards, Dr. Bruno of Turin.

THE LONDON FEVER HOSPITAL AND RELAPSING FEVER.

WITH an alacrity deserving the utmost praise, the authorities of this Hospital, perceiving that their accommodation would be totally insufficient to meet the rapidly increasing number of cases of relapsing fever, have, within fourteen days, provided largely increased accommodation for the treatment of these cases. The subject was brought under the notice of the Committee a fortnight ago, and a Subcommittee was deputed to wait on the Metropolitan Asylums Board the following day to ask them to suspend their building operations, as they were prepared to increase the accommodation at the Fever Hospital, and undertake the treatment of pauper patients. To this the Board consented, and now the authorities at the Fever Hospital have erected a large building within the grounds, made of corrugated iron, with sawdust between the two layers of the walls to insure greater warmth. It is capable of containing sixty patients, and is furnished with every necessary comfort. But even this increased accommodation will prove insufficient, unless means be found of removing patients as soon as convalescence, oftentimes tedious, has fairly set in. The Convalescent Home at Clapton affords at once the solution of the difficulty. Mrs. Gladstone has offered to open this Institution for cases convalescing from relapsing fever, and we cannot doubt that Mrs. Gladstone will at once seize this excellent opportunity for carrying out her charitable project, by coming to an immediate arrangement with the authorities of the Fever Hospital. We may state here that at Marylebone the iron house erected during the late cholera epidemic has been put in readiness for the reception of cases which may occur in that parish, and that the Asylums Board have it in view, if necessary, to build a temporary hospital on a piece of ground in Gospel Oak Fields, Kentish Town.

A RAILWAY MALINGERER.

WE copy from the *Echo* the following summary of a case which was heard in the Court of Exchequer on the 23rd inst. The Midland Railway Company allege that a passenger, who recently recovered £750 damages from them for injury sustained by the negligence of their servants, was successful in duping witnesses, counsel, judge, and jury. As he appeared in the witness-box, he seemed to be quite paralysed and almost entirely blind, so that his pitiable condition drew an expression of compassion from Mr. Baron Martin. But, as the Company now allege, no sooner had the plaintiff pocketed the money than he shook off his palsy and sped to Scarborough, where he was seen "disporting himself freely in the water", exhibiting all the agility of a swimmer, and even jumping from "rock to rock". The Court of Exchequer has granted a new trial, and the plaintiff has been ordered to refund the money pending the decision; but, as he avers that he has spent it all, there seems to be a slight difficulty in the way of restitution. Some of the facts are still disputed, and an interesting second trial may be expected.

"CUBIC SPACE IS ALL A MYTH."

MR. G. CLUTTERBUCK, a ratepayer, has been at the pains to inspect the wards of St. Pancras Infirmary, in order to ascertain whether some of the late deaths may have been accelerated by foul air. The work is praiseworthy, though we regret that we cannot agree with its author that there are enough ventilating appliances for 271 persons. Mr. Clutterbuck found 198 patients in the wards, each of whom, we find (from the author's data) receives about 1,259 cubic feet of fresh air per hour. Mr. Clutterbuck, however, is of opinion that 900 cubic feet per hour, or 15 cubic feet per minute, would be enough, and calculates, from this inference, that there are enough ventilating appliances for 271 persons (while the full number allowed is, he tells us, only 210). Now Dr. Parkes states that, for *healthy* men, at least 2,000 cubic feet of fresh air are required per head per hour; while Dr. Sankey found that, in the London Fever Hospital, the air was not free from smell when each patient received 3,720 cubic feet per hour! In conclusion, we would call attention to an error in Mr. Clutterbuck's statements which is calculated seriously to mislead. We find that 9,957 represents the number of cubic feet *obtainable* per minute (not *obtained*) in all the wards together; and that 4,068 cubic feet of air are discharged from the same wards in the same time. We are then told that the sum of these quantities (14,025) represents the "total cubic feet of air passing by inlets and exits per minute." Will Mr. Clutterbuck tell us how, in round numbers, 10,000 cubic feet can pass *in*, while 4,000 feet are passing *out*? Mr. Clutterbuck has, indeed, good reason to say, with Mr. Jabez Hogg, that "cubic space is all a myth".

THE PRESS ON THE ST. BARTHOLOMEW'S MEETING.

THE *Globe* animadvert on the tone of the articles in the *Times*, speaks of "statements entirely without foundation" and "others grossly exaggerated"; talks of "a complete vindication" and the "confounding sophistries of statistical facts", and mentions that the expenditure is more liberal by £5,000 a year than at the London Hospital, which is, nevertheless, "a most admirably managed establishment".—The *Daily Telegraph* also considers the vindication most complete, and congratulates the treasurer.—The *Echo* considers the defence worth nothing at all, and attacks it *seriatim* under seven distinct heads. It speaks of "the muddle-headed apology of Mr. Foster White."—The *Daily News* considers that the result of the vindication has been to show the management of the Hospital defective on all the points sought to be inquired into, and urges an independent investigation by the Charity Commissioners. It is useless for the Governors to meet and vote confidence in themselves.—The *Sun* thinks that the resolution admits the bad management; the Governors are not capable of judging, being the responsible parties. They passed a self-congratulatory motion, and declared they would do better in future.—The *Times* asks how the treasurer explains the charge that the proportionate expenditure is far be-

yond that of the London Hospital? The expenditure ought to have provided for the wants of nearly 3,000 more in-patients last year than it actually accomplished. Mr. White still leaves room for the belief that the accommodation for the nurses is far from satisfactory, and that at times they may work for too many hours at a stretch. After advocating the appointment of a paid officer, the *Times* asks, "Is it not the fact that the proposed investigations have been accelerated by those very strictures which Mr. White denounces?"—A correspondent (F.R.C.S.) hints at invoking the interposition of Parliament if the ordeal of the Charity Commissioners be not sufficient.—A correspondent of the *Daily News* complains of the great power vested in the treasurer; says the list of grievances is not at all exhausted—for instance, the position of the physician for women and children—and advocates inquiry by the Charity Commissioners.—Dr. Hensley and Dr. Hollis, two of the house-physicians of the longest standing, write to the *Times* to the effect that they have found no difficulty in giving proper attention to the number of "medical casualty" patients.—The *Lancet* commissioner writes to the papers, denying that he got his information from "underlings", or behind the treasurer's back.—"Matter of Fact" writes that Bartholomew's stands a "bad fourth", instead of a first or second, in the University list.

CHARING CROSS HOSPITAL.

DR. BLACK and Dr. Wiltshire are candidates for the appointment of Obstetric Physician to Charing Cross Hospital. The claims of both are most excellent.

THE NEW ST. THOMAS'S HOSPITAL.

THE works at St. Thomas's Hospital are steadily proceeding. The materials now on the ground are of the estimated value of £220,000, while the contract price is £330,000. An unexpected additional source of income to the hospital, has turned up in the shape of coprolites, which have been found to exist in large quantities on its farm at Comberton.

THE COLLEGE OF PHYSICIANS LECTURES.

THE lectures at the College of Physicians will be delivered as usual in spring—the Lumleian Lectures by Dr. Risdon Bennett, the Croonian by Dr. Sibson, the Gulstonian by Dr. Maudsley, and the Harveian Oration by Dr. Gull.

THE ROYAL SOCIETY.

THE annual meeting of the Fellows for election into the Council will take place, as usual, on St. Andrew's Day, the 30th inst., when the following will be nominated:—*President*: Sir Edward Sabine, LL.D.; *Treasurer*: W. Allen Miller, M.D., LL.D. *Secretaries*: W. Sharpey, M.D., LL.D.; and G. Gabriel Stokes, LL.D. *Foreign Secretary*: Professor W. Hallows Miller, LL.D. The other members of the Council are: Frederick Currey, M.A.; Warren de la Rue, Ph.D.; *Sir P. de M. Grey Egerton, Bart.*; Professor W. H. Flower, F.R.C.S.Eng.; *William Huggins*; *J. Gwyn Jeffreys*; John Marshall, F.R.C.S.Eng.; *Augustus Matthiessen, Ph.D.*; Captain Henry Richards, R.N.; *The Marquis of Salisbury, M.A.*; *C. W. Siemens*; *John Simon, F.R.C.S.*; Archibald Smith, M.A.; *Professor H. J. Stephen Smith, M.A.*; *Professor John Tyndall, LL.D.*; and *Professor Alexander W. Williamson, Ph.D.* The Fellows of the Society whose names, in the preceding list, are printed in italics, were not members of the last Council.

ANOTHER POLICE DIAGNOSIS.

AN inquest was held at Great Yarmouth last week, on the body of Francis Ross, a sailor, aged 38, who had died in the police-station. After having visited a public-house one night and had a pint of ale, he was found by a policeman leaning against a lamp-post, and was taken to the station, charged with being drunk and incapable. About an hour afterwards, two other policemen, in visiting the cell where he was confined, found him lying on his back, scarcely breathing. A surgeon was at once called; but the man died. At the *post mortem* examination, the stomach was found remarkably empty; and death appeared to

have arisen from rupture of a valve of the heart. The coroner remarked that the man's condition when brought to the station was such as might be readily supposed to be intoxication; and that all reasonable care was taken of him. The verdict returned was, "Death from natural causes." We note this case as another instance of the absurdity of the assumption that the diagnosis of drunkenness is in all cases so simple a matter, that a policeman may safely undertake it—a mistake which the remarks made by the coroner tend to encourage.

THE ST. PANCRAS GUARDIANS.

DURING the week several inquests have been held on bodies of persons who had died in the workhouse, and verdicts given that the deaths were accelerated by the foul atmosphere of the wards. Dr. Bridges and Mr. Corbett, Poor-law inspectors, have reported officially on the state of the wards. They agree substantially with our report published on November 13th. On Monday, a number of *ex-officio* guardians attended the usual weekly meeting. Letters were read from the Poor-law Board, requiring the guardians to get ready without delay wards of the new Highgate Infirmary to accommodate 170 sick. As to the reduction of the numbers of out-door sick needing infirmary accommodation, by treating the patients as far as possible in their own houses, as the guardians had proposed, the Poor-law Board did not think there would be any appreciable reduction by adopting this course. The Board very properly refused to permit the payment of any fee to a body of medical men who might examine and report on the Infirmary, for the Board knew of no case in which they "could be relieved of their duty of determining, on their own responsibility, whether the workhouse infirmaries are fit for their purpose, and whether the class of patients can be best treated in the various wards." The Board also directed that wards Nos. 3, 4, 5, 6, and 7, should not be used a day longer "than was absolutely necessary." The letters of the Poor-law Board were agreed to, and a committee, largely formed of the *ex-officio* guardians, was nominated to carry out the new regulations. It was determined to send patients to Charing Cross Hospital in order to relieve the Infirmary.

SCOTLAND.

DR. F. PENNY, Professor of Chemistry in the Andersonian University, Glasgow, died last week.

THE EDINBURGH INFIRMARY: ELECTION OF PATHOLOGIST.

DR. J. B. PETTIGREW has been appointed Pathologist to the Infirmary. We congratulate the managers in obtaining one so competent to fulfil the duties of the office.

THE ABERDEEN DISPENSARY AND LYING-IN INSTITUTION.

AN opportunity will now be afforded the Professor of Midwifery, who has been recently appointed Physician-Accoucheur to the Dispensary, of increasing the facilities hitherto available for the purposes of teaching practical midwifery. The Dispensary authorities have purchased a house near the University; and we understand that it is their intention to offer every assistance to carry out the desired improvement.

THE NEW WEST-END HOSPITAL, GLASGOW.

WE understand that negotiations have been going on for some time past between the Senatus of the University and the Directors of the Royal Infirmary, with a view to a joint management of the old and the new hospitals. These negotiations are at present in abeyance, but with every likelihood of their being at some future time renewed. Meanwhile, the plans for the new hospital have been drawn up by Mr. John Burnet, architect, under the guidance of the medical professors, and after he has made a thorough study of all the modern views on hospital construction, and visited the best examples of recent hospital buildings. The plans have been prepared on a modified block system; the building consisting of nine ward-blocks, so arranged as to allow very free access of air on every side. All the most approved modern methods

for securing ventilation, heating, and proper sanitary conditions, are likewise introduced. It is proposed that, of the ultimate accommodation provided (350 beds), not more than three hundred should be occupied; the remaining portion being always retained, to serve the purpose of complete periodical renovation in a proportionate part of the house. The plans having thus, after various modifications, been finally matured, the Senatus will shortly issue specifications, so that operations may commence early in the spring. It is satisfactory to reflect that the want of sufficient hospital accommodation, which has been for some years severely felt in Glasgow, is thus in a fair way of being supplied; and we are sure that the community, which has shown its enlightened spirit and advanced liberality in carrying the new University so near to completion, will not be behind in providing the means of supporting an institution so necessary for the welfare of the sick poor and the sanitary condition of this large city.

THE ABERDEEN AND GLASGOW UNIVERSITIES ELECTION.

THE voting terminated on Friday, and on Monday the declaration of the poll took place at Glasgow. Mr. Gordon's majority was upwards of five hundred, of which 440 were Aberdeen electors. The constituency numbers about 4,000, and of these nearly 3,740 voted.

THE RECTORSHIP AT THE ABERDEEN UNIVERSITY.

WE regret to see that Mr. Grant Duff declines to allow himself to be nominated a second time for the rectorship of the Aberdeen University since Sir William Stirling-Maxwell has been brought forward. Except in a political contest, Mr. Grant Duff would not, he states, provoke a comparison between Sir William Stirling-Maxwell and himself.

THE ANNUAL DINNER OF THE EDINBURGH ROYAL COLLEGE OF SURGEONS.

THE dinner passed off with success on Thursday of last week—Dr. Gillespie, President, in the chair. There were about sixty gentlemen present. The guests included the Lord Justice-General, the Lord Provost, Sir George Harvey, President of the Royal Scottish Academy; the President and office-bearers of the Royal College of Physicians, Professor Christison, Dr. W. T. Gairdner of Glasgow, Dr. Macbain and Mr. Davis of the Royal Navy, Mr. Norris and Dr. Thomson of the 90th Regiment, and Dr. Murray of the Royal Artillery.

THE WATSON'S HOSPITAL SITE AND THE SUBSCRIBERS TO THE NEW EDINBURGH INFIRMARY.

IT is to be hoped we shall hear no more of the opposition to the new site for the Edinburgh Infirmary. At the meeting of subscribers, held in the Music Hall, Edinburgh, on Friday, it was stated that of those who had answered the circular issued to ascertain the general feeling of subscribers on the subject, 1,878 had assented to the adoption of the new site, 212 had dissented, and 236 had remained neutral. The meeting accordingly passed a resolution authorising the committee to concur with the managers of the Infirmary in the proposed application to Parliament for powers to build on the Watson's Hospital site.

IRELAND.

JERVIS STREET HOSPITAL, DUBLIN.

AT an election recently held, Dr. Thomas Walshe was appointed Surgeon.

PECULIAR CASE OF SMALL-POX.

A SAILOR died in the Hardwicke Hospital on the 11th, of variola corymbosa. His vessel left Ostersund, Sweden, on the 6th October, where the disease is said not to be rife, and he was attacked on the 20th. On the 6th, he arrived in Dublin. Three others who slept in the fore-castle, 11 feet square and 5 feet high, escaped the disease. All had been vaccinated. The peculiarity of the disease consisted in patches of raised cuticle, several inches square, and filled with pus.

ST. BARTHOLOMEW'S HOSPITAL.

A SPECIAL General Meeting of Governors was held on Monday in the Hall of the Hospital, His Royal Highness the Prince of Wales, President of the Hospital, in the Chair, to hear a statement by Mr. Foster White, the Treasurer, in answer to allegations which have lately appeared in the JOURNAL and other papers.

HIS ROYAL HIGHNESS, in a few opening remarks, regretted that his position as president of the hospital was more honorary than active. At the same time, he would on no occasion shrink from coming forward to do all he could to further the interests of the institution.

MR. FOSTER WHITE, after some introductory remarks, proceeded to meet the charges brought against the hospital, and against himself as treasurer. He first referred to the alleged quarrel between part of the medical staff and himself, and the consequent discontinuance of the introductory address. There had been no such difference between him and the medical staff. The opening address had been discontinued in accordance with a decision come to last year by the medical officers; and he had nothing more to do with it than with the movements of the sun. With regard to the in-patients, he could prove that the expenditure on them was larger than that of any other hospital. The diet and all the drugs were entirely ordered by the medical staff; and neither he nor the governors generally interfered with their responsibility in the matter. He now came to the casual patients. For years past, an increasing crowd of casual patients came to their doors; and it was alleged that nothing had been done to meet that state of things. In 1861, seven thousand pounds were spent in erecting a new room for surgery cases, four times the size of the old one; and property yielding £1,100 *per annum* was pulled down for the purpose. It was said the room had been built without the advice of the medical staff. No alteration large or small was ever made or contemplated in the hospital without consulting the medical staff, and their judgment as to the nature and extent of the accommodation required was usually followed. He denied, upon the authority of the medical staff, that the rooms in which these patients were received were too small and badly ventilated. The surgery itself was more than 94 feet long, 32 feet wide, and 30 feet in height. No sooner had the new building been opened, than the number of applicants began steadily to increase. No medical man had to attend a hundred of these patients in an hour. In order to facilitate matters, a prescription for cases of diarrhoea and other trifling ailments had been printed beforehand, and the applicants suffering from these ailments were offered a dose or what had been called "doubtful medicine", made in the "brown jug" and poured into a glass. People certainly came to them who had no right to receive charity, but how were they to discriminate? He had tried, in conjunction with others, to prevent the institution from being abused. It was said they had no additional staff to meet the increasing demand; but in 1868, four new resident medical officers were appointed and provided with every accommodation, and those four men acted where one had acted before. During the first year of that arrangement there had not been a single complaint, either from those gentlemen themselves as to their being overworked, or from any poor person that had been neglected. Those four gentlemen were to hold office for twelve months, and at the end of that time three of them retired, the fourth remaining in his position; and shortly after the three new officers came, a letter was received from them stating that the work was more than they could accomplish. On the receipt of that communication, he wrote to the gentlemen who had just retired, asking them whether they had found any practical difficulty in performing their duties, particularly in the casual department. The first reply was to the effect, that during his term as house-physician the writer experienced no difficulty which did not seem to be fairly overcome in the ordinary course of work; that the casual part of the duty was at times somewhat heavy, but certainly was not overwhelming; that he did not think the pressure of the casualty work was ever such as to lead to the neglect of the other duties of the house-physician; and that the great mass of the cases were of a most trifling character. The other answers were of a similar character. A system of classifying the patients had lately been adopted experimentally, and a report on the result of the experiment would shortly be produced. It had been asserted that the nurses slept in cupboards under the stairs, and that there were not sufficient beds for them. They had 83 nurses, and 83 beds for them, each nurse having her own bed. None of the nurses had not on the average 700 cubic feet of space in her bedroom. Three out of the 83 bedrooms had, indeed, been circumscribed in the process of forming the new wings, whereby accommodation for 144 more patients had been provided. He did not say that all the nurses' bedrooms except those three were everything they could desire,

but their buildings were not elastic, and were erected 140 years ago. Many of the nurses objected to dormitories, and would prefer having their own separate rooms, however small, provided they were clean and wholesome. Again, it was said their nurses were too few in number, and cruelly over-worked. He denied this allegation, and maintained that in this respect St. Bartholomew's would bear comparison with the London Hospital, than which there was no better conducted institution in the kingdom. At a cost of £500 a year they had relieved their nurses of the work of scrubbing the floors and other menial duties, and they allowed them one day to themselves in every three weeks, and every third Sunday. Their pay, besides food, was 8s. per week, or, after two years' service, 8s. 9d. No other hospital paid more, and many paid less. The nurses had not made any complaint. They were promoted to the position of sisters for fidelity and efficiency, and some of their best sisters had formerly gone through all the 'drudgery of nurses. On an average, every nurse, according to the rules, had eight hours' sleep each day; and when emergencies arose, extra nurses were employed, who could be easily obtained. As to the alleged sickness and mortality among their nurses, in 1866 and 1867 they had not a death among them; but, taking an average of 16 years, they had 34 deaths during all that time, 27 of them being from fever, and 7 from other causes. The medical staff had represented to him that it was extremely desirable to have a special ward for treating ophthalmic cases; but he felt considerable difficulty in recommending the governors, after the very large outlay incurred on other improvements of late years, to expend £5,000 more in carrying out this recommendation at present, for it was impossible they could do everything at once. They had yielded to the suggestion made to them as to making special provision for the treatment of diseases of the ear, of deformities, and of the diseases of women, and various other matters. But they must take up these works gradually, and as the state of their funds would permit. It might be said they had not undertaken their improvements until forced to do so by pressure from without; but these things had been in progress for months, and preparations had been made in the workshops in order to avoid all unnecessary disturbance in the hospital by building operations. Therefore, although the institution was certainly not perfect, they were doing their best; and what had been accomplished during the last twelve months proved that they were not disposed to stand still. With regard to the obstetric department, he explained that every student was furnished with a set of printed rules and instructions. It had been alleged that the income of the hospital was £48,000 a year. It was no such thing. It was further stated that no balance-sheet was issued, but all who heard him could contradict that. As to the assertion that there was no audit of the accounts, everything was purchased and all work was done, as far as possible, by contract; the expenditure was regularly checked, and no bill was paid without the signature of the proper officer to whose department it belonged. In conclusion, he had been their treasurer for nearly fifteen years, and one of their almoners for nearly twenty years. No emoluments were attached to his office, and he had been induced to perform its duties from pure love of the work and pure gratitude for the constant support and encouragement accorded him by the governors and the staff. He indignantly repudiated the assertion that £2,000 of the hospital funds were to be employed in furnishing his residence as treasurer. As to his connexion with St. Bartholomew's Hospital, until the governors intimated to him that the time had come when it would be better that he should hold his office no longer, he would stick to his post. He was told, indeed, that he kept out some one better able to discharge its duties provided he were paid a salary, and that it was the intention of somebody—although the governors had not yet been consulted on the point—to split his office between two gentlemen, each of whom would receive £1,000 a year. They might do as they pleased in that matter, but he had at least saved them those salaries for fifteen years.

Mr. White then read a letter, addressed to himself, and signed by the whole medical staff of the hospital, of which the following are the important portions.

"So long as you have been silent on the subject of these remarks we have felt it right to be so too; but when you decide on defending yourself and the governors of the hospital against them, it becomes our duty to bear witness of our own accord to the number and importance of the improvements effected, or in progress, during your treasurership, in those departments of the hospital with which our duties are connected.

"Among the improvements effected, we reckon—The very great enlargement of the surgery and of the reception-rooms for casual patients. The enlargement and better arrangement of the dispensary department, and its fitting up with the best and completest pharmaceutical apparatus. The erection of a new admission-room for in-patients. The arrangement of departments for the practice and teaching of dental surgery

and of vaccination. The fitting-up of a room for examination of out-patients with diseases of the eyes, and the provision of all the best modern apparatus necessary for the purpose. The arrangement of means proper for the special study of deformities and of diseases of the skin and of the ear. The enlargement of the wards appropriate to diseases of women; the erection of the adjacent special operation theatre, fitted with every requisite apparatus; and the addition of small wards entirely devoted to patients of this class who have undergone serious operations. The conversion of the hospital square into a place fit for open-air exercise for the patients. The rebuilding and admirable construction of the hospital kitchen. The improvement in the dietary of the patients, at a large increase of its annual cost. The diminution of the work of the nurses, by the employment of persons to do much of their menial labour. The enlargement and augmented convenience of all the museums and the library, of the rooms for practical anatomy, and of the chemical laboratory, and the provision of a room for microscopic examinations, and for the collection of drawings of diseases observed in the hospital. The annual publication of the statistical tables of the cases of the hospital in-patients. To this list of important works for the improvement of the hospital and school, designed and completed under your direction, we might add many which, though singly less considerable, are in their total very important; and of the whole we may briefly say that they have made the hospital at least equal to any other in the kingdom—both for the relief of the sick poor, and for the education of students for the medical profession.

"We have felt bound to believe that there have been good reasons for delay, whenever delay has occurred in the fulfilment of any plan that we have submitted to you. Such reasons we will not doubt have existed particularly in respect to the provision of special wards for the diseases of the eyes: but the wards of which the building is commenced will, we believe, completely remedy the deficiency of the hospital for the reception of this class of cases.

"The building of the wards will, we hope, be immediately followed by the appointment of one or more ophthalmic surgeons, for the special charge of both in and out patients with diseases of the eyes. But with respect to the institution of other special departments in the hospital, we beg leave to repeat the opinion implied in the letter of the Medical Council—that, with the exceptions of the diseases of the eye and the diseases of women, there is not at the present time any so-called 'specialty' in medicine or surgery which ought to be either practised or taught in the hospital by any but the medical or surgical officers. The arrangements that you have sanctioned for the teaching of the nature and treatment of the diseases of the skin and of the ear, and of deformities, by members of the medical staff are, in our opinion, far better than any plan which would assign these diseases to practitioners chiefly or exclusively devoted to them.

"We look forward to the early establishment of a convalescent hospital, and to the improvement of the arrangements for the nurses, for we know that these are among the measures which have long engaged your attention. We have as little doubt that so often as we may point out to you, and through you to the governors of the hospital, any means by which the cure or the comfort of the patients can be promoted, they will be considered with the same care and benevolence as have dictated the improvements we have enumerated."

Mr. FOSTER WHITE then moved:—"That it be referred to the House-Committee to inquire and report to a court to be specially summoned—firstly, what measures can be adopted for the purpose of providing better sleeping accommodation for the nurses; secondly, whether it is expedient to adopt any and what steps in order to diminish the labour of the nurses, and afford them longer periods of rest; thirdly, whether the arrangements lately made for the purpose of securing the more effective relief of casual patients are sufficient, and if not, what further provision should be made for the object in view; fourthly, what course can be adopted for the purpose of providing a convalescent institution in the country for the patients of the hospital."

This resolution was seconded by Captain ENGLEDEW, and was carried unanimously.

Mr. HELPS proposed—"That the Governors express their grateful sense of the zeal and ability with which the Treasurer has discharged for fifteen years the duties of his office, and their full confidence that he will continue to do all in his power to promote every improvement that may tend to the greater benefit of the poor patients; that the Governors also desire to express their best thanks to those of their body who have given so much of their time and attention to the business of the House-Committee, and likewise to the almoners, etc."

This resolution was duly seconded, and carried unanimously.

A vote of thanks was then carried by acclamation to His Royal Highness the Prince of Wales for presiding at the meeting.

His ROYAL HIGHNESS, in reply, trusted that the remarks contained

in the long and elaborate statement which the Treasurer had made, would be as well received by the public in general as by the Governors, and suggested that, the oftener the Governors came to the hospital, the more they would become conversant with all the details of the different matters connected with its management, and be enabled to afford greater support to the Treasurer.

THE WATCHWORD OF THE COLLEGE OF PHYSICIANS.

WE congratulate the College on its fearless enunciation of the principles which are henceforward to shape the organisation and the destinies of British medicine. To all thorough medical reformers, the unanimous votes of the College on the 24th instant must be eminently satisfactory. The Report of the Council, presented to the College on the 8th of October, and subsequently printed and circulated among the Fellows, was on Wednesday taken into consideration, and adopted without a dissentient voice. It divides itself naturally into two parts; the first having reference to the preliminary Education and Examination in Arts of those who are about to commence the study of medicine; the second having reference to the Examining Boards, which, under a new Medical Act, shall be charged with the duty of examining and licensing medical practitioners. The two following paragraphs, which refer to Examinations in Arts, were, on the motion of Dr. Birkett, the Senior Censor, seconded by Dr. Fuller, unanimously adopted.

"The Council having had referred for its consideration three letters from the General Medical Council with Reports on Professional Education and State Medicine, begs leave to recommend, in the first place, that a letter be written to the Registrar of the Medical Council to the effect that this College has long considered that the Examination in Arts should be left entirely to the existing National Examining Boards, and with this view discontinued in the year 1865 conducting an Examination in Arts at this College.

"That the College is also of opinion that it is highly desirable that every person, previously to commencing his studies for the medical profession, should be required to pass an Examination in Arts conducted by a Board of Examiners appointed by some University in the United Kingdom, or such foreign Examining Boards as may be approved by the General Medical Council."

The four following resolutions relating to Professional Examinations were moved and seconded *seriatim*, and likewise unanimously adopted.

"1.—That the time has now arrived when, full liberty being left to the Universities and Corporations to deal as they please with their honorary distinctions and degrees, an Examining Board should be formed for each division of the kingdom, before which every person who desires a Licence to practise Medicine, Surgery, and Midwifery, should appear, and be examined on all subjects that may be required by the Medical Council. Any higher distinctions or degrees he may wish to take should come after, and should be optional.

"2.—That every person examined and approved by the aforesaid Board of Examiners in either division of the kingdom, should receive a Licence to practise Medicine, Surgery, and Midwifery, and should be entitled to register under the Medical Act as a Licentiate in Medicine, Surgery, and Midwifery.

"3.—That the course of study required, and the number and nature of the Examinations to be undergone, be as nearly uniform as possible in the three divisions of the kingdom.

"4.—That, inasmuch as the Licence would confer the same rights and privileges of practice, whether granted in England, Scotland, or Ireland, the fees for the Examination and License should be the same in each division of the kingdom."

It was then moved by Dr. Pitman, seconded by Dr. Quain, and, after some discussion, carried unanimously:—"That a Committee be appointed, with power to confer with the Universities and Medical Corporations of England, and, if deemed advisable, with those of Scotland and Ireland, for the purpose of framing a scheme on the basis of the Report of the Council, and to submit such scheme as early as possible to a future meeting of the College." The Committee to consist of Sir James Alderson (President), Dr. Birkett (Senior Censor), Dr. Frederick Farre (Treasurer), Dr. Pitman (Registrar), Sir Thomas Watson, Dr. Burrows, Dr. Risdon Bennett, and Dr. Quain.

While we anticipate a hearty response, on the part of our Association, to this bold and politic move of the London College, and while we acknowledge the propriety of placing on the Committee those eminent and able men who compose it, we observe with regret that, with the exception of Dr. Risdon Bennett, no one who is not a graduate of an English University has been thought worthy of being a member of it. This is a result, probably, of the vicious system which still reserves a large share of the honours and prominent offices of the College for

the graduates of Oxford and Cambridge. We also venture to remark, that we can scarcely conceive any circumstances under which it should not be "deemed advisable" to confer with the Universities and medical corporations of Scotland and Ireland, in carrying out the great reform which the London College so laudably seeks to accomplish.

At the same meeting, Dr. Pitman proposed *for the first time* the alteration of several bye-laws, and the enactment of a new one, whereby the use of the reading room, library, and museum, and admission to all lectures, at present confined to the Fellows and Members, shall be extended to all Licentiates of the College. He likewise proposes to follow up these changes, which were unanimously agreed to, by extending to Members the privilege hitherto enjoyed only by Fellows, of taking books out of the College.

ASSOCIATION INTELLIGENCE.

COMMITTEE OF COUNCIL: NOTICE OF MEETING.

A MEETING of the Committee of Council will be held at the Queen's Hotel, Birmingham, on Friday, the 3rd day of December, 1869, at 3 o'clock P.M. *precisely*.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.
13, Newhall Street, Birmingham, November 9th, 1869.

CORRESPONDENCE.

THE HOSPITAL FOR WOMEN, SOHO SQUARE.

SIR,—As one of the medical officers of the Hospital for Women, "from its foundation to this very day", I will thank the writer of the letter, in your last impression, headed "The Soho Hospital", if he will declare, *in proper person*, the grounds on which he asserts that it "has borne a character far from enviable", and "has been properly shunned by the profession", since I feel sure that all connected with the Hospital for Women will be happy to receive any good suggestions in furtherance of their desire to make the hospital efficient and complete in every respect. And, as a member of the British Medical Association, I would ask if, with your well known courtesy, you deem it to be right to publish in the pages of our common journal, an abusive and anonymous letter, from one member against others, without citing a single fact to justify his gratuitous censure. I am, etc., PROTHEROE SMITH.

London, November 1869.

SIR,—Will you kindly allow me to state one or two facts in reply to the assertions contained in the very charitable letter of "A Member of the Association" which appeared in your last issue? I will leave your readers and "the profession" to draw their own conclusions from them.

1. The writer says that the hospital in question, which, by the way, he calls "the Soho Square Hospital", shewing that he does not even know its title, "from its foundation to this very day, has borne a character far from enviable, and which has very properly caused it to be shunned by the profession." My answer to this is, that the list of Vice-Presidents of the institution contains the names of Sir Charles Locock, Sir William Jenner, Sir William Fergusson, and Dr. Arthur Farre. So much for the statement that it is "shunned by the profession".

2. The writer alleges that "It (*i.e.*, the hospital) has tried to make a position, as in the present instance, not by honest professional work, but by enlarging its influence almost entirely through the purse of the charitable but unthinking public". To this I reply, first, that the sentence is simply unintelligible: for, how a hospital is to make a position, or to try to make a position; how it can enlarge its influence; how it is to do so through a purse; and why a charitable public must also be an unthinking one—these are statements which in their way are curiosities indeed. As to the question whether any "honest professional work" is done inside the hospital, I should like first to know who this anonymous accuser of his brethren is, and what claims he has to be considered a judge of what honest professional work is. For myself, I should appeal to the scores of medical men who attend the hospital, and send cases to it, in disproof of his calumnious assertion. And, allow me, sir, to add that, as long as the "charitable but unthinking public" is represented by such men as the Earl of Shaftesbury, who at least cannot be accused of thoughtlessness in charitable works, Sir Thomas Watson, and Sir Charles Locock, each of them a peer in his own walk; so long, too, as the benefits of the hospital are sought by thousands of the poor, and its advantages as a field of study are freely open to the profession at large, so long I, for one, shall feel it a pleasure to do duty as one of its officers,

despite the anathemas of a host of anonymous scribes. And certainly, if "the profession" is content to be considered as fairly represented by "A Member of the Association", I can only hope most sincerely that it will continue to "discourage the hospital without flinching", for there could not be a stronger recommendation in its favour, and I have every confidence that it will survive such discouragement.

I am, etc., ALFRED MEADOWS.

London, November 1869.

P.S.—As I have heard it whispered, in some quarters, as a probable ground of complaint against the new or paying wing of the hospital, that it may be the means of injuring the general practitioner, by receiving cases which would otherwise come under his care, will you oblige me by giving publicity to the accompanying form of certificate, *which must in every case be filled up before the application is considered*; and I would direct especial attention to the words I have underlined in the certificate, as these make it clear that no case can be admitted which would be a grievance or loss to the general practitioner in attendance on the case; at least, if it be, he alone is to blame in the matter, for the medical committee, with whom rests the entire control of the admissions, would never receive any which was not properly certificated in this respect. The certificate is as follows:

Form of Certificate to be filled up by the Medical Attendant of Persons desiring to be admitted into the New Wing.

To the Medical Committee of the Hospital for Women.

Gentlemen,—I hereby certify that _____ is suffering from _____; and, from my knowledge of her circumstances and social position, I believe her to be a fit person to participate in the benefits of the Paying Wing of the Hospital for Women.

I remain, Gentlemen, yours faithfully,

Name

Address

Date

HOSPITALISM: THE RESULTS OF FIFTY-NINE AMPUTATIONS OF THE LIMBS IN HOME-PRACTICE.

SIR,—In your number for 23rd October, there is a communication on the statistics of amputations, etc., by Dr. Matthews Duncan of Edinburgh. He affects to cast doubts on a return, which I some time since made on the amputations performed by me, to Sir J. Simpson. In my return, I reported 52 primary amputations of the limbs, or 10 amputations of the thigh, 17 of the leg, 20 of the arm, and 5 of the forearm, all successful. In the same return, I reported 7 secondary amputations, with 2 deaths. At the time of the occurrence of each of these cases, I had them all duly and methodically entered in my day-books, which no hospital records could possibly surpass; and I challenge any hospital in Great Britain to show a more accurate and correct daily record than I have kept or can show of my cases from the commencement of my practice. At the time when I performed most of my amputation cases, I was, in addition to other practice, superintending-surgeon to a large iron-works, and two very extensive collieries, where accidents were extremely frequent, under the imperfect machinery and adjustments then in use, which machinery the Mining Inspection Act has wonderfully altered for the better.—I am, etc.,

Airdrie, November 1869.

JAMES CULLEN, M.D.

CASE OF SPINA BIFIDA TREATED BY LIGATURE.

SIR,—In the JOURNAL of the 6th inst., Mr. W. J. Wilson makes some remarks in reference to my case of spina bifida, reported September 25th. Mr. Wilson states that I am mistaken in supposing that the treatment by deligation commenced with Forrester or Bell. I will now, with your permission, correct the mistake in the name of the surgeon who first suggested ligature.

I find, on referring to the authority from which I obtained my information, that the name is Forestus, and not "Forrester". While thanking Mr. Wilson for thus reminding me, I deny that I am mistaken with regard to Bell; and, however sceptical Mr. Wilson may be as to the propriety of deligation, I am quite convinced of its superiority over excision—there being, in my case, neither any great amount of constitutional irritation, nor any dribbling of arachnoid fluid.

I am, etc., EDWARD SIDEBOTTOM.

Manor House, Mottram-in-Longendale, Nov. 17th, 1869.

DEATH OF A CHILD FROM EATING CHRYSANTHEMUMS.—Yesterday Mr. R. Blagden, the coroner, held an inquest at the Lamb Hotel, Westbourne, on the body of a child, named Eliza Pelter, who was poisoned by eating a number of chrysanthemum blooms, which had been given to her at school.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—At a meeting of the Council, on the 11th inst., the following gentleman was admitted a Fellow of the College:

Shearman, Edward James, M.D., M.R.C.P., of Moorgate, Rotherham

The following gentlemen, having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners, on November 18th.

Baker, Henry Francis, Andover, Hants (St. Bartholomew's)

Bird, Thomas, Liverpool (Liverpool School)

Gibbins, Alfred Thomas, Chichester (King's College)

James, James, Cardigan (University College)

Kemmis, Henry Marcus, Dublin (Dublin School)

Law, Alfred Roberts, Barnstaple (Edinburgh)

Lill, William Frederick, Nottingham (Guy's)

Milles, George Ridley, Yalding, Kent (King's College)

Palmer, James Foster, Wilby, Norfolk (St. George's)

Pedler, George Henry, Forest Hill (King's College)

Raynor, Arthur, Hull (University College)

Smart, David, Cranbrook, Kent (St. Bartholomew's)

Taylor, John, Sheffield (Guy's)

Taylor, Thomas, Seaton, Sunderland (Newcastle School)

Thomas, Llewelyn Morgan, Camberwell (St. Thomas's)

Thorne, William Bezly, Leamington (St. Bartholomew's)

Walford, Edward, Ramsgate (St. George's)

Waterworth, Edward Allan, Newport, Isle of Wight (St. Thomas's)

Webster, William, King's Lynn (King's College)

Wood, Richard, Bromsgrove, Worcestershire (Guy's)

Wood, John William, Douglas, Isle of Man, (St. Bartholomew's)

Admitted members on November 19th:—

Bell, William, London Street, Fitzroy Square (Edinburgh)

Hoadley, Robert, Halifax, Yorkshire (Jeff. Coll. Phil.)

Hogg, Richard Bowen, Rotherhithe (Guy's)

Lloyd, Robert Hodgins, Holloway (Westminster)

Roberts, Arthur Copleston, Exeter (Guy's)

Robertson, Frederick Marrant, Peckham (Guy's)

Tyler, Edward Alfred, High Street, Manchester Square (Middlesex)

Wall, Alfred John, Besborough Street, W. (St. Mary's)

Wearne, Walter, Helston, Cornwall

It is stated that, out of the 86 candidates examined, only 9 failed to acquit themselves to the satisfaction of the Court of Examiners, and were consequently referred to their hospital studies for six months.

Fellowship Examinations.—The following members of the Royal College of Surgeons passed the primary or anatomical and physiological examinations for the diploma of Fellowship of the College at a meeting of the Court of Examiners on the 23rd instant.

Messrs. John Robinson, Midhurst, Sussex (diploma of membership dated November 9, 1849, of University College); Frederick Elliott Ryott, Newbury, Berkshire (March 26, 1858, London Hospital); James Watson, Army (May 28, 1858, St. Bartholomew's Hospital); William John Pilcher, Boston, Lincolnshire (April 13, 1860, Dublin School); Jesse Griggs Pilcher, H.M. Indian Army (April 13, 1860, Dublin School); Charles Steele, Clifton, Bristol (November 14, 1860, Bristol School); George Welland Mackenzie, London Hospital (April 28, 1864); Henry Rundle, Plymouth (April 26, 1865, St. Bartholomew's Hospital); William Thomas, Birmingham (November 14, 1865, Birmingham School); John Horsfall, Leeds (May 22, 1866, St. Bartholomew's Hospital); Kelson Congreve Dobson, Bristol (April 25, 1867, St. Thomas's Hospital); William Anderson, Derby (April 25, 1867, St. Thomas's Hospital).

The following gentlemen, *not* members of the College, also passed the examinations.

Messrs. George Cooper Franklin, St. Thomas's Hospital; Napoleon Augustus Rogers Harrison, and Edward Bovill, Guy's Hospital; Ernest Alfred Elkington, Birmingham School; William Mitchell Banks, Liverpool, Edinburgh, and Glasgow Schools; and James B. Ball, University College and St. Mary's Hospitals.

It is stated that five candidates failed to acquit themselves to the satisfaction of the Court of Examiners, and were consequently referred to their studies for six months.

UNIVERSITY OF LONDON.—The following are lists of the candidates who have passed the recent Second M.B. Examinations for Honours.—(*Obtained marks qualifying for Scholarship. †Obtained marks qualifying for Medal.)—Medicine.

First Class.

Baxter, Evan Buchanan (Scholarship and Gold Medal), King's College

*Thomas, John Davies (Gold Medal), University College

+Gowers, William Richard, University College } equal

+Stocker, James Reginald, Guy's Hospital

Second Class.

Dukes, Clement, St. Thomas's Hospital

Snow, Herbert Lumley, Queen's College, Birmingham, and University College

Dessé, Ethelrid, University College

Rayner, Edwin, B.A., Paris and University College

Third Class.

Marshall, Henry Flamank, Birmingham General Hospital and University Coll.

Willoughby, Edward Francis, University College

Midwifery.

First Class.

Thomas, John Davies (Scholarship and Gold Medal), University College
 Baxter, Evan Buchanan (Gold Medal), King's College
 Dukes, Clement, St. Thomas's Hospital
 Stocker, James Reginald, Guy's Hospital
 Rayner, Edwin, Paris and University College

Second Class.

Snow, Herbert Lumley, Queen's College, Birmingham, and University College
 Gowers, William Richard, University College
 Willoughby, Edward Francis, University College
 Buck, Thomas Alpheus, Guy's Hospital

Forensic Medicine.

First Class.

Stocker, James Reginald (Scholarship and Gold Medal), Guy's Hospital
 Rayner, Edwin (Gold Medal), Paris and University College
 Willoughby, Edward Francis, University College

Second Class.

Snow, Herbert Lumley, Queen's College, Birmingham, and University College

Third Class.

Buck, Thomas Alpheus, Guy's Hospital
 Thomas, John Davies, University College

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, November 18th, 1869.

Bolton, John George Elliott, Mauritius
 Buchanan, Walter, Chatham
 Joy, Frederick William, University College
 Payne, Martin Henry, Bridgewater
 Sylvester, Henry Thomas, Bath

The following gentlemen also on the same day passed their first professional examination.

Crackle, Thomas Arthur, Guy's Hospital
 Pike, William Royston, St. Thomas's Hospital

MEDICAL VACANCIES.

THE following vacancies are declared:—

ANDERSON'S UNIVERSITY, Glasgow—Professor of Chemistry.
 BALLINASLOE DISTRICT LUNATIC ASYLUM—Apothecary: applications, 11th Dec.; election, 13th Dec.
 BANBURY UNION, Oxfordshire—Medical Officer and Public Vaccinator for the Middleton Cheney District: applications, 1st Dec.; election, 2nd Dec.
 BRADFORD (Yorkshire) INFIRMARY AND DISPENSARY—Assistant Resident Medical Officer: applications, 30th Nov.
 BRIGHTON AND HOVE DISPENSARY—Resident House-Surgeon: applications, 30th November; election, 7th December.
 CANCER HOSPITAL, Piccadilly and Brompton—Chloroformist: 2nd Dec.
 CATRINE, Ayrshire—Certifying Factory Surgeon.
 CHARING CROSS HOSPITAL—Physician-Accoucheur: applications, 30th. Lecturer on Botany: applications, 27th.
 CHOLSEY (Berkshire) NEW PAUPER LUNATIC ASYLUM—Resident Medical Superintendent: applications, 16th Dec.
 COLERAINE UNION, Co. Londonderry—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Articlave Dispensary District: election, December 7th.
 COW-POCK INSTITUTION, Dublin—Assistant-Secretary.
 DUNSHAUGLIN UNION, co. Meath—Medical Officer to the Workhouse; 30th.
 EAST WARD UNION, Westmoreland—Medical Officer and Public Vaccinator for the Workhouse at Kirkby Stephen and the Kirkby Stephen District: applications, 4th Dec.; election, 6th Dec.
 EASTRY UNION, Kent—Medical Officer for the Ash District.
 GALWAY UNION—Medical Officer for the Arran Dispensary District: 29th.
 GREENOCK INFIRMARY—Surgeon.
 HOLYHEAD UNION—Medical Officer for the Workhouse: applications, 29th; election, 30th.
 HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton—Assistant-Physician: applications, 15th Dec. Resident Clinical Assistant: applications, 6th Dec.
 IPSWICH, Borough of, LUNATIC ASYLUM—Resident Medical Superintendent: applications, 15th Jan.; duties, April.
 IRVINE, Ayrshire—Medical Officer and Public Vaccinator for parish of.
 KINGSBRIDGE UNION, Devon—Medical Officer for District No. 13.
 LIVERPOOL BOROUGH PRISON, Walton—Surgeon: applications, 10th Dec.
 LIVERPOOL ROYAL INFIRMARY—Medical Superintendent: Dec. 6th.
 MODBURY, Devon—Admiralty Surgeon and Agent for.
 NAAS UNION, co. Kildare—Medical Officer for the Kildare Dispensary District: 7th Dec.
 NEWCASTLE-UPON-TYNE INFIRMARY—Surgeon: applications, 1st Dec.; election, 9th Dec.
 NOTTINGHAM UNION—Medical Officer and Public Vaccinator for District No. 2: applications, 20th; election, 23rd.
 PEWSEY UNION, Wilts—Medical Officer for District No. 4.
 RAMSGATE AND ST. LAWRENCE ROYAL DISPENSARY—Resident Medical Officer: applications, 4th Dec.; election, 6th Dec.
 ROYAL COLLEGE OF SURGEONS, Edinburgh—Conservator of the Museum.
 ROYAL INFIRMARY LUNATIC ASYLUM, Liverpool—Resident Medical Superintendent: applications, 6th Dec.
 ROYAL KENT DISPENSARY—Medical Officer for Greenwich.
 ROYAL SOUTH LONDON DISPENSARY—District Surgeon.
 ST. GEORGE (Hanover Square) DISPENSARY—Physician-Accoucheur: 20th.
 ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Resident Medical and Surgical Officer: applications, 30th.
 ST. MARYLEBONE GENERAL DISPENSARY, Welbeck Street—Physician-Accoucheur.
 ST. PANCRAS AND NORTHERN DISPENSARY—Resident Medical Officer: vacancy, 25th December.

SOLIHULL UNION, Warwickshire—Medical Officer for the Workhouse.
 SORN, Ayrshire—Parochial Medical Officer for the North District.
 SOUTHAMPTON DISPENSARY AND HUMANE SOCIETY—Three Acting Medical Officers: 2nd Dec.
 STOCKTON SURGICAL HOSPITAL—Medical Officer.
 UNIVERSITY COLLEGE, London—Professor of Medical Jurisprudence.
 UNIVERSITY COLLEGE HOSPITAL—Assistant-Physician: 1st Dec.
 WEYMOUTH UNION—Medical Officer for the Weymouth District.
 WORCESTER INFIRMARY—House-Surgeon: applications, 10th Dec.; vacancy, 11th January. Resident Dispenser: applications, 10th Dec.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

CHURCHILL, Frederick, M.B., appointed Surgeon to the Westminster General Dispensary, *vice* H. A. Reeves, Esq.
 *COOPER, A., Esq., appointed Surgeon to the Out-patients at the Lock Hospital.
 MOSSOP, Isaac, Esq., appointed Resident Physician to the Royal Edinburgh Sick Children's Hospital, *vice* Edwin Thompson, M.B., resigned.

BIRTHS.

BELL.—On November 4th, at Perry Hill, Kent, the wife of W. R. Bell, M.D., of a daughter.
 FALLS.—On November 16th, at Bournemouth, the wife of *W. Stewart Falls, M.D., of a daughter.
 LOWNDS.—On November 18th, at Egham, Surrey, the wife of *T. Lownds, M.D., Surgeon Her Majesty's Indian Army, of a son.
 MARSHALL.—On November 6th, at Bedworth, Warwickshire, the wife of Francis Marshall, Esq., Surgeon, of a son.
 STEVENSON.—On November 18th, at Caversham Road, the wife of Thomas Stevenson, M.D., of a daughter.
 WOODS.—On November 15th, at the Royal Naval Hospital, Malta, the wife of Henry C. Woods, M.D., R.N., of a daughter.

MARRIAGES.

CAMERON, Ewen W. H., Esq., to Annie Eisdell, second daughter of Edward CHINERY, M.D., of Lymington, Hants, on November 23rd.
 COLEMAN, Matthew Owen, M.B., of Surbiton, Surrey, to Elizabeth, younger daughter of John JAMIESON, Esq., of Aberdeen, on November 13th.
 HIRON, John Hickman, Esq., Surgeon, of Studley, Warwickshire, to Julia, youngest daughter of George SHELTON, Esq., of Edgbaston, Birmingham, at Bath, on November 23rd.
 *LITTLEWOOD, Joseph, Esq., Surgeon, Nottingham, to Hephzibah, younger daughter of Richard BIRKIN, Esq., of Aspley Hall, Notts, on November 11th.
 *NEUBOLD, Edward, Esq., Surgeon, of Macclesfield, to Frances Mary, second daughter of the late John DRAKEFORD, Esq., of the same town, at Manchester, on November 20th.
 ROBERTS, Frederick J., Esq., Surgeon, Stalybridge, to Amelia, youngest daughter of the late J. DUDLEY, jun., Esq., of Wharton, Winsford, Cheshire, on Nov. 17th.

DEATHS.

BRADLEY.—On November 15th, at Belitha Villas West, Barnsbury Park, the wife of Charles L. Bradley, Esq., Surgeon.
 *EASTLAKE, Henry Edward, F.R.C.S., at Paris, on November 17th.
 FOSS, William, Esq., Surgeon, at Stockton-on-Tees, aged 59, on November 16th.
 GARLICK, John William, M.D., at Halifax, aged 69, on November 11th.
 GREENE.—On October 25th, at Cornwall Road, Westbourne Park, Louisa, widow of Richard Greene, M.D.
 HAYWARD, John, Esq., Surgeon, at Pewsey, Wilts, aged 45, on November 19th.
 HOWITT.—On November 13th, at Preston, aged 21, Harriette Ann, eldest daughter of *William Howitt, Esq., Surgeon, and J.P. for the County of Lancaster.
 REID.—At Marmion Terrace, Edinburgh, on November 15th, aged 24, Alice, eldest daughter of the late John Reid, M.D., Professor of Anatomy and Physiology in the University of St. Andrew's.

THE CANCER HOSPITAL.—The receipt has been acknowledged of £1,000, from "G. M. E.," for the Cancer Hospital.

NATIONAL DENTAL HOSPITAL.—Mr. Joseph Steele, of Croydon, has been appointed dental surgeon to this hospital, *vice* Mr. R. T. Hulme, resigned. Mr. A. Hockley has been appointed secretary.

THE ASHFORD COTTAGE INFIRMARY (KENT) is to be opened for the reception of patients on the 1st of January, and is to be designated "St. John's House".

A REMARKABLY HEALTHY PARISH IN SHROPSHIRE.—The *Shrewsbury Free Press* reports that in the course of the present year only three deaths have occurred in the parish of Sheriffhales among a population of more than a thousand persons. Of these three, two were by natural decay, at 74 and 76 years; the other by consumption.

THE NATIONAL COTTAGE HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, VENTNOR.—Mr. Frederick H. Leaf, a member of the General Committee, has offered to be at the cost of the erection of one of the houses of the third pair of buildings; and it is earnestly to be hoped that some other equally benevolent friend will come forward and undertake to build the other house, so that the pair may be forthwith commenced. By the laws of the institution, any person erecting one of these houses will be entitled always to have three patients in the hospital; and the house will, if desired, bear the founder's name.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
 TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.
 WEDNESDAY..St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.
 THURSDAY...St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopaedic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
 FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
 SATURDAY...St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Mr. Spencer Watson, "On a Case of Traumatic with Glaucomatous Symptoms"; Dr. Cockle, "Further Notes on Pulsating Tumours of the Neck."
 WEDNESDAY.—Obstetrical Society of London, 7 P.M., Council Meeting. 8 P.M., Dr. Tyler Smith, "A Case of Puerperal Fever treated by Injection into the Veins"; Mr. Spencer Wells, "On the Complication of Pregnancy with Ovarian Disease"; Dr. Braxton Hicks, "Six Cases illustrative of the same subject"; and other papers by Dr. Hall Davis, Dr. Lloyd Roberts, Dr. F. Daly, and Dr. Mendenhall.
 THURSDAY.—Harveian Society of London, 8 P.M. Dr. Broadbent, "On Relapsing Fever."—Royal Society.—Linnæan Society.—Chemical Society.
 FRIDAY.—Western Medical and Surgical Society of London, 8 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS not answered are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

ERRATUM.—In the last paragraph of Dr. Leet's letter in the JOURNAL of November 20th, the word "digestive" should be "objective".

PREVENTION OF SEA-SICKNESS.—Mr. Scarth is engaged in perfecting a plan for preventing the effect on suspended cots of the pitching and rolling motions of ships—motions which produce so much discomfort in the shape of sea-sickness.

ARTIFICIAL COLOURING OF WINE.—Dr. T. L. Phipson (*Chemical News*) tells us that there are in France regular establishments for the manufacture of colouring-matter for improving the tint of wine. Elderberries yield the chief supply of this material; and alum is used in its preparation, and is often found in the wine thus artificially coloured.

FIRST INTRODUCTION OF LAUDANUM INTO ENGLAND.—According to a contributor to *Notes and Queries* (Oct. 30th), the following extract, from the diary of John Manningham, circa 1602 (Harleian MS., British Museum), lately published by the Camden Society, acquaints us with the first introduction of laudanum into England. "There is a certain kinde of compound called *laudanum*, which may be had at Dr. Turner's, apothecary, in Bishopgate Strete, the virtue of it is very souveraigne to mitigate anie payne; it will for a tyme lay a man in a sweete trans, as Dr. Parry told me he tried in a fever, and his sister Mrs. Turner in hir childbirth."

VERY OLD NEWS.—"The Black List of the Profession", which appeared lately in the *Lancet*, will be found nearly entire in the BRITISH MEDICAL JOURNAL of July 6th, 1867. The only names removed since the publication of our list have been those of William Macdonald and John Pattison—both "for infamous conduct in a professional respect".

PRESERVATION OF MEAT.

SIR,—However successful and deserving Mr. Jones has been, as you remark in the JOURNAL of Nov. 20th (p. 565), in the preservation of meat, he cannot maintain the privileges of a patent for the protection of the invention, inasmuch as he has been long since anticipated in this practical application of the Torricellian vacuum.

After a preliminary period devoted to inquiry in the year 1854, fondly imagining myself to be the first to apply the Torricellian vacuum to several practical purposes of life, I at that time applied to a well known firm in London to secure a patent for such new applications—this being one of them.

On further investigation, we discovered that some parts of my intended scheme had been anticipated by Dr. Neil Arnott, in his excellent work, *Elements of Physics*, 1827, vol. i, p. 345; also by the Hon. Robert Boyle, etc.

My own practical inquiries into this application of the Torricellian vacuum have been limited to milk among animal products. I am, etc.,

Plymouth, Nov. 20th, 1869.

THOMAS LITTLETON, M.B., F.R.C.S.E.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

THE MEDICAL DIRECTORY.—The work, as we have already shown, abounds in these blunders. "Staff Acting Assistant-Surgeon" Vincent Ambler must have held the appointments during the Crimean war without a diploma, or his returns in the *Register* and *Directories* are incorrect.

HERPES LABIALIS.

SIR,—If Mr. J. B. Curgenvill will take the trouble to read Bateman on *Herpes Labialis*, commencing page 236, he will find that the complaint which he mentions is very accurately described; and that there is no necessity to propose a new name for a very old disease. To call herpes labialis "herpes epizooticus contagiosus", from such insufficient data, confuses the nomenclature of our already confused cutaneous literature, and retards rather than advances medical science. The malady which Mr. Curgenvill pleases to call "herpes epizooticus contagiosus" is evidently nothing more than the ordinary catarrhal influenza, accompanied by symptomatic herpes, which every medical man at some time or other has seen to affect several members of the same household.

Cricklade, North Wilts, Nov. 11th, 1869.

I am, etc.,

N. B. LANGLEY.

THE MEDICAL SERVICE OF THE BRITISH AND INDIAN ARMIES.—The *Madras Times* complains that medical officers of the British army serving in India may be called on to perform any amount of duty, without a proportionate increase of pay; whereas the officers of the India Medical Department receive separate pay for separate charges. Lately, a medical officer of a British regiment had the care of a wing of his own corps, a troop of horse artillery, and a battery of garrison artillery, for a time. Moreover, it is complained that the British assistant-surgeon is in a comparatively unfavourable position as regards promotion; he has to wait for a vacancy, while in the Indian Army promotion takes place at the end of twelve years.

MEDICAL MONOPOLY.

SIR,—From the comments on medical reform which have lately appeared in the journals, it is evident that some of our established usages require criticism and investigation. We cannot now accept the obstructive Tory maxim, which means no change, no progress. It is well known, for instance, that our hospital administration is by no means perfect; and, happily, efforts are being made to discover the evils, and to remedy them. But I refer to this only *en passant*; my present object being to criticise "red-tapeism" in another insidious form, the College of Physicians, an institution which is regarded by many as immaculate, and of which it behoves us to speak "with bated breath." Now, in suggesting the importance of having an accurate definition of the functions of the College, I would not detract from the respect due to that venerable body. I find it enacted in the regulations of most of the London hospitals that the candidate for their (medical) appointments must be not only a University graduate, but also a member of the College of Physicians. What does this latter qualification indicate? If the coveted "M.R.C.P." is only indicative of an examination equal to, or less stringent than, that for the University degrees, why make both imperative? If it be higher, then let our Universities raise their standard of examination to that of "the College", so that their graduates may be spared the annoyance and expense of any further ordeal. The result of this system of monopoly is that, although a candidate may be possessed of many first-rate qualifications and special acquirements; although he may be really the best man for the appointment, his election cannot take place until he has paid a fee of thirty guineas for the privileges of the College, and satisfied the Pall Mall authorities as to his knowledge of the classics! Is not this medical Toryism?

London, Oct. 26, 1869.

I am, etc.,

A HERETIC.

** The remedy for "Heretic's" grievance clearly rests with the hospitals, and not with the College. Let them alter their regulations, and it is at an end. The grievance is, however, a real one. Many of our hospitals define the qualifications of their officers in a manner much too arbitrary.

THE TREATMENT OF URTICARIA.—Mr. Wasdale Watson, of Newport, Monmouthshire, writes:—Considerable doubt existing as to the best treatment of some forms of urticaria, more especially the chronic, I am induced to offer a few remarks on the question, What is the best treatment? In the report of several cases in this JOURNAL of September 18th, no mention is made of the treatment adopted in any of them, although of a most interesting class. Individually, I am often perplexed as to which reputed remedy I shall next give a trial, after using saline aperients, warm baths, Turkish baths, acid lotions, iodide of potassium, arsenic, and dilute sulphuric acid mixtures, with little or no benefit. The best result I obtain is from a strong dose of calomel and rhubarb, followed by an acid mixture; but then only with temporary relief. In this neighbourhood, a large proportion of the working classes suffer from this affection; and, at present, I cannot distinctly trace the primary cause of the gastric irritation, but am strongly inclined to think that the practice of drinking large quantities of tea has much to do with it. Of course, the cases occurring soon after eating shell-fish, especially mussels, are easily treated and cured; but the obstinate, chronic, regularly returning cases seem to defy all curative treatment. I have now under my care a number that I should only be too glad to relieve, and shall hope to hear of some new remedy, or if not new, one not at present tried by me.

MR. JESSOP'S CASE OF GENERAL EMPHYSEMA.

SIR,—In reply to Mr. McVeagh's inquiry, will you allow me to state: Firstly, that on December 19th, the day upon which I was called to him, my patient took something less than three teaspoonfuls of brandy mixed with three tablespoonfuls of milk, when his vomiting ceased. Secondly, that on the 20th, 21st, and 22nd, brandy was not administered at all. Thirdly, that on the morning of the 23rd, I ordered his friends to give him every ten minutes a teaspoonful of a mixture of one part of brandy to four of hot water. Fourthly, that I prescribed brandy and milk, in the first instance, in accordance with my experience that this mixture, when given to the exclusion of all manner of food, is one of the most efficient means of arresting the vomiting of commencing febrile complaints in children which we possess. Fifthly, that brandy was again prescribed on the day of the boy's death, because he appeared to be gradually sinking, as if from shock.

I regret the necessity for this explanation. In my regard for the value of time to the gentlemen who attended the Surgical Section at Leeds, and of your space, I omitted many details which would have rendered the report of my case more complete, if not more interesting.

Leeds, October 1869.

I am, etc.,

T. R. JESSOP.

NOTICES of Births, Marriages, Deaths, and Appointments, intended for insertion in the JOURNAL, should arrive at the Office not later than 10 A.M. on Thursday.

L.R.C.P. and another correspondent send us the following advertisement from public papers:

"£300.—This sum will be paid to any respectable (married) person adopting an infant from its birth.—Address, with references and nominal fee, to cover expense of inquiries, Dr. Sutton, M.D., 15, Regent Square, London, W.C."

We do not know what Dr. Sutton's professional qualifications are. On his door-plate, he describes himself as "*Microscopist*"—whatever that may mean.

MEDICAL TITLES.

SIR,—With reference to the letter of L.S.A. on Medical Titles, in the JOURNAL of November 6th, let me say that the generally received opinion is, that *Doctors of Medicine* can alone prefix, by right, Dr. to their names. Physicians can merely do so by courtesy. Licentiates of Colleges of Physicians (except by special by-laws) are as much Physicians as Licentiates of Colleges of Surgeons or Apothecaries are Surgeons and Apothecaries.

I am, etc.,
November 10th. A MEMBER OF THE BRITISH MEDICAL ASSOCIATION.

OBSTETRIC MORTALITY AND OBSTETRIC MEMORANDA.

SIR,—Permit me to take exception to some of the remarks in the paper of Dr. Matthews Duncan, published in the JOURNAL of October 30th. I quite grant, generally, what he states as to the desirability, or, indeed, necessity of statistical data, recorded immediately, in cases, whether medical, surgical, or obstetrical; but when he says that men cannot, if they speak truly, speak correctly as to the point of their never having lost a case in childbed, I must differ from him. For twenty-four years, I carried on an extensive practice in a somewhat wide-lying agricultural neighbourhood; and during that time, with one exceptional case, no woman ever died in childbed under my care, of whose case I had the management from the commencement of her labour. The cases comprised all classes, from the wife of the baronet to the pauper. Far be it from me to take any special credit to myself: I merely state, what was notoriously the case in the neighbourhood, or, as an instance of what may be amongst a healthy agricultural population—call it chance, or luck, or whatever else you will—that I never got fever amongst my parturient women, but none died, the case alone alluded to excepted, which was one of convulsions, coming on about the end of the sixth month; I delivered the woman, but she never became conscious from the first, and died comatose. She had been subject to epileptoid attacks in her childhood. I much regret now that I did not keep a record of my cases, as, doubtless, Dr. Duncan will say, my not having done so renders what I now write worthless; but I repeat my statement, and can have it sufficiently verified. As to the number of cases attended in the twenty-four years, I cannot place it at less than eight hundred—probably two hundred more would be nearer the mark—out of a population of at least two thousand five hundred, of which a very considerable monopoly belonged to me. Two or three cases of death from *post partum* hæmorrhage occurred under the hands of the midwives; two of these died before my arrival at the house, and one a few minutes after, during extraction of the placenta. There was, too, a case of death from heart-disease, immediately after labour; but that, too, was not my case, and the woman was dead before I saw her.

Of my own cases, three were cases of craniotomy, two from contracted pelvis, one from large fibrous tumour. These cases were almost the only ones on which I called consultation; they all did well. One of these women I delivered twice afterwards by induction of premature labour. She recovered well, and is now alive; one of the children lived a short time, the second was alive till within a short time of its birth. Of one of the women I lost sight; the third, I was told, died in her subsequent confinement, at a distance. I had at least three arm and shoulder presentations, two of them within a fortnight of each other, and, I think, every other variety of presentation, with the usual allowance of twins, which one would expect to meet with in a large number of cases. Singularly, I had but one case of placenta prævia. In one woman, I had to tap her in two consecutive pregnancies, about the end of the eighth month, for dropsy of the amnion, to prevent suffocation. The gush of water was so immense it was impossible to gauge it. The second time, after the birth of a well-formed child, of full size for the eighth month, having to introduce my hand to extract a slightly adherent placenta, I discovered a second fœtus, of about the third month of development, which had been blighted, and much compressed against the uterine wall. Among other memoranda, I once drew off, and measured, from the bladder of a woman, who had been confined eight-and-forty hours previously, under the care of a midwife, exactly one gallon of urine. She required the catheter for a few days, but subsequently recovered perfectly.

I conclude, with a few words on some principles of treatment, which may be of use to my younger brethren. I have great respect for the binder, not merely applied after the termination of labour, but long before. My plan was to have any suitable cloth, folded broad, like a cravat, so as to embrace the distended abdomen, over the night-dress, and tied in a rough knot at the back, so that it was completely under my own control. This generally extemporised binder was such a comfort, that I never knew a patient who had experienced it once, who did not desire it again. Even if it did not contribute to excite uterine contraction, it certainly, by supporting the abdominal walls and contents, did much to ward off sickness and faintness; or, being tightened both after the birth of the child and the expulsion of the placenta, it certainly, in my opinion, alleviated hæmorrhage, especially if aided by a good dose of ergot very shortly before the birth of the child, in all cases in which tendency to flooding was either suspected, or had been previously experienced. In all cases of tedious labour, the longer I practised, the more I had recourse to the use of the forceps (Simpson's), and I am sure with advantage and safety both to mother and child; and so conscious were some of my patients of this, that, if long in labour, they would beg for the instrument to be used. I am certain I saved children, and, possibly, mothers; and I never had a case in which perineal inconvenience was brought under my notice afterwards. When patients suffered, as some will do habitually, from severe after-pains, I always found advantage in the removal of any small clots by hand, a short time after labour. The small amount of immediate pain was well repaid by the subsequent ease. I never, except under the most urgent circumstances, left my patients under the hour, and often stayed much longer. Two cases at least were saved by my being in the house after the hour. As a rule, I fed my patients, and allowed a mutton chop the third or fourth day. Lastly, I always trusted in my own immediate action, and, except in craniotomy cases, did not waste time in sending for consultants from a distance.

I am, etc.,

A RETIRED GENERAL PRACTITIONER.

THE TAXIS IN HERNIA.—The other day a patient presented himself at one of our large London hospitals, with a strangulated hernia, which resisted all efforts to reduction by the taxis, ice, etc., for three hours. He was advised to take chloroform, but, saying he would rather die, he threw off the ice-bag and speedily reduced the hernia himself.

SERPILLUM.—A correspondent asks: Would some of the associates who may have administered Salvatori's repellent antidote to intemperance kindly give the result of their experience. *Thymus Serpyllum* is mentioned by Sir James Wyllie, in his edition of the *Pharmacopœia Castrensis Ruthenica*. Murray, the pupil of Laennec, recommends the herb as an antidote to the headache arising from excess; and Dr. Christison writes on the same subject. Is the purple-flowered wild thyme the serpyllum of Salvatori?

OXALATE OF CERIUM IN THE SICKNESS OF PREGNANCY.

SIR,—One unacquainted with this remedy, would infer from the recent recommendation that it was a new one. Many years ago, I read that Dr. (now Sir James) Simpson prescribed it for a lady (who consulted him, having unsuccessfully tried every known drug supposed to possess any power in preventing sickness during her pregnancy) with the happiest immediate results. Previously to that period, I used to rely on chloroform, in doses of from ten to thirty minims, and generally with benefit; but I procured the oxalate at once, and have never been disappointed with it, in many cases giving five grains three or four times a day in water. Allow me to add that in cases of persistent irritable stomach, arising from uterine disturbance, in unmarried females and in the absence of pregnancy, I have invariably found it a good remedy.

I am, etc.,

Frome, October 1869.

EDWIN BUSH.

CLUB-PAYMENTS.—The members of the Preston Society, at a meeting on July 16, unanimously adopted resolutions that three shillings *per annum* should be the minimum charge for each club patient residing in the borough; and that, outside the borough, no medical man should attend unless on the payment of such mileage as may be agreed on. Notice has accordingly been given, that the resolutions will come into force on January 1st, 1870. It is reported that there is an intention of consigning the bulk of the clubs to some one qualified medical man—viz., we suppose, the fee of two shillings, hitherto paid. We only hope that no qualified medical man will be found to act so unjustly to his fellow practitioners and so meanly towards his profession.

CHINESE THERAPEUTICS.—The Chinese (says the *New York Medical Gazette*) divide medicinal substances into heating, cooling, refreshing, and temperate. Their *Materia Medica* is contained in the work called the *Pen-tao-sang-mou*, in fifty-two large volumes, with an Atlas of Plates. Most of our medicines are known to them and prescribed; also mineral waters, with which the country abounds. They also have animal magnetisers, called *Cong-fou*. They divide their prescriptions into seven categories. 1. The Great Prescription. 2. The Little Prescription. 3. The Slow Prescription. 4. Prompt, or Through-by-day-light Prescription. 5. The Odd Prescription, for fools, madmen, hypochondriacs, and the hysterical. 6. The Even Prescription, for the wise and good. 7. The Double Prescription, for those in the family-way. Each of these recipes is applied to particular cases, and the ingredients that compose them are weighed out with the most scrupulous accuracy. The physician never pays a second visit, unless sent for.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Nov. 17th; The New York Medical Gazette, Nov. 6th; The Parochial Critic, Nov. 17th; The New York Medical Record, Nov. 6th; The Boston Medical and Surgical Journal, Nov. 4th; The Madras Mail, Sept. 15th; The Indian Medical Gazette, Oct. 18th; The Scotsman, Nov. 19th; The Bradford Observer, Nov. 15th; The Western Daily Press, Nov. 11th; The Northern Daily Express, Nov. 15th; The Aberdeen Guardian, Nov. 11th and 20th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. C. Johnson, Lancaster; Dr. J. Waring Curran, Mansfield; Mr. G. V. Poore, London; A. D. O.; Medicus; Mr. R. B. Moore, Wolverhampton; Mr. J. Hawthorne, Newcastle-upon-Tyne; Mr. C. Clutterbuck, London; Dr. T. Littleton, Plymouth; Mr. T. Savage, Birmingham; Dr. Gervis, London; Mr. J. Sampson Gamgee, Birmingham; Dr. Shearman, Rotherham; Dr. Miller, Edinburgh; Dr. Gairdner, Glasgow; Dr. Gull, London; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. C. J. B. Williams, London; Dr. James Russell, Birmingham; Dr. Protheroe Smith, London; Dr. Sedgwick, London; Mr. J. Harrison, Congleton; Mr. A. Evershed, Amptill; Mr. R. P. Oglesby, Leeds; Dr. T. J. Walker, Peterborough; Dr. Phillips, London; Mr. R. Bentley, London; Dr. Humphry, Cambridge; Dr. Wade, Birmingham; Mr. C. R. Thompson, Westerham; Mr. Partridge, Birmingham; Mr. W. Scott, London; Dr. J. Matthews Duncan, Edinburgh; The Secretary of the Harveian Society; Dr. Smart, Edinburgh; Mr. E. Kimpson, Warwick; Mr. T. Watkin Williams, Birmingham; Mr. A. B. Squire, London; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Treutler, Kew; The Registrar of the Medical Society of London; Mr. Eyton Jones, Wrexham; Dr. J. Mulvaney, Portsmouth; Dr. W. Anderson, Richmond; Dr. R. Lightfoot, Wincanton; Mr. O. W. Berry, Wimbledon; Mr. S. S. Alford, London; Mr. R. Harrison, Liverpool; Dr. Alfred Meadows, London; Mr. Smith, London; Mr. Cross, London; Dr. Inglis, Aberdeen; Mr. Coats, Glasgow; Mr. Curgenven, London; Dr. Mapother, Dublin; etc.

BOOKS, ETC., RECEIVED.

The New Treatment of Snake-Bite. By G. B. Halford, M.D. Melbourne: 1869.
Essays on Physiological Subjects. By G. W. Child, M.A., etc. Second Edition. London: 1869.
Nederlandsch Archief voor Genees- en Natuurkunde. Utrecht: 1869.
Report of the Nottingham Provident Medical Aid Institute, 1869.
Injuries and Diseases of the Knee-joint. By William P. Swain, F.R.C.S. London: 1869.
Vaccination. By J. Thorburn, M.D. London and Manchester: 1869.

INTRODUCTORY LECTURE

DELIVERED IN

THE UNIVERSITY OF EDINBURGH,

November 8th, 1869.*

By JOSEPH LISTER, F.R.S.,

Professor of Clinical Surgery.

GENTLEMEN,—I stand before you affected with very mingled feelings. On the one hand, I cannot but feel proud to have been called to occupy a chair which, without disparagement to others, must be allowed to have been, during the last thirty-six years, the one most influential for good in this the most important medical school in the British dominions. But the exultation which I might otherwise naturally feel is heavily dashed by the thought, that the circumstance which led to my promotion was the retirement of the man to whom the lustre of the Edinburgh chair of clinical surgery has been from first to last entirely due. I am well aware that he has made the place, not the place him. And though in his presence I must not say all that I otherwise should, I cannot refrain from expressing my conviction that, whether regarded as a scientific and practical surgeon, or as a teacher of those principles which he has done more than any other man in this century to establish, he has been without a rival in the world. Hence, in addition to the grief which I feel in common with you all at the cause of his resigning the chair which he had so long adorned, I am oppressed with a humbling sense of my own insufficiency; of my weakness, compared with his giant strength of mind and purpose; of my utter inability to fill his place. I can only strive, by the blessing of God, to do my best among you; relying, as I know I may, upon your generous sympathy. At the same time we may all rejoice that our old master is still among us to cheer us by his presence and aid us by his counsel; and it is a source of great satisfaction to myself that, as I have the privilege of free access to his inexhaustible store of wisdom and experience, he will, in some sense, through me be still your teacher.

But leaving these personal considerations, let us turn to the subject that lies before us. Clinical surgery is, strictly speaking, surgery at the bedside; surgery illustrated by cases in hospital as distinguished from surgery taught systematically in the class room. The importance of clinical or bedside study cannot be over-estimated. It is the very keystone, without which all the rest of the educational structure, being merely preparatory, would be absolutely useless. It is to surgery or medicine what dissection is to anatomy. It confers a familiar acquaintance with the nature of disease and an instinctive knowledge of the appropriate treatment without which a man, however accomplished otherwise, would be utterly unfit to practise the profession. But how, it may be asked, can a course of lectures be delivered upon this principle? Can it be possible to take a class of the size of my present audience from bed to bed in a ward and profitably teach them there? To do this would certainly be impossible. Remarks made at the bedside are doubtless highly valuable to those who hear them and who see their subject, but it is only a few at a time who can be thus taught. Hence, clinical lectures commonly degenerate into the reading of details of cases with remarks upon them, which, for the great majority of those who hear them, lack the genuine element of clinical interest.

This difficulty was happily overcome by Mr. Syme. Though it was impossible to take a large class to the bedside of the patient, it was easy in most instances to bring the patient before the class, collected in the operating theatre, where they could all see the salient features of the case, and hear not only the remarks of the teacher, but the patient's own account of his symptoms, and witness the treatment then and there put in practice; or, if it was thought desirable to defer the operation to another day, they were prepared to watch its various steps with intelligence and profit after having heard the principles of the procedure fully discussed. Such a course of instruction is truly clinical, and, if rightly conducted, possesses a vividness of interest and permanence of impression peculiar to itself. Having witnessed its advantages when in Edinburgh, I have followed this system in Glasgow, and shall continue to pursue it here. But, invaluable as such lectures may be made, you

* This Lecture was not originally intended for publication, and was for the most part delivered extempore.

must not suppose that attendance upon them will do all that is needful for you in the way of clinical study. You must not only see diseases and watch their treatment by others, but handle them and be personally concerned in their management. Facilities for this are presented by the hospital offices of dresser, clerk, and house-surgeon; and no man should consider himself justified in assuming the serious responsibility of practice without having availed himself largely of such opportunities, either in our Infirmary or at some other similar institution.

But to return to the course before us. There are some details regarding the mode in which you may attend it to the greatest advantage, which I shall reserve till we next meet. And, now, as the place where we are assembled forbids my entering at once upon demonstrative surgery, I propose to devote the remainder of this hour to the endeavour to convince you, so far as the limited time at our disposal permits, of the truth of the germ-theory of putrefaction, the basis of a new mode of treatment, which finds its applications in all departments of practice, so that without understanding it we cannot advance satisfactorily in the consideration of individual cases. I allude to the antiseptic system.

This system of treatment consists of such management of a surgical case as shall effectually prevent the occurrence of putrefaction in the part concerned. When this is really secured, surgery becomes something totally different from what it used to be; and injuries and diseases formerly regarded as most formidable or even hopeless, advance quietly and surely towards recovery. Of this system the germ-theory of putrefaction is the pole-star which will guide you safely through what would otherwise be a navigation of hopeless difficulty.

The germ-theory declares that the putrefaction of organic substances under atmospheric influence is not effected, as used to be supposed, by the oxygen of the air, but by living organisms developed from germs floating in the atmosphere as constituents of its dust.

The first great step towards the establishment of this theory was the discovery of the yeast-plant, in 1836, by Cagniard Latour, who, having detected in yeast a microscopic fungus, the *Torula Cerevisia*, which appeared to be the essential constituent of the ferment, attributed the resolution of sugar into alcohol and carbonic acid to the disturbing influence of the growing organism. (See *Comptes Rendus*, tom. iv, p. 905.)

In the following year, Schwann of Berlin published the results of a remarkable investigation into the causes of putrefaction (in the course of which, by a coincidence such as is not uncommon in the history of science, he too had independently discovered the yeast-plant); and he related experiments which showed that a decoction of meat might remain for weeks together free alike from putrefaction and from the development of infusoria or fungi in a flask containing air frequently renewed, provided that the atmosphere was subjected to a high temperature at some part of its course towards the containing vessel (see Pogendorff's *Annalen*, vol. xli, art. xvi). Hence he concluded that putrefaction was caused by the growth of organisms springing from germs in the air, the heat preventing the putrefactive change by depriving the germs of their vitality. In other words, he propounded the germ-theory of putrefaction. These experiments of Schwann's appear to me to prove conclusively that oxygen, as ordinarily understood by chemists, cannot of itself occasion putrefaction. It is true indeed, that if you attempt to repeat the experiments, you may meet with failure. But it must be remembered that merely negative results go for nothing here, if the positive evidence rests on satisfactory authority. This is a point which has been too little borne in mind in the discussion of this subject. If we consider what the germ-theory assumes, how minute the putrefactive particles are supposed to be, and how universally present in the atmosphere and in the dust which adheres to all objects exposed to it, it is easy to understand failure in such experiments consistently with the truth of the theory; but it is impossible to understand success in any single instance consistently with the falsehood of the theory. If in any one case it really happened that a decoction of meat remained without putrefaction for weeks together, though freely exposed to air unaltered except by having been temporarily subjected to a high temperature, this is enough to show that oxygen, as known to chemists, is not the sole cause of the change in question.* One genuine successful experiment out of a thousand is enough to establish that point.

Schwann's observations, however, did not receive the attention which they appear to me to have deserved. The fermentation of sugar was generally allowed to be occasioned by the *torula cerevisia*, but it was not admitted that putrefaction was due to an analogous agency. And yet the two cases present a very striking parallel. In each a stable chemical compound, sugar in the one case, albumen in the other, undergoes extraordinary chemical changes under the influence of an excess-

* Such experiments are peculiarly likely to fail in the hands of those who perform them with the object of confuting the germ-theory. In fact, a belief in the theory almost essential, in order that the experimenter may be sufficiently keenly alive to the subtle sources of failure.

ively minute quantity of a substance which, regarded chemically, we should suppose inert. As an example of this, in the case of putrefaction, let us take a circumstance often witnessed in the treatment of large chronic abscesses. In order to guard against the entrance of atmospheric air, we used to draw off the matter by means of a cannula and trocar, such as you see here, consisting of a silver tube with a sharp pointed steel rod fitted into it, and projecting beyond it. The instrument, dipped in oil, was thrust into the cavity of the abscess, the trocar was withdrawn, and the pus flowed out through the cannula, care being taken, by gentle pressure over the part, to prevent the possibility of regurgitation. The cannula was then drawn out with due precaution against the reflux of air. This method was frequently successful as to its immediate object; the patient being relieved from the mass of the accumulated fluid, and experiencing no inconvenience from the operation. But the pus was pretty certain to reaccumulate in course of time, and it became necessary again and again to repeat the process. And, unhappily, there was no absolute security of immunity from bad consequences. However carefully the procedure was conducted, it sometimes happened, even though the puncture seemed healing by first intention, that feverish symptoms declared themselves in the course of the first or second day, and, on inspecting the seat of the abscess, the skin was perhaps seen to be red, implying the presence of some cause of irritation, while a rapid reaccumulation of the fluid was found to have occurred. Under these circumstances, it became necessary to open the abscess by free incision, when a quantity, large in proportion to the size of the abscess, say, for example, a quart, of pus escaped, fetid from putrefaction. Now, how had this change been brought about? Without the germ-theory, I venture to say, no rational explanation could have been given. It must have been caused by the introduction of something from without. Inflammation of the punctured wound, even supposing it to have occurred, would not explain the phenomenon. For mere inflammation, whether acute or chronic, though it occasions the formation of pus, does not induce putrefaction. The pus originally evacuated was perfectly sweet; and we know of nothing to account for the alteration in its quality, but the influence of something derived from the external world. And what could that something be? The dipping of the instrument in oil, and the subsequent precautions, prevented the entrance of oxygen. Or, even if you allowed that a few atoms of the gas did enter, it would be an extraordinary assumption to make, that these could, in so short a time, effect such changes in so large a mass of albuminous material. Besides, the pyogenic membrane is abundantly supplied with capillary vessels, through which arterial blood, rich in oxygen, is perpetually flowing; and there can be little doubt that the pus, before it was evacuated at all, was liable to any action which the element might be disposed to exert upon it.

On the oxygen theory, then, the occurrence of putrefaction, under these circumstances is quite inexplicable. But if you admit the germ-theory, the difficulty vanishes at once. The cannula and trocar having been lying exposed to the air, dust will have been deposited upon them, and will be present in the angle between the trocar and the silver tube, and in that protected situation will fail to be wiped off when the instrument is thrust through the tissues. Then, when the trocar is withdrawn, some portions of this dust will naturally remain upon the margin of the cannula, which is left projecting into the abscess, and nothing is more likely than that some particles may fail to be washed off by the stream of outflowing pus, but may be dislodged when the tube is taken out, and left behind in the cavity. The germ-theory tells us that these particles of dust will be pretty sure to contain the germs of putrefactive organisms; and if one such be left in the albuminous liquid, it will rapidly develop at the high temperature of the body, and account for all the phenomena.

But, striking as is the parallel between putrefaction in this instance and the vinous fermentation, as regards the greatness of the effect produced, compared with the minuteness and the inertness, chemically speaking, of the cause, you will naturally desire further evidence of the similarity of the two processes. You can see with the microscope the torula of fermenting must or beer. Is there, you may ask, any organism to be detected in the putrefying pus? Yes, gentlemen, there is. If any drop of the putrid matter be examined with a good glass, it is found to be teeming with myriads of minute jointed bodies, called vibrios, which indubitably proclaim their vitality by the energy of their movements. It is not an affair of probability, but a fact, that the entire mass of that quart of pus has become peopled with living organisms, as the result of the introduction of the cannula and trocar. For the matter first let out was as free from vibrios as it was from putrefaction. If this be so, the greatness of the chemical changes that have taken place in the pus ceases to be surprising. We know that it is one of the chief peculiarities of living structures that they possess extraordinary powers of effecting chemical changes in materials

in their vicinity, out of all proportion to their energy as mere chemical compounds. And we can hardly doubt that the animalcules which have been developed in the albuminous liquid, and have grown at its expense, must have altered its constitution, just as we ourselves alter that of the materials on which we feed.

The only question, therefore, that remains to be answered is, whence have those vibrios originated? Have they sprung like higher animals and plants from pre-existing similar organisms, or have they arisen spontaneously out of the pus from an alteration in its physical constitution, determined in some inexplicable manner by the introduction of a cannula and trocar?

All analogy, gentlemen, is in favour of the former view. The doctrine of spontaneous or equivocal generation has been chased successively to lower and lower stations in the world of organised beings, as our means of investigation have improved. I remember a conversation which I once had, when a student, with an elderly gentleman, not indeed belonging to our profession, on the subject of mites in cheese. He believed that they grew out of the cheese from some change in its substance, as the result of keeping; and the view which I advocated, that they had sprung from the eggs of pre-existing mites, seemed to him preposterous. But when the microscope is applied to these creatures, and we see that they are nearly analogous in structure, though on a smaller scale, to crabs and lobsters, and that they are similarly provided with organs of reproduction, it seems to us as absurd to suppose that they have arisen from a mere alteration in the cheese, as it would be to imagine that crabs could spring spontaneously out of a piece of dead fish or other garbage upon which they prey. Yet, though no physiologist doubts that cheese-mites do arise from parentage, it must be confessed that there is some difficulty in accounting for their almost invariable occurrence in some kinds of cheese kept for a sufficient length of time. Whether the eggs are transferred by the hands of the cheesemonger, or whether the adult mites migrate from cheese to cheese, may be matter for curious discussion.

But though with creatures as large, comparatively speaking, as the cheese-mite, it may not be very easy to explain the extensive diffusion of their ova, this difficulty becomes less and less the more minute the organism. If a vessel containing preserved fruit be left exposed to the air, the surface of the preserve soon becomes covered with mould, and it is then found to have a "mouldy" flavour implying alteration in its chemical constitution. The mould itself has a flavour of its own, and it has developed, in part, at least, at the expense of the preserve. If the mould be examined microscopically, it is seen to be just as distinctly a vegetable as a cabbage is, and far more abundantly provided with reproductive apparatus. Supposing it to be the ordinary blue mould, the blue tint is simply the colour of the fructification. This is in accordance with a general law in the organic world, that, so far from any deficiency appearing in the arrangements for reproduction in the lower forms of life, so as to make it difficult to account for their originating from parents, the lower the organism the more lavishly is this provided for. In some animals low in the scale of being, we find, besides the formation of ova, a faculty of self-multiplication by segmentation, or, as it is termed, fissiparous generation. For what purpose, I venture to ask, can be this ample provision for reproduction of the lowest species by parentage, if they can spring spontaneously out of the materials in which they grow?

Now in the case of the blue mould, the sporules, besides being produced in incalculable multitudes, are of extreme minuteness, and constitute a very fine dust, which cannot fail to be wafted and extensively diffused through the air. If a ray of sunlight were to shoot through this room, we should see the sunbeam peopled with motes. But the particles of dust which are rendered visible to the naked eye by being so illuminated are gross indeed, compared with the sporules of such a fungus. Some of them are complicated organic structures, such as pieces of hair or vegetable fibre; and if these be suspended in the air, still more must microscopic spores be so, though their extreme minuteness makes it less easy to distinguish them from particles of inorganic matter. Hence it appears that, for the lowest forms of life, as for the highest, the notion of spontaneous generation is simply gratuitous and uncalled for.

But, although from these considerations we may be led pretty surely to infer, on the one hand, that the atmosphere is pervaded by the germs of minute organisms, and, on the other, that without such germs the organisms could not take their origin, it would be highly desirable to obtain positive evidence on both these points, if indeed it be attainable.

Such evidence has been afforded of late years by the beautiful researches of Pasteur. From among his numerous experiments I will select one set as peculiarly instructive. A number of glass flasks, with attenuated necks, were partially filled with a decoction of yeast, filtered so as to be perfectly clear and transparent. Each was then boiled for a certain length of time, with the object of destroying any organisms

existing in the decoction, or adhering to the interior of the vessel; and during ebullition the neck was hermetically sealed, so that when the vessel cooled a vacuum was produced in the part previously occupied by air. A certain number of such a series of flasks were then opened in a particular locality—as, for example, a lecture-room such as this—by breaking the narrow neck of each after scratching it with a file. Air rushed in to fill the vacuum, after which the neck was immediately sealed again with the blow-pipe. As the result of the introduction of this limited amount of air, the previously transparent liquid in some of the flasks was seen to present, in the course of the next few days, a cloudiness indicative of the first appearance of the growth of *torulæ* or other organisms, which afterwards continued to increase. But, if a set of such flasks were opened in a situation where atmospheric germs might be expected to be few, if any, a different result was obtained. M. Pasteur was at the pains to take such flasks to Mont Anvert in Switzerland, and open them beside the Mer de Glace, taking especial care, by using a file that had been exposed to the flame of a spirit-lamp, and long forceps similarly treated, to guard as much as possible against the introduction of living organisms from the instruments employed, or from his own person. The pure air thus introduced had, indeed, in a very small proportion of the flasks, the effect of inducing, very slowly, an appearance of organic development; but in the great majority of the vessels the liquid remained perfectly unchanged for an indefinite period. On the other hand, if the flasks were opened in a situation where the air, though pure, might be expected to abound in minute life—viz., under the shade of trees in the country—organisms formed in sixteen out of eighteen flasks, and presented a great variety in their nature (see *Annales des Sciences Naturelles*, 1865). These experiments, which rest not only on the high authority of M. Pasteur, but also on the unimpeachable corroborative testimony of a committee of the French Academy of Sciences, with the celebrated Milne-Edwards as one of its members, prove conclusively that the gases of the air cannot of themselves occasion the growth of organisms even in a very favourable nidus for their development; and also that, in the regions inhabited by plants or animals, whether in cities or in the country, each cubic inch of atmosphere really does contain living germs floating in it.

But there is one other experiment related by Pasteur* which is, in some respects, even more striking. A flask is prepared similarly to those already described, except that, after the introduction of the decoction of yeast, the neck is not only drawn out into a pretty narrow tube, but bent at various angles. The fluid is then boiled as in the former experiments; but the end of the neck, instead of being sealed, is left open, so that air passes into the flask on withdrawal of the lamp. The vessel being then left undisturbed, the diurnal changes of temperature, involving alternate expansion by day and condensation at night of the gases in the flask, necessitate a daily interchange between the air in the body of the flask and the external atmosphere. Yet the fluid, though exposed in this way to air perpetually changed, remains for an indefinite period quite transparent, without trace of organic development. There can be but one interpretation of this fact. The oxygen, whether in its ordinary condition or that of ozone, with all the other atmospheric gases, including any which may exist in such small quantities as to be undiscoverable by the chemist, must pass, each in its own proportion, unchanged into the body of the flask. It is impossible that a dry glass-tube can stop any gas. For, though the tube is moist from condensation of aqueous vapour in the first instance, it is soon dried by the air that passes in and out through it. It is therefore inconceivable that any atmospheric gas can have been arrested by the tube. But it is conceivable, considering the very gradual character of the movements of the air in consequence of the diurnal changes, that dust, even though very fine, may be arrested by the angles. We may perhaps wonder that particles of such extreme minuteness as the germs of atmospheric organisms should be so detained; but no one can say it is impossible, and no other possible explanation presents itself. The experiment proves with certainty that the gases of the air, however abundantly supplied, are of themselves unable to originate the growth of *torulæ* and other minute organisms which appear in a decoction of yeast freely exposed to the atmosphere, and also that the essential source of such development must be suspended particles or germs. But in order to render the experiment, if possible, still more conclusive, the Committee of the Academy completed it by sealing the end of the neck of the flask after the fluid had remained clear for a sufficient length of time to show that no organism could grow in it, and, inverting the flask, shook it until some of the liquid passed into the angles of the bent tube, after which the vessel was again left to itself. And now, gentlemen, occurred something which you may perhaps be disposed to regard as

too good to be true, but which is true nevertheless. In the course of no long time, the fluid in the angles of the tube exhibited indications of organic growth, demonstrating that the sources or germs of such development had, as a matter of fact, been arrested there. (See *Annales des Sciences Naturelles*, loc cit.)

This experiment charms us alike by its simplicity and perfect conclusiveness. Here is evidence, indeed, which, if the facts be admitted, cannot be gainsaid. But, though I could not doubt the authority on which it rested, I felt desirous, if possible, to bring it to bear more directly upon the subject of putrefaction. The fluid which seemed most likely to answer this purpose, combining transparency with a high degree of putrescibility, was urine; and I accordingly made it the subject of the experiment to which I now desire to direct your attention.*

Two years ago last month, I introduced portions of the same specimen of fresh urine into four flasks, of which two are before you. The body of each vessel was about one-third filled with the liquid. After the introduction of the fluid, the necks of three of them were drawn out into tubes rather less than a line in diameter, and then bent at various acute angles, as you observe in one of these. In the other, the neck was drawn out to a calibre, if anything, rather finer, but cut short and left vertical, as you see it. The liquid in each flask was then boiled for five minutes, the steam issuing freely from the open end of the narrow neck. The reason for boiling it so long is, that, as Pasteur has shown, merely raising the fluid to the temperature of 212 deg. F., and then allowing it to cool, is not enough to kill all the organisms it may contain. It is necessary to maintain the elevated temperature for about five minutes, to ensure complete destruction of their vitality.† The lamp being then removed, air of course passed in to take the place of the condensed aqueous vapour. And, during the two years that have since elapsed, a considerable fraction of a cubic inch of fresh air has entered every night into the body of each flask, to exert its influence upon the liquid. In the case of the flasks with contorted neck, the air moving to and fro through the tube soon dried the moisture which was at first deposited within it; and any of you may see, after lecture, that in the one before you the neck is dry, as well as open, from end to end; so that it could present no obstacle to any gaseous constituent of the atmosphere. Nevertheless, though thus freely exposed to the action of the gases of the air for so long a period, including two unusually hot summers, the urine still retains its original straw colour and perfect transparency, presenting neither cloud, scum, nor sediment; and the only change that I can detect in it is, that of late—as a result, I presume, of the slow evaporation that has been going on in consequence of the perpetual change of air—some very minute shining crystals have been deposited upon the sides of the glass. Similarly unaltered are the contents of the other two similar flasks, which I have not thought it needful to bring here. But very different is the appearance of the urine in this other flask, whose neck, short and vertical, was calculated to admit particles of dust, as well as gaseous material. The transparent straw colour has given place to a muddy brown, with abundant sediment, including the *débris* of different fungi, which have long since ceased to grow—poisoned, no doubt, by the acidity of the liquid, the pungently ammoniacal character of which may be readily ascertained by placing the warm hand for a moment upon the body of the flask while one nostril is kept above the orifice.

Soon after the commencement of the experiment, this short-necked flask had a really beautiful appearance. Two different kinds of fungi presented themselves: one of exceedingly delicate structure, growing rapidly from the bottom of the vessel, so as to occupy, in no long time, the greater part of the bulk of the liquid; the other, a dense blue mould, floating at the surface, and extending slowly in concentric rings. Meanwhile, the fluid gradually assumed a deeper and deeper amber tint, indicative of progressive change in its chemical composition.

In the flasks with bent necks, I was not content with observing the completely unchanged appearance of the contained urine. Half a year after the experiment was begun, I poured out about half an ounce of the clear contents of one of them into a wineglass for examination. Its odour was perfectly sweet, and its reaction faintly acid; and, under the microscope, a careful search with an excellent glass of high power failed to detect vibrio, bacterium, or any other organism. The lowest

* Since making the experiment, I have learned that Pasteur had also performed it with urine.

† See *Comptes Rendus*, vol. 1, p. 306. It follows that, if any germs were drawn into the body of the flask with the air that rushes in on the withdrawal of the lamp, they would retain their vitality in the hot liquid, and develop in it when it had cooled. I have elsewhere expressed the opinion, that the germs contained in the air which is thus rapidly admitted in the first instance, must be arrested by the drops of water which appear in the angles of the tube immediately on the cessation of ebullition, just as the particles of dust in inspired air are stopped by the mucus of our bronchial tubes.—See BRITISH MEDICAL JOURNAL, July 18th, 1868.

* This experiment is attributed by Pasteur to M. Chevreul

known forms of organic development, and the slightest approach to putrefactive change, had been alike prevented by simply filtering the air of its floating molecules.

Yet the urine, which had so long remained unaltered under the free influence of the gaseous constituents of the atmosphere, proved as prone as ever to the usual effects of exposure to the air, as soon as particles of dust could gain access to it; for, the wineglass having been covered to prevent evaporation, I found the fluid in two days with a dunghill odour, and loaded with minute microscopic organisms; and, a few days later, different kinds of fungi, visible to the naked eye, were growing in it.

Gentlemen, I commend these facts to your candid and impartial judgment, beseeching you to form your own opinions regarding them. The minds which you bring to bear upon this subject to-day are very much the same as they will be throughout your lives. An observation which any one of you may make now will serve in after-life to illustrate a course of lectures, should he occupy a position corresponding to that which I have now the honour to hold; and you are as competent as you ever will be to draw logical inferences from established data. Do not, then, let any authority shake your confidence in knowledge so obtained.

Throughout the course on which we are entering, I shall endeavour as far as possible to place before you simple facts, trusting that, in estimating their significance, you will be ever guided by that which our dear master has so constantly striven to inculcate as our leading principle—the love of Truth.

NOTES

ON

ALPINE SUMMER QUARTERS FOR INVALIDS IN 1869.*

By CHARLES J. B. WILLIAMS, M.D., F.R.S.

It must be confessed that this first view of the Baths of Bormio from below is too wild and desolate to be beautiful; but, as the Stelvio road emerges from the narrow streets of the ugly town, and ascends the gentle slope to the baths, the scene all brightens; and, when we reached the terraced gardens of the building, and, turning our backs on the frowning Stelvio, looked in front over the green fields to the valley and gorge that we had left, now in the azure distance, with its varied mountains towering above it, some wooded, some barren, and most of them capped with snow—then another beautiful valley, with its vista of mountains lying to the left; and withal, for a foreground, a garden glowing with grouped flowers of brilliant colours,—we were constrained to admit that we had surveyed few scenes more lovely in the lands which we had left behind us. Thus were removed our first misgivings as to the beauty of the place.

But next as to its salubrity. The establishment of the New Baths is a modern building, placed on a hill sloping up to the perpendicular cliffs before mentioned, which are the terminal buttresses of Monte Cristallo, the highest of the two mountains between which the Stelvio road is carried. This hill is formed of the *débris* of the limestone rock fallen from the cliffs, and is consequently dry and stony, with large masses of rock scattered here and there over it. A thin soil, with mountain herbage and scattered shrubs, partially cover it; and this has been further improved by artificial planting and a variety of walks and seats for the benefit of the inmates of the establishment. The building faces the south, looking down the Val di Sotto or Upper Valtelline. Behind, the rocky cliffs of the Stelvio form a complete screen to the north and east. To the right is the valley of Pedenos, running westwards, and leading to the Vals Viola and Livigno, through which it is possible to make short cuts to the Bernina road. To the left, beyond a projecting spur from the Stelvio mountain, lies the valley of Furva, which runs up to Santa Caterina, another watering-place, to be noticed hereafter.

The new baths of Bormio are, therefore, favourably placed for dryness, sunny aspect, shelter from the winds of the north and east; and yet derive coolness from the altitude, and from the breezes which frequently blow from the west and from the south. No doubt, the heat of the sun is great in summer; and there is a want of tree-shade near the establishment. But the detached rocks afford shelter; and there are always portions of the Stelvio road in the shade, as it winds

through the ravine behind the old baths. On the opposite hill, also, are extensive pine-woods, in which shady walks may be found.

The meteorological observations collected by Dr. C. G. Brügger give a favourable view of the temperature of the Bormio baths. The mean annual temperature is 44.51 deg. F., which is from two to four degrees warmer than any place of the same altitude in Switzerland. The moderateness of the temperature at different seasons is further proved by these figures:—

Temperature of the Air at Bormio (New Baths).

	MAX.	MIN.	MEAN.
Summer	F. 80 deg.	41 deg.	61.7 deg.
Autumn	73.2	18.5	43.16
Winter	—	—	31.6
Spring	70	21	42

The mean humidity of the air at Bormio in the three summer months is 68 deg. (saturation being 100 deg.) By way of comparison, may be mentioned that of Berne (75.7 deg.), and those of Zurich (79.8 deg.) and Montreux (80 deg.)

These figures correspond pretty well with the indications of our sensations during our sojourn. The air was never either oppressive or too cold to be pleasant. The sun's rays, of course, had great power; but there was almost always a cooling breeze, which was refreshing, without the extremes of scorch and chill from which we had suffered in the Engadine.

The airiness and dryness of the situation may be ascribed partly to its absolute height (which I found 4,560 feet above the sea; Ball states, 4,798), and partly to the declivity falling from it—on the west, abruptly into the ravine down which dashes the torrent of the Adda; and on the south, by a more undulating slope, into the Bormio valley; while behind, to the north and east, it is protected from the colder winds by the Stelvio mountains. It may be said to stand in an amphitheatre of mountains; but those in front are more distant, so that they shut out the morning and evening sun less than in the Engadine; whilst those behind are so near and so high as effectually to shut out the cold blast from the north. Hence the thermometer, in the coldest months, falls only a few degrees below freezing; whereas at St. Moritz it sometimes is down to—18 deg. F., or fifty degrees below freezing. The occurrence of frost at night during the summer months, which we had experienced in the Engadine, is never thought of at Bormio. In fact, the growth of gourds, and of several other tender plants, in the open gardens of the establishment, proves how much more genial is the climate than that of the upper Engadine, where even potatoes and common garden-stuff cannot be raised.

On comparing Bormio with other places, with regard to the amount of rain and the number of rainy days in the year, it appears from Dr. Brügger's tables to be much below the average; the number of rainy days in the summer (June, July, August), during five years, averaging twenty-three; whilst at Zurich it was thirty-two; at Berne, forty-five; Zermatt, thirty-eight; Remiis (Unter-Engadin), forty-two; Gastein (Tyrol), forty-three; Tegernsee (Bavaria), fifty-two. In predominance of fine weather, therefore, Bormio resembles Italy more than Switzerland. Possibly the paucity of trees in the immediate neighbourhood may be a cause of this greater exemption from rain and cloud. I was struck with the difference between this place and Switzerland generally, in the prevalent prognostic as to the weather. In Switzerland, it is commonly doubtful or gloomy. At Bormio, in spite of occasional gathering clouds and falling rain, the general assurance was, "It will soon be fine again;" and so it proved.

The establishment of the Bagni Nuovi is under the management of an intelligent Swiss, who speaks English, and is a most attentive host. It contains one hundred and forty bedrooms, plainly but comfortably furnished; and there are the *salles à manger*, *salon de société*, *salle de lecture*, billiard-room, etc., usually found in large continental hotels. There are forty bathing-rooms, with baths, some of marble, some of wood; and appliances for douches of different kinds; and a few are appropriated to collect the muddy deposit from the waters (*fanghi*)—a disgusting-looking slimy matter, redolent of sulphuretted hydrogen, supposed to be effectual as a discutient for tumours and rheumatic swellings.

It is foreign to my purpose to describe the waters and their uses, and I must refer to the pamphlet of Dr. G. Fedeli, the intelligent physician residing in the establishment; and to that of Drs. Meyer-Ahrens and Brügger, before mentioned. I may merely state that the thermal waters gush in great abundance from several sources in the tufa deposits at the foot of the Stelvio mountain. These may be explored half a mile above the new baths, at the Bagni Vecchi, a smaller and still more economical establishment. The temperature of the springs here is as high as 106 deg. F. At the Bagni Nuovi, to which it is conveyed in pipes, I did not find it higher than 98 deg. F. The chief

* Concluded from page 578 of last number.

mineral ingredients in the waters are sulphates of lime, magnesia, and soda, with very little iron and sulphur. The mud, however, which is deposited from the Archduchess Spring, is rich in filaments of sulphur, and in sulphuretted hydrogen, besides ochreous and saline matters. There is also a very drinkable cold chalybeate spring just below the old baths, not unlike that of St. Moritz, but less brisk with carbonic acid. It is much recommended for the weaker patients who are using the baths.

The establishment of the new baths is open from the middle of June to the end of September; but, if the advantages of the situation for purity and dryness of air—its sunny aspect, yet airiness—its coolness, without bleakness—were more known, its season would probably be lengthened, and part of the establishment kept open through the winter.

There are many delightful excursions in the neighbourhood deserving of notice; but the limits of this communication will allow me to mention only that to Santa Caterina, another hotel or health-establishment, with accommodation for fifty inmates. There are only two or three baths; but the attraction is a noted chalybeate spring. It seemed to me too strong to be taken without dilution; but it is bottled to a great extent, and is much used as an addition to wine or to other waters. The distance is about ten miles from Bormio, up the beautifully wooded glen, Val Furva. Although St. Caterina stands at a height of 6,000 feet—as high as St. Moritz—there is in this glen leading to it a much greater variety of trees than in the upper Engadine. But, as at St. Moritz, the mineral spring rises out of a bog; and, as you walk to it, the path yields with singular elasticity under your feet. This swampy ground forms the bottom of the valley, which is closely hemmed in by lofty mountains on all sides, except to the west, where it leads down the Val Furva towards Bormio; and to the north-east, where it is open to the ice-bound Val Forno, surrounded with the snow-peaks and glaciers of Monte Cevedale, Zufal-Spitz, Monte Tresero, and others. However advantageous this situation may be for scenery and mountain-climbing, it is obviously not a suitable residence for invalids, or for any persons likely to suffer from cold and damp.

Besides the route which we took to Bormio over the Bernina pass, there is another down the Engadine to Martinsbruck, and by the Etschthal over the Stelvio pass, the highest and grandest of all the carriage-passes over the Alps. Or the Stelvio may be reached from Innsbruck by the Brenner railway to Botzen, and up by Meran and the lower part of the picturesque Etschthal. From the Italian side, it is possible to go from Varenna or Bellagio on the Lake Como to Bormio, in a long summer's day; but the journey is generally divided by sleeping at Sondrio, which is the least unhealthy of the towns in the beautiful but dangerous lower Valtelline, in which it is not expedient to linger even for a day.

Although the new baths of Bormio appear to me to offer more advantages in point of dryness, shelter, and comfort, than any of the other high mountain resorts in the Alps; yet several of these deserve mention, as affording good accommodation, and being entitled at least to compete with the Engadine as summer-quarters.

The Hotel Rigi Kaltbad (4,727 feet) is on the south-west of the Rigi, and thus sheltered from the coldest winds. The Hotel Rigi Scheideck (5,406) is on the south-east of the mountain, less sheltered, but is quiet, with more scope for promenade, and well supplied with milk and whey. The great objection to the Rigi hotels are, the frequent occurrence of bad weather, and their inaccessibility by carriage. At Combamaz (4,417), above Aigle, and in the same vicinity at Sepey and Ormont Dessus, under the Diablerets mountains, are several sanitary hotels, which are much frequented in the summer, for the sake of their pure air and fine wild scenery.

Leukerbad, under the Gemmi pass, stands at a height of 4,642 feet, with a southern aspect, and by its great mountain-screen to the north and east, is fairly protected from extreme cold. It is accessible by a good carriage-road from the Rhone Valley, and has good hotel accommodation.

Courmayeur, on the Italian side of Mont Blanc, stands at a height of about 4,000 feet, with two large hotels; but it is too close to the Brera glacier and the great snow-fields of the Géant to be safe from sudden chills.

At Gressoney St. John, in the Val de Lys, is Delapierre's very comfortable hotel, at a height of nearly 5,000 feet, in a beautiful Alpine valley, with the Lyskamm at its upper end; but the splendid snow-mountain which is its pride might send down its bleak blast at times, to the detriment of the delicate. The valley at present is not accessible to carriages.

There is a good hotel on Monte Generoso, between the lakes of Como and Lugano, which may prove a good summer residence. The summit is 5,561 feet. This also is accessible only on foot or on horseback.

There are also two good summer places in the Maritime Alps, mentioned by my son in his last edition,* well adapted for invalids. One is St. D'Almas de Tende, fifty miles from Nice, on the road to Turin. It stands at a height of 3,000 feet, and is well sheltered from the north. The other is Certosa di Pesio, two days' journey north of Oneglio, on the Riviera, at the altitude of 5,000 feet, with a hydropathic establishment, and accommodation for one hundred guests.

THE TREATMENT OF SYPHILIS BY THE HYPODERMIC INJECTION OF THE SALTS OF MERCURY.†

By THOMAS JAMES WALKER, M.D. LOND.,
Surgeon to the Peterborough Infirmary, etc.

SINCE the publication of the first part of this paper in the JOURNAL for July 10th, M. Liégeois has brought before the French Société de Chirurgie the results of his experience of the treatment of syphilis by hypodermic injections. The strength of the solution employed by him is only 1 in 500; and, in consequence of his observations of the advantages which this weaker solution has over the stronger one, I have latterly injected one-thirtieth of a grain of the bichloride dissolved in ten drops of water and glycerine, instead of one-tenth of a grain, as recommended in the former part of this paper; and the weaker injection I use daily instead of every third day. The pain and inflammation at the seat of puncture are much less with the weaker solution; and, though I am not at present in a position to say whether the smaller dose is equally effectual, I should recommend its trial.

Of the various cases of secondary syphilis which came under my care during the last three months of the past year, thirteen were subjected to the treatment by the hypodermic injection of the bichloride of mercury; and, in order that a fair estimate of the value of the remedy may be arrived at, I do not pass over even those cases in which, from various circumstances, this treatment was not persevered with.

I now give abstracts of the records of the cases from my notes. The reports of most of the cases which have occurred in dispensary practice, are furnished by Mr. Lloyd, House-Surgeon to the Peterborough Infirmary.

CASE 1.—A female, aged 30, wife of a hawker, of robust frame, but emaciated and cachectic looking, was admitted to the Peterborough Infirmary on September 1st, 1868. She stated that, seven months previously, she first noticed copper-coloured blotches over the body and the labia. She was at that time an out-patient of the Dispensary, and was treated with fifteen-grain doses of iodide of potassium; she continued under treatment for three months, and then ceased to attend. On admission, she presented large copper-coloured maculæ over the legs, arms, and labia; there were also superficial ulcers on various parts of the body, general induration of the glands, and condylomata (mucous papules) about the pudenda. She had had ulcerated throat, but was not then suffering from it.

On September 3rd, one tenth of a grain of bichloride of mercury was injected under the skin of the anterior surface of the right thigh. Next day, she complained of aching at the seat of the injection, and said that she suffered pain in walking. There was neither swelling nor inflammatory redness. During the succeeding night, a slight blush appeared at the seat of injection, but was disappearing when she was seen on the 5th. The pain was then less. A tenth of a grain of bichloride was injected under the skin of the left thigh. This second injection caused the same local effects as the first. On the 8th, the rash had diminished considerably. A third injection, of the same quantity, was made under the skin of the fore-arm. Next day, there were pain, swelling, and slight redness at the seat of the last injection. On the 12th, a fourth injection was made, under the skin of the left buttock, close to a group of condylomata. This injection caused little discomfort. The blotches were disappearing from all parts with astonishing rapidity. Her health was much improved. On the 15th, she was so much improved that she wished to leave the hospital. Another injection was made over the right buttock. The injection was repeated on the 19th and 22nd. On the latter day, she was much better in all respects, the rash having almost entirely disappeared. She then neglected to attend for thirteen days, during which time she was not injected; and when she was seen on October 7th, a few fresh spots of eruption had come out, and the condylomata had not disappeared. An eighth injection was made. The patient now left the town; and the treatment was discontinued. About three months later, she shewed herself as she was passing through

* *The Climate of the South of France*, etc. By Charles Theodore Williams, M.D. 1869.

† Continued from page 31 of number for July 10th.

Peterborough; she was free from rash, but had syphilitic tubercles on the tongue.

Summary.—The patient, cachectic, and with advanced and extensive secondary syphilis, was under treatment three weeks regularly, and was once seen at the end of another fortnight; during which time, less than a grain of bichloride of mercury was administered in eight doses. When she ceased to attend, she was very greatly relieved, though still presenting symptoms of syphilis when seen three months later.

CASE II.—A male, aged 31, a shoemaker, of irregular habits, who had been under treatment for syphilis about three years since, was first seen, on this occasion, on 22nd September, 1868. He stated, that in July last, about a month after coitus, superficial sores appeared on the glans penis; that since that time, he had had sore-throat, and had been failing in health, and that, recently, the skin had become affected. The patient was pale and feeble looking, presented superficial ulcers on the glans penis, deep ulcers of the fauces, rupial ulcers on the chin, and swelling in front of the right leg, over the extensor muscles. One tenth of a grain of bichloride of mercury was injected. The patient turned faint from the puncture and the pain caused by the injection, was compelled to keep his bed for a day, and was unable to work for four days. On the 27th, a second injection was made on the outer side of the left thigh. On October 1st, a third injection was made on the right thigh. The patient's general health was much better; the sores on the glans were rapidly healing, and the ulcers in the throat were greatly improved. There was a superficial sore at the seat of the injection made on the 27th September, and some exudation and superficial redness at each of the points where the injection had been administered; but the latter punctures had caused less pain and discomfort than the first. On the fifth, a fourth injection was made on the left thigh. He said that he was much better, and his appetite was now very good. The rupial sores had almost entirely disappeared; but the swelling in front of the leg increased, and was the seat of much pain. The injection was repeated on the 8th. On the 11th, the abdomen was selected as the point of administration, as the tenderness of the thighs, caused by the injection, prevented the patient from being able to work. On October 14th, while all the other symptoms had improved, the pain and swelling in the leg had become so severe, that I did not consider it fair to the patient to withhold any longer the iodide of potassium, which would, I felt confident, relieve these tertiary symptoms. The subcutaneous injection was, therefore, discontinued, and five grains of the iodide were given every four hours. In a fortnight, the ulcer formed by the giving way of the skin over the shin, was healing rapidly; and the patient, considering himself cured, ceased to attend.

CASE III.—This case simply illustrates a difficulty which may occur to prevent the carrying out of the treatment. A female, aged 49, wife of the next patient, had been under irregular treatment for three months, for secondary syphilis. She was, when I saw her, weak and cachectic, covered with syphilitic maculæ, and suffering from leucorrhœa and sore throat. On October 5th, one-tenth of a grain of bichloride was injected. The patient turned faint and sick the moment the needle touched her, and complained greatly of the subsequent pain. She refused to submit to the hypodermic treatment any further; and, having taken iodide of potassium for some weeks without improvement, she was ordered a mixture containing bichloride of mercury and sarsaparilla. She still continued to become worse; and, on the 28th October, I ordered mercurial inunction, with the usual precaution of the diligent use of alum to the mouth. This treatment I had abstained from previously, fearing that the patient might, if it were adopted, suspect the nature of her malady. Under the use of the mercurial ointment, the general health greatly improved, the rash disappeared, and, after a month's treatment, my attendance ceased, no symptom remaining but leucorrhœa.

CASE IV.—A male, aged 52, whip-maker, was first seen 5th October, 1868. He stated, that in June last, within a few days after impure coitus, a sore appeared by the side of the frænum; this reached the size of a pea, and was healed in about three weeks under treatment. At the end of about a month from the first appearance of the chancre, a rash broke out on the surface. When seen, his health was not much affected; he had copper-coloured papules and tubercles, with scaly surface, on the face and other parts of the body; and general induration of the lymphatic glands. Injections of one-tenth of a grain of bichloride of mercury were made on the 5th, 9th, 12th, 16th, and 19th, in the right arm, right and left legs, and abdomen. The rash was better on the 12th; on the 16th, there was great improvement; and, on the 19th, the stains had almost disappeared, and the elevations of the skin quite so, with the exception of one on the upper eyelid. The nail was separating from the middle finger of each hand, and there was slight ulceration round the matrix; the nail on the right hand was *stuffed*; that on the left, cut with a piece of brass. But little inconvenience had been experienced from any of the injections, except the second on the left thigh, which

excited inflammation, and had left a tender swelling. The injection was repeated on October 24th, 28th, and 31st. On November 3rd, a ninth injection was made. The rash had now disappeared, but the sores round the injured nails did not shew any tendency to heal. He was ordered to apply black wash to these. On the 11th, the tenth injection was made. The patient had been out of town, and had, consequently, not shewn himself for a week. There were flat ulcerated condylomata round the anus; to these he was to apply sulphate of copper lotion (three grains to the ounce). The injection was repeated on the 14th, 18th, 20th, and 22nd. The patient again went out of town; and, on his return, presented himself quite well, and he has remained so to the present time.

CASE V.—A male, aged 24, a sawyer, was first seen October 13th, 1868. He stated, that about two months previously, he wounded the middle finger with a splinter, near the nail; this did not pain him much at first, but, soon afterwards, a sore formed there. On being pressed, he acknowledged the possibility of his finger having become inoculated with syphilis. On the middle finger of the right hand, at the margin of the matrix of the nail, was a superficial sore, rather smaller than a threepenny piece, and presenting the characters of a true chancre; the right supracondyloid gland was much enlarged and hardened, the body was covered with syphilitic maculæ, and, on the outside of the prepuce, were three small superficial ulcers, of the size of a pin's head. The patient was feverish, and was losing strength and appetite. On October 13th, a tenth of a grain of bichloride of mercury was injected. Black wash was ordered for the chancre. The injection was repeated on the 17th, 20th, and 24th. The chancre had now healed; the rash was worse; his general health fair. The injections were continued with regularity up to December 5th, when the sixteenth was administered. The patient was better, but had not lost the rash. On the 23rd, after the twentieth injection, that is, when two grains of bichloride had been injected in all, the gums became a little tender. The patient ceased to attend for three weeks; and, on the 11th January, there still being a few maculæ, the bichloride was again injected. The treatment was repeated on the 15th, 19th, and 22nd, the last being the twenty-fourth injection of one-tenth of a grain. The patient, remaining free from any syphilitic symptoms, was discharged cured.

CASE VI.—A male, aged 33, a porter, was first seen November 9th, 1868. Thirteen months previously, he had a chancre, and had not been free from syphilitic symptoms from that time. There was now no rash, but the health was feeble, and the lymphatic glands were indurated and enlarged. Eight days before I saw him, he first found the eye affected; there was low iritis, with contracted pupil, and discoloured iris, with exudation of lymph on its surface and into the anterior chambers. One-tenth of a grain of bichloride of mercury was injected, and solution of atropine was dropped into the eye. This treatment was repeated on the 12th and 14th. The discoloration of the iris was now much less; the lymph had been absorbed from the anterior chamber, and the pain was entirely relieved. The injection is only noted again on the 21st; and the patient ceased to attend, resuming his work.

In this case, I think it probable that the injection, which was prescribed every other day, was used more frequently than is noted; but the improvement after the third injection was so decided, that the patient possibly ceased to attend regularly.

CASE VII.—A male, aged 26, a labourer, was first seen on November 14th. Two months previously, the primary sore, which had now healed, appeared on the under surface of the penis; this was followed, at the end of a month, by constitutional symptoms. The present symptoms were: condylomata on the perinæum and around the anus; a scaly papular rash over the head and scrotum; psoriasis plantaris; and condylomata between the toes. He was ordered a sulphate of copper lotion (five grains to the ounce) for the condylomata, and the injection, every third day, of one-tenth of a grain of the bichloride of mercury. On November 30th, under this treatment, the patient was improving; and the sixth injection was made. On December 18th, the fourteenth injection was made. The patient did not attend after this day; but applied for his discharge, as cured, on the 16th of January, 1869.

CASE VIII.—A male, aged 20, a sawyer, was first seen on October 27th, 1868. Six weeks previously, a week after coitus, a chancre appeared on the margin of the prepuce, speedily followed by suppurating bubo in the left groin, and, two weeks from its first appearance, by an eruption. When seen, he had a chancre of the size of a fourpenny piece, with a hardened base of the size of a hazel-nut, on the prepuce; the glans and prepuce were inflamed and desquamating; there was ulceration round the corona glandis. He had a small bubo containing fluid in the left groin, and syphilitic lepra thickly spread over the whole body. The supracondyloid and other lymphatic glands were hardened and infiltrated. He was ordered to apply black wash to the sores, and to have a hypodermic injection of one-tenth of a grain of bichloride of

mercury every third day. On November 11th, it is noticed that, during the fifteen days that the treatment had been pursued, the patient had greatly improved. The chancre had healed, and the hardened base almost entirely disappeared; the eruption had lost its scaly character, and the maculae were fading. The fluid in the bubo had been absorbed; and the swelling was almost entirely gone. A sixth injection was made this day. This patient, being very anxious, continued to come up at intervals up to March 16th, 1869. He was rarely seen by me; but my assistant, Mr. Noble, continued to inject the bichloride under the skin, until all the stains left by the eruption had disappeared. The intervals between the injections were long, and, at first, there was an evident aggravation of the symptoms when the injection was omitted. The operation was repeated thirty-two times; that is, three and one-fifth grains of the drug were administered.

CASE IX.—A female, aged 19, a servant out of place, was first seen November 14th, 1868. She stated, that primary sores appeared four months previously, four days after coitus, and that constitutional symptoms had existed three months. She was pallid, emaciated, and cachectic. There were several large chancres in the pudenda, with oedema of the labia; infiltration and hardening of all the lymphatic glands. She had patches of lepra, with an unusually deep copper coloured raised base, over the whole body, and ulceration of the fauces. She was ordered lotio nigra and hypodermic injection of the bichloride every third day; and was taken into the Infirmary. The patient began to improve rapidly under the above treatment. On January 8th, 1869, she had gained flesh, had a colour, and ate well. The rash had almost faded, and all the other symptoms were relieved. The eighteenth injection was made. On February 13th, the twenty-second injection was made. The injections were then discontinued for a week, to observe whether the symptoms continued to decrease equally without them. They were resumed on February 20th, as there was still a little rash which did not fade, about the inner side of the knees and thighs; and there were condylomata on the inner side of the lower lip. She was ordered to leave the hospital. The patient did not attend frequently enough to have the injection regularly; and the dose was administered only four times from February 13th to March 6th. On the last named day, she looked fat and well; the whole of the leprous patches had disappeared, except one on the inner side of the knee; and the condylomata within the lips were better; there were two or three flattened discharging papules near the anus, and a small ulcer round the meatus urinarius. On March 20th, while improvement went on in all other respects, there was no change in the lepra on the inside of the knee. The thirtieth injection was, therefore, made to-day, in the immediate neighbourhood of this spot. On the 27th, the patch of lepra had almost disappeared since the last injection. The patient was dyspeptic, with confined bowels. She was ordered to take a stomachic mixture and aloetic pills. The injection was repeated. On April 5th, she was almost well, but had slight sponginess of the gums. The injection was again used. On the 10th, the lepra had absolutely disappeared; but the left eye was inflamed. There was slight pytalism; the injection was not, therefore, repeated; and alum was ordered for the mouth. On the 17th, the patient was re-admitted, with iritis; and, on May 11th, she was re-admitted, with a recurrence of the iritis in a severe form. The mouth being quite well, the hypodermic injection was renewed. On June 5th, the thirty-seventh injection was administered; and, the eye being quite well, the patient again left the hospital. Another injection was administered on the 12th. On the 19th, the patient appeared quite well; but was ordered to continue the use of atropine to the eyes.

CASE X.—A female, aged 28, a labourer's wife, hale and thin, was first seen December 1st, 1868. Six weeks previously, she first noticed sores on the labia. She had now a soft chancre at the fourchette, and syphilitic lepra over the whole body. She was ordered to apply black wash to the chancre, and to have one-tenth of a grain of bichloride of mercury injected every third day. On the 14th, the patient complained so much of the pain caused by the treatment by injection, that it was desisted from; and she was ordered to rub in mercurial ointment twice a day, and to use alum for the mouth. On the 22nd, there was a callus of inflammatory exudation beneath each clavicle where the injection was made, and a fluctuating swelling in front of the right arm, at the seat of the third injection. The lepra was almost well. The ointment was rubbed in twice a day, from December 4th to January 26th, 1869; there was no pytalism; all the syphilitic symptoms had disappeared; but the patient, though better in health, had not quite regained her strength. The patient has remained under treatment for anæmia and dyspepsia, up to the present time, but without any indication of syphilis.

CASE XI.—A male, aged 22, a carpenter, of robust frame, was first

seen December 25th, 1868. He would give no clear history of the origin of his malady; stating that it was four months since his last coitus, and only a month since the first appearance of the sore. He had a flattened ulcer surrounding the meatus; the frænum was eaten away, and there was a sore below the corona on each side of the penis. The lymphatic glands at the right side were enlarged. There were lepra and impetigo, of characteristic appearance, about the thighs and abdomen; the eruption having appeared within a few days. He was ordered black wash for the sores, and the hypodermic injection of the usual dose of bichloride every third day. The treatment was continued for exactly a month; in which period, one grain of the salt was administered in ten injections. All traces of syphilis disappeared, and the symptoms have not recurred.

CASE XII.—A male, aged 16, an errand boy, was first seen December 15th, 1868. A sore appeared three weeks previously, one week after the last coitus. There was a chancre on a hardened base, which had quite destroyed the frænum, and extended both into the glans and prepuce. The lymphatic glands of each groin were infiltrated, and there were syphilitic maculae over the whole body. He was ordered lotio nigra and the hypodermic injection. On January 12th, 1869, the patient had attended very irregularly, only five doses having been administered in the past month. He was, however, improving; although the throat was now inflamed. On February 26th, the patient applied for his discharge, stating that he was well. The last injection (the ninth) was administered on February 4th.

CASE XIII.—The patient was a male, aged 24, a butcher, of robust frame. The notes of this case are so scanty, that no more can be done than to record that the case was a very obstinate one of chancres and secondary syphilis, which had been under treatment previously to my seeing it. The hypodermic use of the bichloride was desisted from, because it seemed doing but little good, and caused considerable pain. The case passed out of my hands while still unrelieved.

Of the thirteen cases, No. 3 may be dismissed from consideration, as giving no indication of the value of the remedy, since but one injection was administered; it illustrates, however, a possible objection to the practicability of applying this plan in every case.

In like manner, Nos. 10 and 13 are of little value; for, although in each case the hypodermic injection appeared to be doing good, the patients objected to its continuance; one, the female (10), solely on account of the pain; the other, the male (13), because he found that he was unable to continue his work when suffering the inconvenience caused by the injection, in addition to the pain caused by the severe local affection of the penis.

In the remaining cases, there was immediate improvement after one or two injections. In the first case, after three weeks of treatment and the injection of only seven-tenths of a grain of bichloride of mercury, the change in the condition of the patient was surprising; and, although, unfortunately, the patient was prevented, by her leaving the neighbourhood, from following up the treatment, when last seen, though not perhaps truly cured, she was in a very much better state of health.

In Case 11, those symptoms which were rather of the secondary type, were all relieved after six injections; and the tertiary symptoms yielded with unusual rapidity to the iodide of potassium when it was commenced. My further experience would lead me to the conclusion (which our knowledge of the action of mercury, administered in the ordinary way, would lead one to presuppose)—that, in tertiary syphilis, whether affecting the bones or the skin and cellular tissues, the hypodermic injection of the salts of mercury can in no degree take the place of the iodide of potassium.

In Cases IV and V, although neither patient attended so regularly as he ought to have done, the result was most satisfactory; both patients recovering under the use of a remarkably small quantity of the drug.

In Case VI, the very rapid and decided change in the appearance of the iris, after three doses of a tenth of a grain of the bichloride had been injected, was most remarkable; and, although the patient has since been lost sight of, I believe that there has been no relapse, or he would have again applied for relief.

Case VII was even more satisfactory in its results than IV and V.

Case VIII remained very long under treatment, and required three and one-fifth grains injected in thirty-two doses before the patient had lost every trace of syphilis; but improvement in all the symptoms followed the very commencement of the treatment, and it is probable that, had the patient attended regularly, the cure would have been completed much sooner.

Case IX was one of a severe character, and in it the treatment had been required for a lengthened period; but, in this case, as in all the

* The notes are not, I fear, accurate as to the number of doses administered but the whole quantity was certainly less than one grain.

others, improvement began as soon as the hypodermic injection was commenced; and it was the occurrence of iritis, when all the other symptoms of syphilis were disappearing, which necessitated the continuance of treatment. In this case, the gums were affected, and the first attack of iritis came on while the patient's mouth shewed the effects of mercury. This affection of the mouth I did not, however, regard as evidence that the system was more under the influence of mercury than the systems of those who did not show this symptom; but rather as an accidental complication, which occurred in consequence of the syphilitic affection of the mouth; and as soon as, under the use of alum, the gums had recovered, I resumed the hypodermic injection. It is noteworthy that, though this patient was undergoing mercurial treatment for so long a period, her general health, as well as the specific symptoms, continued uniformly to improve.

Case XI was treated with greater regularity than any of the others; and ten injections, administered regularly every third day, effected a cure.

In Case XII, although the patient attended very irregularly, a cure was effected with less than a grain of the bichloride, nine injections being made in the course of seven weeks.

As I stated at the commencement of this paper, the cases are not numerous enough for very positive conclusions; but certainly the result of the treatment in ten of these cases is sufficient to encourage a fair trial; and my further experience is at least as favourable to this plan, as that which I have here recorded. I have made no mention of cases which have come under my care since the commencement of the present year, reserving the records of these until sufficient time has elapsed to make the cases complete; and also trusting that the method will receive a fair trial in institutions which will furnish cases enough for accurate statistical deductions, and render further publication on my part unnecessary.

CASE OF BENDING OF THE RADIUS IN AN ADULT.

By ROBERT FARQUHARSON, M.D.,

Medical Officer to Rugby School; late Assistant-Surgeon Coldstream Guards.

ON the 15th of last October, I was watching a football match on Rugby School Close, when J. S., aged 18, asked me to look at his right arm, which had been injured during the game. On cursory inspection, I could detect nothing far wrong; and, considering his symptoms due to a severe bruise, merely recommended rest and fomentation. Next day, he again presented himself, stating his conviction that he had bent his forearm by the accident. Naturally rather incredulous, I made a careful examination, and found that he was quite right, and that a well marked distortion really existed. Both bones were affected in some degree; but the chief strain had been experienced by the radius, which described a considerable curve, with the convexity inwards. No feeling of crepitus could be detected, nor any trace of irregularity along the margin of the bone; and motion, although attended by slight pain, was altogether unaffected. The deformity readily yielded to firm manipulation over the knee; but, as it speedily returned on the withdrawal of the force, it was necessary to apply an anterior and posterior splint.

On October 20th, the splints were removed; but the bend of the radius, though decidedly less marked, could still be observed. Reduction, if I may so call it, being effected as before, the splints were re-adjusted. On October 26th, on uncovering the arm this morning, it was found to have entirely regained its normal shape; a slight degree of weakness and stiffness only remaining. Since that date, it has rapidly recovered strength, and has never given rise to uneasy sensations of any kind.

REMARKS.—Systematic writers on surgery insist on the great rarity of such an occurrence as the above after puberty, and even hint at its impossibility, save in connexion with degeneration of the osseous tissue. But, in my patient, no such predisposing cause could exist; for he was not only stout and well developed, but of special activity in those games which most severely test the frame. We must, therefore, look upon the case as one of an exceptional nature, in which rending of a perfectly sound bone took place, irrespective of fracture; and the record of such an event may save others from the error, into which I so nearly fell, of overlooking the true nature of the injury; for, although the consequences of such an omission might not be very serious, the resulting deformity, however slight, would sooner or later have proved an annoyance, and brought discredit on the medical art. It is, therefore, fortunate that the marked way in which my attention was drawn by the lad to the nature of his lesion prevented my being led astray by the recollection of our ordinary surgical principles.

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

MULTIPLE VESICAL CALCULI.

By WILLIAM NEWMAN, M.D. Lond., F.R.C.S. Eng., Stamford.

J. B., aged 75, just came to me in May 1867, complaining of pain in passing urine. This was of some months' standing. He also passed some blood at times. He was relieved by medical treatment; the use of any instrument he strongly opposed.

Nearly a year afterwards, he again came with the same symptoms, and was again a little relieved. In December 1868, he had actual retention of urine; and I then passed a catheter and struck some calculi. They were easily moved by an instrument. Occasional attacks of retention happened afterwards, until his death in May 1869, from exhaustion.

I made a *post mortem* examination of the bladder, and found a hundred and five separate small calculi. Most, if not all, had an uric acid nucleus, and an outer coating of phosphatic material. Their total weight was over three ounces. The bladder, contrary to my expectation, was only slightly altered from the healthy condition; its interior towards the base only was somewhat reddened. The prostate was markedly enlarged.

OBSTINATE GASTRIC IRRITABILITY, TREATED BY HYPODERMIC INJECTIONS.

By JOHN HARRISON, Esq., Congleton.

JAMES MITCHEL, aged 19, suffered during three years from severe attacks of vomiting, which were induced by all kinds of solid food, and by all liquids. Pure water was not always rejected. Sometimes, and sometimes only, a few spoonfuls of beef-tea, milk, or mutton-broth, would not cause sickness. He was obliged to leave the table several times during each meal, and lost many dinners daily in his attempts to retain one. Excessive weakness, depression of spirits, and, pallor were the obvious results of this disease. He was treated by me, and by various other medical men, during his illness, without any benefit, and was for six weeks an in-patient of a large hospital, where great care was bestowed upon his diet and treatment, without avail. He was fed entirely upon milk, and milk with lime-water; a teaspoonful only was given each half-hour; but he did not improve.

The patient came under my notice again in June 1868. I had just then successfully treated a most obstinate case of vomiting consequent on pregnancy, by the hypodermic method, (*Vide* BRITISH MEDICAL JOURNAL, August 23rd, 1868) and resolved to try the same plan with this patient. At first, one-fifth of a grain of morphia was injected; afterwards, the dose was gradually increased to one grain. At the end of a fortnight the strength of the injection was gradually diminished, and was finally discontinued in six weeks from the date of the first injection. During the period of treatment, the patient steadily improved in every respect, the vomiting ceased, he gained flesh, and was soon able to work hard as a farm-labourer. Once or twice during the past year, nausea and slight sickness have been felt by him, but ordinary remedies have easily removed these threatening symptoms.

CASE OF HERPES CORNEA WITH HERPES ZOSTER, SUCCESSFULLY TREATED WITH ARSENIC.

By C. CURRIE RITCHIE, M.B., Manchester.

HENRY F., aged 9, was brought to me on April 7th, 1869, on account of a "breaking out" on his skin, which was said to have appeared about three weeks previously, after scarlet fever. He was small for his age, and somewhat strumous in appearance; he presented a well-marked example of herpes zoster, the eruption being rather plentifully diffused over the side of the nose, cheek, chin, neck, and trunk on the left side. I observed that he was also suffering from phlyctenular kerato-conjunctivitis of the same side, the vesicles surrounding the lower part of the cornea like a row of pearls: there was but little injection or haziness of the cornea. On inquiry, I found that the boy had complained of his eye being painful and "watering" about a fortnight before, but little attention had been paid to it. I prescribed two-drop doses of liquor arsenicalis with quinine and iron, three times a day, after regulating the

bowels, and ordered generous diet, with plenty of open-air exercise; the eye to be bathed occasionally with a weak alum collyrium. Under this mode of treatment, the cutaneous eruption rapidly disappeared, and simultaneously the eye got well, no trace of phlyctenulæ remaining at the end of three weeks. I saw the patient lately, and there has hitherto been no relapse.

This case seems to me to support the theory of Stellwag von Carion, as to the origin of phlyctenular ophthalmia, which he considers a herpetic eruption of the cornea and conjunctiva; in fact, a neurosis of the ciliary nerves. It also confirms the observations of Mr. Oglesby, of Leeds, as embodied in his interesting paper in the current number of the *Practitioner*.

HISTORICAL NOTES.

THE PLAGUE AMONGST THE ENGLISH TROOPS AT HAVRE.

DURING the early part of 1563, Havre was occupied by English troops under Lord Warwick. It was under siege; and the troops, seven thousand strong, were closely packed. On the 7th of June, Warwick reported to Cecil that a strange disease had broken out, and that nine men had suddenly died. By the 27th, the men were dying at the rate of sixty a day. "Those who fell ill rarely recovered." On the 29th, five hundred had died. The disease principally attacked the common soldiers; the officers for the most part escaped. The physicians died. The troops were not only crowded, but subjected to much privation; they could not obtain fresh water, and were restricted to wine and cider for drink; they had neither fresh vegetables nor fresh meat.

When June ended, Lord Warwick, out of his seven thousand men, had but three thousand fit for duty. The bodies were unburied, and lay floating in the harbour. Fresh troops in plenty were sent over, and the men rapidly fell victims to the disease.

On the 11th of July, but 1,500 men were left; and Warwick reported that in ten days more, at the present death-rate, he should have but three hundred alive. On the 29th of July, Warwick, by special permission of Queen Elizabeth, surrendered Havre to the French. Lord Clinton, the Admiral of the English fleet, afterwards informed the French messenger (sent by the Queen mother) that the plague of deadly infection had done for them that which all the force of France could never have done.

The English troops which remained alive were permitted to return with their arms and baggage at leisure. When they landed in England, Elizabeth issued a proclamation, exhorting all people to receive them with honour. "She would have it known and understood that there wanted no truth, courage, nor manhood, in any of them, from the highest to the lowest." "They would have withstood the French to the utmost of their lives; but it was thought the part of Christian wisdom not to tempt the Almighty to contend with the inevitable mortal enemy of the plague." (Proclamation, August 1st, 1563.)

The soldiers returning to their homes spread the infection through England, and town and village suffered.

"The eruption on the skin, which was usual with the plague, does not seem to have attended this visitation of it. The first symptom was violent fever, burning heat, alternating with fits of shivering. The mouth then became dry; the tongue parched; with a pricking sensation in the breast and loins. Headache followed, and languor, with a desire to sleep; and, after sleep, came generally death; 'for the heart did draw the poison, and the poison of its own malice did pierce the heart.' When a man felt himself infected, 'he did first commend himself to the highest physician, and craved mercy of him.' Where he felt pain, he was bled; and he then drank the 'aqua contra pestem'—the plague-water; buried himself in his bed; and, if possible, perspired. To allay his thirst, he was allowed sorrel-water and verjuice, with slices of oranges and lemons. Light food—rabbit, chicken or other bird—was taken after, and in small quantities. To prevent the spread of contagion, the houses and streets and staircases were studiously cleaned; the windows were set wide open, and hung with fresh green boughs of oak or willow; the floors were strewn with sorrel, lettuce, roses, and oak-leaves, and freely and frequently sprinkled with spring-water, or else with vinegar and rose-water. From cellar to garret, six hours a day, the houses were fumigated with sandal-wood and musk, aloes, amber, and cinnamon. In the poorest cottages, there were fires of rosemary and bay. Yet no remedy availed. In July, the deaths in London had been two hundred a week; through the following month, they rose quickly to seven hundred, eight hundred, a thousand—in the last week of the month, to two thousand; and at that rate, with scarcely a dimi-

nution, the people continued to die till the November rains washed the sewers and kennels clean, and the fury of the disorder was spent.

"The bishops, attributing the calamity to supernatural causes, and seeing the cause of the provocation of the Almighty in the objects which excited their own displeasure, laid the blame upon the theatres, and petitioned the Government to inhibit plays and amusements. Sir William Cecil, not charging Providence till man had done his part, found the occasion rather in the dense crowding of the lodging-houses, 'by reason that the owners and tenants, for greediness and lucre, did take unto them other inhabitants and families to dwell in their chambers'; he therefore ordered that 'every house or shop should have but one master and one family', and that aliens and strangers should remove."*

MUSEUM NOTES.

MUSEUM OF THE VETERINARY COLLEGE.

THE Museum of the Royal Veterinary College (Camden Town) will well repay a leisure hour's inspection. It is suitably arranged in a commodious, well-lighted building; and there is a complete catalogue in manuscript. The catalogue is everything that could be wished as an index, but the descriptions of the specimens are, it must be admitted, too brief in most instances, whilst in some little more than the name of the specimen is given. We had the advantage, during part of our inspection of it, of Professor Spooner's explanations, and subsequently of those of the able curator, Mr. Axe. Amongst the most valuable of the contents are a series of wax-casts by Tuson, showing the various phenomena of cattle-plague. These were exhibited some years ago at the Pathological Society, and are described in its *Transactions*.

Specimens of Foot-and-Mouth Exanthem.—Of special interest at the present juncture are a series of specimens of the more frequent conditions observed in connection with the foot-and-mouth exanthem. These are possibly the only ones to be found in London. No. 1202 is the tongue of an ox, showing the ulcers left after the sloughs have separated. There can be no question that in this instance the sores were caused by the formation of true sloughs. Irregular ulcers have been left, the edges of which are as abrupt as if punched out, and at least an eighth of an inch in depth. Another specimen, placed near it (not numbered), shows the disease in an earlier stage, the sloughs being black, or nearly so, with definite edges, and clearly in process of separation. No. 1204 shows numerous superficial abruptly margined abrasions. In this instance the epithelium and papillæ have alone been destroyed, with the exception that, in the middle of one patch, the process has gone deeper, and the muscular substance is exposed. The patches are as large as florins. It certainly is not usual in any disease of the human mouth to see patches just like the deeper ones here exhibited in respect to depth and abruptness of margin. Specimens 1337, 1338, 1345, and 1336, show the feet of different animals in the later stages of the disease. In several, the hoof is exfoliating. There is no specimen in the Museum showing the state of the viscera in fatal cases, nor any illustrating the occurrence of ulcers in the œsophagus or trachea, positions in which, we believe, they are not very infrequent.

The College of Surgeons ought to take advantage of the present epidemic to secure a good set of specimens of the lesions met with in this malady. Hunter did not think it beneath his dignity to preserve specimens of glanders from the horse.

Secondary Trephining of the Skull in a Pony.—The following case, which we extract *verbatim* from the catalogue, is interesting on account of its close resemblance to many human ones. It would appear that secondary trephining after injuries to the head is not more successful in the lower animals than it is in man. "No. 602. Fracture of the right parietal bone of a pony. The animal was brought to R. V. C. soon after the accident, and for some time appeared to be progressing favourably, but coma supervened. The trephine was then used, and a piece of bone removed. The coma passed off, but was followed by pleuritis and death." It is a pity that more details as to symptoms and autopsy are not given; but the case reads remarkably like many others given in hospital reports. Probably the inflammation involved the whole thickness of the dura mater, and spread to the arachnoid cavity. Such is usually the case in man; and, since the date of Pott's successful cases, extremely few patients have been saved by trephining after head-symptoms had set in. We recorded an interesting example of the usual course of such from the Bristol Museum, under the title "A Skull and a Book", in September last.

* The above is condensed from Froude's *History*.

DETACHMENT OF LOWER EPIPHYSIS OF FEMUR.

The Leeds Museum.

THE Leeds Museum contains two valuable specimens of separation of the lower epiphysis of the femur. The first of these, No. 1067, was removed by primary amputation by Mr. S. Hey from a child aged 6. The separation was complete; the soft parts were severely lacerated, and the upper fragment protruded three inches. The child recovered. The second one is of great interest (No. 1099). A lad, aged 15, was admitted under Mr. Wheelhouse, having had his leg crushed in a colliery accident. Gangrene followed, and secondary amputation was performed on the forty-third day. The lad died of pyæmia nine days later. The specimen shows the lower end of the shaft displaced backwards into the popliteal space, stretching the vessels and nerves on its edge. This condition of things is well shown in the appended woodcuts.

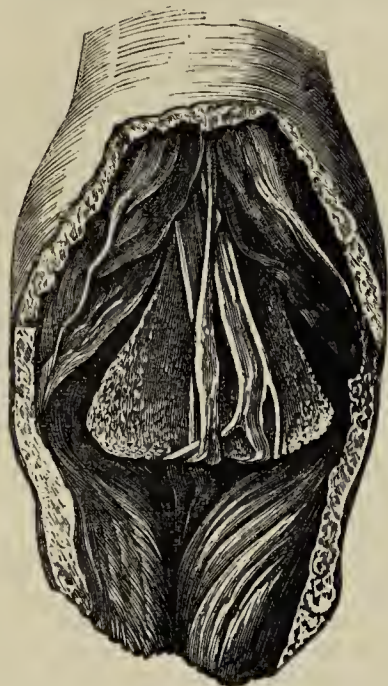


Fig. 1. — Back view, showing the vessels and nerves in the edge of the lower end of shaft.

The cause of the gangrene is apparent. It is to be observed that the condyles of the femur look forward, the epiphysis being in the position of flexion. This is probably due in part to the gastrocnemius

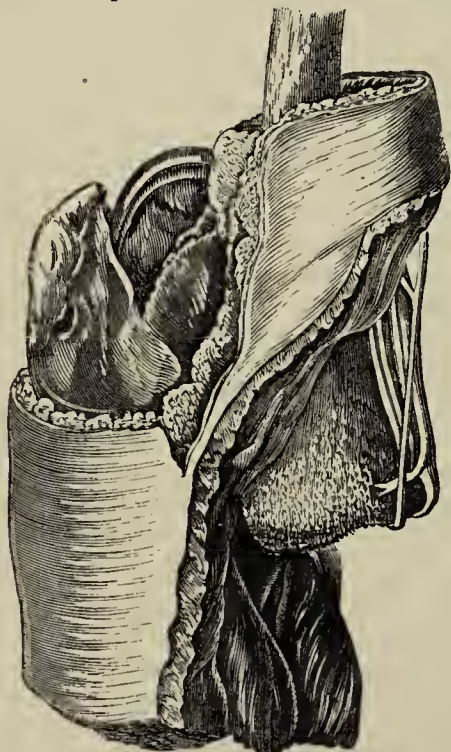


Fig. 2. — Side view of the same.

muscle, and in part to the pressure of the end of the shaft on the soft structures. The reader may profitably note that the lower end of the shaft is wholly denuded of periosteum. This result is almost constant

in separations of epiphyses. The periosteal investment does not tear through at the epiphysal line; but, being here very thick and strong, it is stripped up from the bone, and forms a sort of sleeve, which always remains attached to the epiphysis itself. Hence the result, that the muscles attached near to it all go with the epiphysis, and hence, also, much danger of abscess, and even of exfoliation, of the denuded end of the shaft. These remarks are well illustrated by a specimen of detached upper epiphysis of humerus in the Musée Dupuytren in Paris, and less definitely by several others in English museums.

As a dissected illustration of the pressure of the lower end of the shaft in the vessels and nerves, Mr. Wheelhouse's specimen is probably unique. There are several others showing detachment of this epiphysis in London museums.

NOTES ON BOOKS.

On Polypus in the Nose and Ozæna: their Successful Treatment by New Methods. By J. L. W. THUDICHUM, M.D., etc., Lecturer on Pathological Chemistry to St. Thomas's Hospital. London: 1869. DR. Thudichum has published a pamphlet on the surgical and topical treatment of diseases within the nose, which shows that considerable thought, skill, and patience may be expended in perfecting this branch of practice. The author's nasal douche is well known; and in this publication he also calls special attention to a method of removing nasal polypi by means of a wire loop heated to whiteness by the electric cautery. The operation is stated to be comparatively painless and bloodless, while it is certainly precise, and under perfect control. Dr. Thudichum uses, for illumination, a "spirit-oxygen-lime light". The appliances for the light, the cautery, and the douche, are all bulky, and, we imagine, expensive. Dr. Thudichum's records of some cases in which he successfully removed numerous polypi are deficient in only one important point—the condition of the patients some months afterwards. In only one case do we find any record so long as four months after the operation. The substance of this pamphlet has already, we believe, appeared in various numbers of the *Lancet*.

On the Measurement of the Movements of the Chest. Thesis for the M.D. Degree (University of Cambridge). By ARTHUR RANSOME, M.B., M.A.—Dr. Ransome describes an instrument which, with much ingenuity, he has devised for measuring, not merely the general motion of the chest-walls, but the movements forward, upward, and outward. The following are some of the results at which he has as yet arrived. The following are some of the results at which he has as yet arrived, with regard to the chest-movements in health. 1. In ordinary breathing in adults, the extent of movement of the ribs is extremely small, and is very irregular in extent even in the same person, especially if he be attired in the ordinary dress. 2. At the different ages, the degree and kind of movement vary greatly. 3. In individuals of the same age, without any real differences in the capacity of the chest, there is often a very different extent of movement of the chest-wall. 4. In forcible breathing, the forward movement is most equable throughout the whole act of respiration, but is generally most rapid at the close of the inspiration. 5. In women and children, the upward movement starts at the same time, and keeps pace with the forward motion. In men, the upward movement takes place chiefly at the latter portion of the respiratory act. 6. The outward movement on the chest appears to be very small. 7. In some persons, the act of sighing does not consist in a general expansion of the chest, as in the simple raising of the whole bony cage. 8. In some full-chested men, the earliest periods of the expansive act are accomplished by the lower ribs, which seem to swing from above; and thus the final act of breathing consists of the expansion forwards of the upper ribs and the raising of the whole bony cage. In phthisis, the indications of diminished motion in all directions are generally very marked on the affected side, but the forward motion is generally more affected than the upward and outward. In emphysema, especially if complicated with asthma, the general movement of the chest-walls is very much diminished. Tables of observations are appended. The author intimates that he contemplates further improvements in the instrument, and more extensive observations; so that we may hope for more interesting information from him as to the movements of the chest both in health and in disease.

Health and Meteorology of Newcastle and Gateshead, for Months of June, July, and August, 1869. By G. H. PHILIPSON, M.A., M.D.—The health of Newcastle during the past summer contrasts favourably with its condition in the same season of 1868, showing a diminution not only in the death-rate (of 3 per 1000), but in the total number of cases of disease (in public practice). There have been only a few cases of typhus and measles, but over one hundred of scarlatina; the death-rate of the last disease was not quite five per cent.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, DECEMBER 4TH, 1869.

PREVENTION OF SCARLET FEVER.

THE present epidemic of scarlet fever in the metropolis and its neighbourhood has naturally drawn considerable attention to the best means of preventing its spread. From the Health Department of the Privy Council, and from various other official sources, documents have been issued, supplying instructions as to the use of disinfectants, and in reference to other methods of preventing contagion. From private authors, also, numerous pamphlets, many of them intended for popular use, have emanated. Indeed, the development of this department of preventive medicine is one of the most noteworthy tendencies of modern physicians. As regards most of the diseases against which it is directed—typhus fever, relapsing fever, and the like—there can be no doubt that it is perfectly sound; and their limitation by isolation and disinfection is far the most important means of reducing the mortality from them. They spread by contagion; and they are neither so virulently contagious, nor so wide-spread, that their restraint is beyond hope. It is quite possible, however, to entertain some doubt as to whether scarlet fever comes into the same list. For the solution of this question, data are required of a kind hitherto but imperfectly furnished. We want to know, for instance, whether any large portion of the community go through life without having suffered from the disease, and whether there is any differing ratio of danger at different ages. We want also to be informed whether adults are really less liable to its contagion than children. If it were settled that the reason why adults take the infection but rarely is, that almost all have had the disease, and are no longer susceptible, a great motive for the attempt to restrain contagion would be taken away. We should then have to discuss whether it is likely that this state of things can be materially altered in the future; that is, whether, by modern methods, anything like “stamping out” of the scarlet fever virus can be accomplished. If such a result be hopeless, then we shall clearly gain very little by enforcing such precautions in respect to children as will prevent many of them from taking the disease in early life, and leave them almost certain to suffer from it at a later period. It is obvious to remark that the increasing density of our population, and increasing habits of free intercourse, personal or otherwise, the use of public vehicles, etc., make the task of stamping out such a virus as that of scarlet fever more and more difficult every year. Whether, in the face of so much important and practicable work before us, it is wise to enter upon a crusade in this direction, is, possibly, open to question. At any rate, we may venture to attract professional attention to the matter; and, in the hope of helping its solution, will endeavour to state its main points.

The main argument of those who think that, practically, all members of the community go through this specific fever at some period of life, is supplied by the fact that adults, although clearly liable, as a rule bear exposure without much risk. This immunity is, it is asserted, not the result of increased age, but has been acquired by a previous attack. There is much plausibility in this belief. When adults do take it, they go through precisely the same stages as children; the disease presents no special differences in them; and no facts whatever can be produced favouring the opinion that mere age confers immunity. It is improbable that it should confer absolute immunity on some, and none at all

on others. The other exanthemata affect all ages, with exceptions which may be met by precisely the same argument we adduce in scarlet fever. Now-a-days, opportunities but seldom occur for watching the effects of a specific virus after its introduction into a virgin community; but we believe that hitherto, when such have happened, all ages have been found to suffer. If we may take an example from the lower animals, it is interesting to remark that the foot-and-mouth exanthem spares no age, but goes through the whole herd—grandfather, father, and child—often without allowing a single individual to escape.

It would not be fair to ask for categorical proof, in each individual who seems to be in a state of immunity, that he or she had formerly suffered from the exanthem; because there is such a malady as “latent scarlet fever”. This name—well recognised, we believe, by physicians of the present day—is applied to those cases in which no ostensible symptoms are present. Are these cases very common? or are they only exceptional? This question might soon be settled by careful observation in family practice. Is it not very common for a few children in a family to suffer, and one or two, who certainly have never had the disease before, and who have been exposed to risk of contagion, to escape, so far as ostensible symptoms are concerned? Is it not also common for other cases to occur under like circumstances, in which the escape is not so apparently absolute; but, whilst rash and so forth are still absent, the occurrence of slight indisposition, or, it may be, of unmistakable sequelæ, make it certain that the fever has happened. The use of the thermometer may be expected, in the future, to help us much in the recognition of those cases, and add certainty to our opinions. In the meantime, there can be no doubt whatever that *scarlatina simplex* is far from being the simplest and mildest form which the disease takes; and we are not in the least justified in insisting that a rash is necessary to constitute the malady. The frequency of these rashless cases is a point upon the determination of which several other questions hinge; and it would probably much modify our impressions as to the danger attending the disease.

As regards general impressions on the subject, they appear to support the belief that all, or almost all, persons go through the disease. Sir Thomas Watson, in the third edition of his *Lectures*, wrote: “The contagion of scarlet fever is active and widely diffused. Few children escape its agency. It follows, that scarlet fever is rare in adult life.” Amongst mothers there has been, until quite lately, a belief that scarlatina is one of the “children’s diseases”, which “it is better to have over”; and it is only since they have been taught that “scarlatina” is really the same thing as scarlet fever, that they have come to feel much dread of it.

In reference to the relative amount of risk attending this exanthem at different ages, attention may be directed to its great fatality in pregnant or parturient women. Some authors appear to think that all such die if attacked by it. It would, at first glance, appear to be a very doubtful kindness to enable a woman to grow up and assume the all-important responsibilities of wife and mother, exposed to such a terrible risk. Married women who have families are extremely likely, at some time or other, to have scarlet fever in their households, and, it may be, several times; and the probability that they may thus be exposed to contagion, when in a condition almost certain to cause a fatal result, is by no means small. As a practical suggestion, we may, at any rate, hint that a medical man would do very unwisely to marry a wife who had not already passed through this disease. The value of life undoubtedly increases with years up to a certain period, and that of a child is not in the least to be compared with that of a mother. Then we press the matter further, and say that children can, as a rule, be much more easily and less expensively treated than adults. The inducement to run risk by too early exposure is far less in them than in adults; and facilities for the use of inunctions, baths, etc., during the desquamating stage, are far greater. Viewed from this point, we might almost look

upon an attack in childhood with a degree of the same favour that we bestow on vaccination, as fitting the patient for the risks of after life.

It is by no means our wish in the present article to advocate any opinion. We merely desire to bring the opposite view of the question under the notice of those who so strongly advocate prevention, and shall be glad to record in our pages any facts (not opinions) with which they may supply us. Even if it should in the end be thought that, as regards the main intent, attempts at prevention are wasted labour, yet great indirect good will have accrued, if we have gained clearer knowledge as to the power of disinfectants, and notably of carbolic acid, in destroying the germs of a specific disease. Many of the measures advocated by Dr. William Budd and others are also equally useful as means of treatment, and as preventive of contagion—such, for instance, as baths, inunctions, etc.

The occasional severity of scarlet fever, and the entire uncertainty as to when it will be severe and when mild, are facts which naturally make us all very loth to acquiesce in anything approaching to its voluntary production. It is, however, the function of our profession to examine such questions fairly, and to form opinions based on facts, and not on sentiment. Under many conditions—in the case of schools, etc.—whatever that opinion may be, the rule of conduct must remain the same, and the utmost efforts to prevent the spread of scarlet fever will always be employed.

PEDICULARIA.

THE importance of our topic must excuse its loathsomeness. The discovery of the real connection between pediculi and the numerous skin-diseases which attend them—the knowledge that this connection is a direct and definite one—we rank amongst the most valuable of recent clinical gains. It enables us to cure almost off hand a large number of patients formerly incurable, and to cure them of maladies which, although nowise fatal, were sufficient to embitter life. The discovery to which we allude has been one of a kind not uncommon, in which the long recognised cause of certain rare and severe maladies is found to be the cause also of other much commoner and much milder ones. We are constantly guilty of the error of restricting our names of diseases to exaggerated examples only, much as if a botanist should refuse to call an oak by its name, unless it were big enough to stand under. Thus some physicians long asserted “consumption” to be incurable, refusing to recognise by that name any but cases in which disorganisation was far advanced. The same is still the case with “pyæmia,” from minor degrees of which, unnamed as such, recoveries are probably very common. We use PEDICULARIA as the best name for all forms of skin-disease which are due, from beginning to end, to the presence of lice. The older writers knew well enough that lice sometimes caused terrible irritation; they even believed that they sometimes caused death; and to the states in which they were thus prevalent they gave the name “phtliriasis.” What they did not know, and what we do now know, is that, in addition to the terrible maladies occasionally met with in exceptionally dirty persons, there are multitudes of milder ones occurring in all classes, which are in relation with precisely the same cause, and can be cured only by its removal. Foremost among the maladies which we now associate with this cause are almost all examples of what used to be known as “prurigo senilis”, some examples of “urticaria”, and most of the cases of “porrigo”, on the heads of young persons. We have learnt also that “prurigo senilis” is by no means restricted to the old, but may occur with precisely the same general features at any age, infancy alone excepted. We have learnt, also, that lice are by no means limited to the poor and dirty; but that they gain access not unfrequently to persons of all classes, and of the most cleanly habits. There are few medical men, ministers, school-teachers, or benevolent ladies, who do not run risks in this direction. We have learnt, also, what certainly we should not have expected, that these patients are able to give us little or no help in the diagnosis, and that lice may be present in abundance,

and their host never suspect the fact. This remark again applies to all classes, to the most intelligent and observant as well as others; and it is a most important point to keep in mind. We have further learnt that the amount of irritation produced varies exceedingly in different persons, being in many scarcely anything, and in others intolerable. Amongst the children of the poor in London, a large proportion have lice on the head, but only a small number present the “porrigo”, which they induce. So also in adults and aged persons; many have lice and complain of no irritation.

Twenty years ago, there were but few surgeons in England who were familiar with the facts which we have mentioned. The treatment of lice on the head or body was, it is true, well understood by some, and white precipitate and trooper’s ointment were every now and then prescribed for their destruction. Sidney Smith has left us a ludicrous reference to the supposed antipathy which pediculi bear to the small tooth-comb. “Finger and thumb, precipitate powder, or anything else you please; but for heaven’s sake no small tooth-combs!” But although measures of these kinds were occasionally resorted to, no one, we repeat, knew the extent to which the cause referred to prevails; and, above all, few or none knew that the common and distressing cases of “prurigo senilis” were almost all in such connection. Poor old men and women, in wretched plight, came week after week to our hospitals—aye, and to our special hospitals—and had their sufferings commiserated, but not relieved, internal treatment being prescribed for a supposed neurosis, instead of the attack being made externally on the real cause. It was a parody on Mr. Pickwick’s blunder as to the old inscription. Physicians talked learnedly about the “hyperæsthesia of old age,” when they ought to have used more vulgar phrases. Such was, we believe, the state of opinion, and such we fear it is still in many quarters. If we ask to whom are we indebted for the advance in knowledge for the fact that we have come to entertain wider and juster suspicions, the answer is, we believe, easy. In Vienna, Professor Hebra had long taught the new doctrine, and had enforced it, in his vigorous way, by assuring his pupils that in these forms of prurigo they must try to cure not so much the patient as the patient’s clothes. In Austria, the disease is common, and much more severe than with us; and, for anything we know to the contrary, the knowledge respecting it may have long been widely spread. It was, however, from Hebra’s *clinique* that the doctrine spread, and in due course it was illustrated in his atlas by some excellent plates. Meanwhile, the subject was investigated independently in this country by Mr. Balmanno Squire, and with great success. Mr. Squire worked with great assiduity, and expressed his conclusions with much clearness. He courageously exhibited at the Pathological Society a specimen of the *corpus delicti*, and hinted, not very vaguely, and probably with perfect truth, that but few of the members of that learned body knew pediculi when they saw them. He subsequently (1864) also showed a photograph illustrating the usual form of rash. In Paris, also, the subject had been taken up; and M. Hardy had taught definitely. Thus the doctrine spread until it assumed the form in which we have endeavoured to express it, and became very widely, though still insufficiently, known.

For simplicity’s sake, and to avoid confusion, it seems now desirable that we should have some one word which would imply a knowledge of the cause, and which should be applicable to all forms of the malady; which should bear, indeed, the same relation to lice as the “scabies” does to acari; which should include all forms of eruption which have been traced definitely to this cause. The term “PEDICULARIA” seems to do this fairly well, and we should have as subdivisions P. capitis, P. corporis, P. pubis, P. ciliaris, etc. In each the name would imply knowledge of cause and knowledge of means of cure. To continue the use of the name “prurigo senilis,” and give it a new definition, is manifestly inconvenient in reference to a disease common at all ages; whilst the denomination of “prurigo” alone is equally so, since it has also been appropriated to other maladies, and is, perhaps, applicable to any of which the main symptom is intolerable itching.

The belief that this simple and definite group of skin-diseases is not

as yet so widely recognised as it ought to be, and the wish to state explicitly our belief as to those with whom the merit of having investigated it belongs, have induced us to pen these remarks. We may add that, as soon as the wide prevalence of diseases of the pedicularia group is recognised, and the risk which the rich and cleanly run in respect to them is known, we hope to see measures taken which will lead to their great diminution. If every workhouse and hospital had its oven for baking clothes, and facilities were afforded for its ready and frequent use by the poor, we might hope to effect a great deal in this direction.

A FACULTY of Medicine has been officially instituted at Bueharest by the Roumanian Government.

THE Secretary of State for War has appointed Dr. William Stuart Visiting-surgeon for Woolwich under the Contagious Diseases Act; and Mr. Thomas C. Langdon Visiting-surgeon for Winchester.

M. RICCI, President of the Council of Health at Rome, has founded an infirmary for rachitic and scrofulous children in the Meneacci Palace at Porto d'Anzio, in the Roman States.

PROFESSOR CARL BRAUN and a Vienna midwife have gone to Rome, by request of the Empress of Austria, to attend her Majesty's sister, the ex-Queen of Naples, in her approaching confinement.

THE deaths registered in London last week were 1,676, which is 76 above the estimated number, but 183 less than were recorded in the previous week. The mortality from scarlet-fever was rather higher, the number of deaths being 219. The total number of deaths from zymotic diseases was 474, the corrected average being 360. There were 187 deaths from phthisis, 250 from bronchitis, and 119 from pneumonia, the average number of deaths from these diseases being 185, 207, and 122 respectively. One death from relapsing fever is noted. The mean temperature of the air was 41 deg., which is 0.1 deg. below the average of the last fifty years.

THE SCOTTISH HOSPITAL.

TUESDAY being St. Andrew's Day, the anniversary dinner of this admirable charity was held at the Freemasons' Tavern, Great Queen Street. His Royal Highness the Prince of Wales and Duke of Rothesay presided. About £2,500 was contributed—by far the largest subscription ever received at any anniversary of the Scottish Hospital.

DEATH OF DR. LOCKING.

DR. LOCKING, who was physician to the British Lying-in Hospital, died quite suddenly on the 20th ultimo. He had only been left by his wife a few moments before, apparently in good health. He had suffered for some time from heart-disease.

THE KING OF ITALY.

THE health of the King of Italy has improved so much that he was present a few days ago at the theatre, in Florence. We may note that he was treated for inflammation on the chest by the old-fashioned remedy of venesection.

HYDROPHOBIA.

LAST Saturday, a mad retriever bit a number of persons in Derby—thirty, it is said. It is stated that the dog ran on through Nottingham and Loughborough towards Leicester, and that several other persons and dogs were bitten by it on its way. A similar and yet more terrible occurrence is reported in the *Cologne Gazette*; a mad wolf having bitten a large number of persons, and killed several. In cases of hydrophobia in man, it is always easy to trace contagion. In dogs, however, it is by no means so easy; and hence the general but erroneous impression that it often originates spontaneously. In such frightful occurrences as those just mentioned, we can readily see how the disease may be conveyed to many animals, without any knowledge on the part of their owners that they have been bitten. We trust that most scrupulous care will be taken to find out the bitten dogs, and to have them either destroyed or kept in strict confinement.

RATHER HARD ON THE RAILWAY.

THREE hundred pounds damages have just been given to a railway passenger who, almost a year ago, hurt his leg by falling into a hole on a platform, two feet deep. He suffered after the accident from "inflammation of the skin of the shin-bone." He stepped into the hole at night, but the station was said to be lighted, and a porter who had helped him to alight, carried a lantern. Stepping into holes will become fashionable if three hundred pounds can be got so easily.

CATTLE-PLAGUE IN RUSSIA.

THE cattle-plague (Rinderpest) has broken out in St. Petersburg and in Eastern Russia. In the southern provinces, it has entirely disappeared—owing, it is said, to the system of inoculation which is largely practised. The foot-and-mouth disease is very prevalent.

THE HARTLEPOOL HOSPITAL.

AT the annual meeting of the subscribers to this institution, recently held, among several alterations in the rules, one was made to the effect that the medical officers should be legally recognised as managers; they had already virtually acted in that capacity. The name of the institution was changed to that of "The Hartlepool Hospital".

SECTION OF NERVES IN TETANUS.

ON the evening of November 25th, instead of amputating, Mr. Maun-der cut down upon and severed the ulnar, radial, and median nerves of the arm of a man who was the subject of tetanus following injury to the three inner fingers. On the next day, the symptoms were aggravated, and the disease appeared to be pursuing its usual course. The patient afterwards died.

A SURGEON'S ASSISTANT CHARGED WITH EMBEZZLEMENT.

A YOUNG MAN named William B. Carr, lately an assistant to Mr. Bland, surgeon, of Sandiacre, near Derby, has been taken into custody on a charge of embezzlement of large sums of money belonging to Mr. Bland. He was apprehended in London, where he had taken passage in a ship bound to Melbourne, having fitted himself out expensively, and having entered into an engagement to act as assistant-surgeon of the vessel during the voyage.

THE "SATURDAY REVIEW" ON THE PHYSICIAN'S VOICE.

"A GOOD VOICE, calm in tone, and musical in quality, is one of the essentials for a physician; the 'bedside-voice', which is nothing if it is not sympathetic by constitution: not false, not made up, not sickly, but tender in itself, of a rather low pitch, well modulated, and distinctly harmonious in its notes." And again: "There are certain men who do a good deal by a hearty, jovial, fox-hunting, kind of voice—a voice with a sort of undefined rollick and devil-may-care sound in it. That, too, is a good property for a medical man."

THE LINCOLN COUNTY HOSPITAL.

THE centenary festival of this hospital, which was founded in 1769, was celebrated on Thursday, November 25th. Divine service was celebrated in the cathedral in the morning; and an appropriate sermon was preached by the Lord Bishop of the Diocese, who represented the institution of hospitals and infirmaries as an effect of Christianity. A dinner, which was largely attended, afterwards took place in the County Assembly Rooms; Earl Brownlow, lord-lieutenant of the county, in the Chair. It was reported by the Treasurer that, in consequence of the centenary festival, £2,752 had been received—the hospital being thus relieved of a debt of £500; and that the annual subscriptions had been augmented to the extent of £110. It was noticed, also, that many of the descendants of the earliest subscribers to the hospital were among its present supporters. Mr. Snow, the senior surgeon, in returning thanks for the toast of the medical officers, said that he had been surgeon to the hospital more than fifty years, and that during that time there had been perfect harmony among the medical officers.

MEDICAL BENEVOLENT FUND.

AT the usual monthly meeting of the Committee, held on Tuesday, at 11, New Burlington Street—Dr. C. G. Jonson in the Chair—the sum of £113 was distributed in grants among sixteen cases; and, as the state of the annuity department warranted it, it was decided to hold another meeting on Tuesday next, for the election of additional annuitants. The Treasurer, Dr. Hare, gave notice that, at the annual meeting, he should move that for the future the Fund be called “The British Medical Benevolent Fund”.

CONVICTION UNDER THE CONTAGIOUS DISEASES ACT.

A LODGING-HOUSE KEEPER, in Charles Street, Drury Lane, has been charged, under the Contagious Diseases Act, with neglecting to give notice to the police that an inmate in the said lodging-house had been suffering from a contagious disease known as typhoid fever. Mr. Vaughan read the Act to the defendant, and told him that he was liable to a penalty of £20. Taking all the circumstances, however, into consideration on this occasion, he must pay a fine of 8s., or be imprisoned seven days.

PROPOSED IRISH MEDICAL JOURNAL.

THE prospectus of a new weekly journal, under the above title, has reached us. Its distinctive feature is to be nationality. The scope of the journal will be similar to our own, and will comprise all the usual departments; but the articles are to be written by Irish practitioners. It cannot excite surprise that the schools of Dublin, Belfast, Cork, and Galway are desirous of having a weekly journal connected directly with themselves; and we have no doubt that the Irish profession will easily supply plenty of material for it. Facilities for prompt publication undoubtedly act favourably, in encouraging systematic observation, and preventing the waste of thought; and, as the project will, we have no doubt, if carried out, be an advantage, not only to Ireland, but to medical science, we heartily wish it success. Its list of promised contributors already includes the names of many of the distinguished professors and lecturers in Dublin. We hope to welcome the first number early in January.

THE DRAINAGE OF LINCOLN.

MUCH local discussion is taking place as to the disposal of the drainage of the workhouse at Lincoln. At present, it appears, the sewage is conveyed to a ditch on a neighbouring common, which is much used as a playground by children. It is said, also, that the water-supply of the house is not as good as it ought to be. Typhoid fever has been prevalent in Lincoln, and many cases have occurred in the workhouse. Diarrhoea has also been prevalent in the workhouse, but has ceased on the closing of a well which was supposed to be contaminated. The Sanitary Act of 1866 has never, it is said, been enforced in Lincoln; but an attempt is apparently being made to bring its provisions into operation, and we trust that there will be sufficient good sense in the Lincoln people to relieve their city from the condition, in which it now apparently is, of being much behind the age in sanitary matters.

TREATMENT OF INFANTILE SYPHILIS BY SUBCUTANEOUS INJECTION OF MERCURY.

FOR the first time, clinical observations in the treatment of infantile syphilis by hypodermic injections were made a short time ago at the Ste. Anne Hospital for Sick Children in Vienna. Professor Widerhofer, the clinical director, desired his assistant, Dr. Monti, to subject some of the little patients to injection of bichloride of mercury; and this gentleman has done so in fourteen cases, which he has published in the *Jahrbuch für Kinderheilkunde*. The children were aged from one month to five years. The doses of bichloride injected varied from 1-32nd to 1-4th of a grain. Some of the children, who were brought as out-patients to the hospital, could not have the injection made every day. The children were cured, with three exceptions; the duration of the treatment varied from seven to fourteen days. The injections frequently caused, however, unpleasant complications; in seven cases, abscesses formed.

Relapses were also noticed. In one case, laryngitis existed, which disappeared in a remarkably short time under the treatment. Dr. Monti speaks favourably of the treatment, but would recommend small doses, say between 1-32nd and 1-24th of a grain.

THE MEDICAL CLUB.

THE second dinner of the members for this season was held on Wednesday last, under the presidency of Dr. Swettenham, Deputy Inspector-General of Hospitals (Army), who took the opportunity, in proposing success to the Club, of recommending it very warmly to medical officers in the army and navy, as a home and a place of reunion for them when from time to time they visit this country and metropolis, during their period of service.

A NEW POISON.

AT a recent meeting of the California Academy of Sciences, Dr. Stout presented some specimens of an unknown umbelliferous plant, popularly known as “wild parsnip”, which had been sent to him from Ruby Valley, Nevada, by Lieutenant Carpenter, of the United States Army. Three men had eaten some of the root; in about half an hour, they were seized with vomiting, followed soon by convulsions and unconsciousness. Two of them, who had eaten each a whole root, died at the end of about an hour and a half; the other, who had taken a small portion only, recovered. The symptoms are described by Lieutenant Carpenter as resembling, with the exception of loss of consciousness, those of strychnia-poisoning; the hands were clenched, the face distorted, and the head thrown back almost under the back of the neck. The plant grows in marshy places, and smells and tastes like a parsnip.

THE ROYAL SOCIETY.

AT the anniversary meeting of the Fellows of this Institution, on the 30th November, being St. Andrew's-day, the gentlemen nominated for admission to the Council, and mentioned in our list last week, were duly elected. At the same meeting, the Copley Medal was awarded to Mons. Henri Victor Regnault of Paris, already a recipient of the Stamford Medal of the same Society. The Royal Medals were awarded to Sir Thomas Maclear, Astronomer Royal at the Cape of Good Hope, and Mr. Augustus Matthiessen, Lecturer on Chemistry at St. Bartholomew's Hospital, for their admirable researches, the former in astronomy and the latter in chemistry. We are glad to claim Sir Thomas Maclear as a member of our profession, having been admitted a member of the Royal College of Surgeons of England on the 1st of December, 1815.

DEATH OF A CHILD FROM BRANDY.

THE newspapers record the death of a girl six years of age, in consequence of drinking about a “quartern” of brandy. The father had brought home some brandy to give to his children, who were suffering from diarrhoea. He gave a teaspoonful to the girl; and she begged for more, but none was given her. The father went to sleep, leaving the bottle within reach. When he woke up, he found that the child was insensible, and that the cork had been removed from the bottle. The brandy must have been drunk about five o'clock in the morning; and the child died in the evening of the same day. It is stated that the father had soaked an acorn in part of the brandy, as he had been told that this would cure his children.

VERY SATISFACTORY.

AT a recent meeting of the Brecon Board of Guardians, a letter was read from the Medical Department of the Privy Council, addressed to Mr. James Williams; informing him that, in accordance with the resolution of the Privy Council to make grants to those public vaccinators whose work should appear to be sufficiently meritorious, the sum of twelve guineas had been awarded to him. About three years ago, Mr. Williams received under similar circumstances a gratuity of ten guineas; and he is to be congratulated on this second mark of approval. We understand that the relations existing between Mr. Williams and the Brecon Guardians are very satisfactory. He has been a parochial medi-

cal officer for more than a quarter of a century, and has never had the least misunderstanding with the Board. Some time since, they consented to give him five shillings per case for vaccinating persons at their own homes at a distance of more than six miles from his residence—a matter of great advantage to the poor in a thinly populated and mountainous district. There was lately a slight difficulty in regard to the vaccination contracts at Brecon, owing to the Privy Council not allowing the town to be any longer divided into two districts. The difficulty, however, was simply settled by Mr. Williams and Mr. North, who had hitherto acted as vaccinators, agreeing to draw lots for the single appointment. The lot fell to Mr. Williams.

CHLOROFORM ACCIDENTS.

THE memoranda on the administration of chloroform, which we publish at another page, have been drawn up in the hope that they may be useful in the prevention of accidents. We have endeavoured to make them as concise as possible, omitting everything not essential. The type will be kept standing for a short time, and we shall be glad to supply members of the Association with copies of them on application.

THE CHRISTIAN MEDICAL ASSOCIATION.

THERE was a large attendance of students and practitioners at the meeting of this Association in Freemasons' Hall on Friday evening, November 26th. Dr. C. J. B. Williams, F.R.S., was in the chair. The Rev. Dr. Barry, Principal of King's College, the Rev. J. W. Reeve, Dr. Miller, F.R.S., Dr. Stewart, and others, addressed the meeting. The Association has been in existence sixteen years. Its work is to aid medical students in organising religious meetings at their respective hospitals. The Committee hope soon to be in a position to help forward a medical mission in London in a similar manner to those of Edinburgh, Liverpool, and other places. Between forty and fifty students inscribed their names as members of the Association.

UTILISATION OF SEWAGE.

THE British Association appointed a committee last year to report upon the treatment and utilisation of sewage. The funds granted by the Association last year were sufficient for defraying the expenses of some preliminary work connected with the main undertaking, and this year £50 more has been voted to the Committee for the completion of the work. The British Association has done what it can in granting £50 and its moral support for the settlement of this very unsettled subject; but it is clear that many times £50 will be required before a question like this, involving a great deal of very skilled scientific work, and probably considerable outlay on apparatus, can be set at rest. The Committee has, therefore, issued a circular-letter to all the towns in the United Kingdom, setting forth its position, and asking for subscriptions towards the object. The Committee suggest that towns shall subscribe, more or less in proportion to their population, the very moderate sum of £5 5s. being suggested for places whose population does not exceed 10,000. The thorough investigation of the sewage-question in all its bearings is of quite national importance, and should be of interest to every individual. Our towns will show much far-sighted economy by contributing liberally to the object in view. The members of the Scientific Committee of the British Medical Association are Richard B. Grantham, F.G.S., etc.; J. Baily Denton, F.G.S., etc.; J. Thornwell Harrison, M.I.C.E.; Dr. B. H. Paul, Professor Wanklyn, W. Hope, V.C.; Professor Williamson, Professor Marshall, Professor Corfield, Mr. C. Cooke, and Sir J. Lubbock.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

THE Report of this Association for the session 1868-69, in recapitulating the work done, gives brief analyses of the papers read by Dr. Druitt (President), Dr. E. Ballard, Dr. Odling, Dr. Gavin Milroy, Dr. Guy, Dr. Letheby, and Dr. Richardson; and refers to the action of the Association in reference to the prevalence of scarlatina, the Workshop Regulation Act, the Artisan and Labourers' Dwelling Act, etc. The following papers are announced for the session 1869-70: Town-Sewers

and House-Drains in connexion with Sewer-Drain and Water-Closet Ventilation, by R. Rawlinson, Esq., C.B., C.E.; the Air of London, by Dr. Angus Smith; the Quality of the Water-Supply of some of the large Cities and Towns of England, in relation to their Sanitary Condition, by Dr. Letheby; also papers by Dr. Richardson, W. H. Michael, Esq., and Dr. George Buchanan.

ST. ANDREW'S MEDICAL GRADUATES' ASSOCIATION.

THE third annual session of this Association was holden at the Freemasons' Tavern, Great Queen Street, on Wednesday and Thursday, the 1st and 2nd inst.—B. W. Richardson, M.D., F.R.S., President, in the Chair. After the reading of the annual Report and the election of officers of Council for the year, the meeting on the first evening was occupied with the reading and discussion of a paper furnished by Dr. C. Black of Chesterfield, "On the Clinical Examination of the Urine in Health and Disease." On Thursday, the Association assembled at 4 P.M. for the reading of papers; after which, at 5 o'clock, the President delivered an address on "The Science of Cure." In it, he pointed out as obstacles to be removed—dogmatic generalisation, individual experience that cannot be made general experience patent to all who will learn and convincing to all; and the fear of fashion and its caprices. He then proceeded to point out the methods of advancing the science of cure. In the evening, the members dined together.

THE ST. PANCRAS INFIRMARY.

DR. STEVENSON, the Medical Officer of Health for St. Pancras, has presented a report to the Vestry of various visits made by him to the Infirmary. The report is, in substance, the same as that lately published in the JOURNAL, with some exceptions; and these exceptions are consequent on remedies adopted since the abuses were exposed; such, for instance, as the crowded state of the wards. What appears to us strange, however, is the fact that the Vestry should have adopted the report, and, at the same time, expressed their astonishment that the papers could have given the Infirmary a bad character.

NEW ARCHIVES OF OPHTHALMOLOGY AND OTOTOLOGY.

A NEW biannual volume of *Archives* has been started, edited by Professor H. Knapp of New York, and Professor S. Moos of Heidelberg. The greatest novelty is its publication simultaneously in English and German—a great advantage to very many, in our country at least. It is open to original communications only; and in the first number we find contributions, amongst others, from Hinton, R. Liebreich, and L. Wecker. The volume is well illustrated by coloured and plain lithographs, and the paper and print are excellent. One little suggestion from the editors might well be borne in mind by contributors to other journals than these *Archives*: "Every article should be written in such a way that its length will not be disproportionate to the amount of new and instructive material furnished by it."

CHARING CROSS HOSPITAL.

DR. DOWSON has been appointed to the Chair of Botany at the Charing Cross Hospital Medical School. Dr. J. W. Black, late of Edinburgh, has been recommended for appointment to the office of Physician-Accoucheur.

THE OBSTETRICAL SOCIETY.

THE last meeting for the current year of this Society took place on Wednesday evening, and was well attended. A number of new members were elected, and more proposed. The material brought forward was most abundant. Besides a number of specimens, including a fibroid tumour removed by Dr. Meadows, after dilating the cervix uteri with Dr. Barnes' dilators instead of sponge-tents; a foetal heart shown by Dr. Wynn Williams, in which the aorta and pulmonary artery had changed places, besides other malformations; a placenta, in which spontaneous knotting of the funis had caused still-birth, shown by Dr. Gervis; and other specimens, Dr. Tyler Smith narrated a successful case of treatment of puerperal fever by the injection of dilute liquor

ammonia (one part to three water) into the veins; Mr. Spencer Wells and Dr. Braxton Hicks brought forward a number of cases of pregnancy complicated with ovarian disease, with remarks on treatment, followed by a short though interesting discussion; and Dr. Hall Davis read a paper on "Puerperal Convulsions", illustrated by some thirty or more cases. The time failed to read the whole of these cases, but we are glad to know that the paper is to appear *in extenso* in the forthcoming *Transactions*. Surely this was enough for one evening.

WANT OF SUBJECTS.

OUR students who are anxious to dissect will not get much help from the Paddington Board of Guardians. At a former meeting, the opinions of the guardians seemed in favour of allowing the bodies of unclaimed paupers to be used for purposes of anatomical teaching, but at a meeting yesterday, the subject was more fully discussed, with the result of its being "allowed to be dropped". One speaker warned them that things were coming to such a pass that legislation must ensue; and, if they did not mind, they might resuscitate the "resurrectionists".

SCOTLAND.

DR. W. SCOTT AITKIN of Greenock has died, after a fortnight's illness, of typhus fever, contracted in the course of professional avocations. This is the seventh death from fever in Greenock during the past two years.

THE Marquis of Bute has subscribed £1,000 to the building fund of the Glasgow University.

PRESENTATION OF DIPLOMA TO DR. SMART.

THE New York State Agricultural Society has conferred its diploma on Dr. Andrew Smart of Edinburgh, for the "learning, ability, and sagacity evinced in his investigation of the pathology of the cattle-plague, and particularly in his microscopic investigations of its lesions, and in the plan of treatment so judiciously recommended." It was resolved to send a copy of the resolution to the above effect to the Lord Provost of Edinburgh, on the occasion of Dr. Smart's candidature for the Chair of Pathology in the University.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

AT a meeting held on Thursday in last week, in the hall of the Royal College of Physicians, Edinburgh, the chairman, Professor Laycock, brought under the notice of the meeting the subject of clinical teaching of insanity. On the motion of Dr. Sibbald of the Argyle District Asylum, seconded by Dr. Skae of Edinburgh, it was resolved, "That this meeting desire to express a strong opinion of the necessity of making the clinical teaching of insanity imperative in every medical curriculum, and request the secretary to send a copy of the resolution to the medical Faculties and University Courts of Scotland, the Boards of Examiners in Scotland, and the members of the General Medical Council." Papers were afterwards read by Dr. Tuke, on "The Cottage System of the Management of Lunatics"; by Dr. Clouston of Carlisle, on "The Medical Treatment of Lunatics"; by Dr. Bence Thomson of Perth, on "The Hereditary Nature of Crime"; and by Dr. Howden of Montrose, on "The Death-rate of the Insane."

IRELAND.

A HOSPITAL FOR KINGSTOWN.

AT a meeting lately held to censure the medical officer for allowing his books to be examined for election purposes, the foundation of a hospital was proposed. One gentleman offered £500. The population of the district is over 20,000.

STATISTICAL SOCIETY OF DUBLIN.

AT the first meeting, the Right Hon. Mr. Justice Lawson in the Chair, Dr. Robert M'Donnell, F.R.S., read a paper on "Patronage and Purchase in Making Appointments", of which the following are extracts.

"During the last session, Dr. Mapother read a paper before the Society which attracted a good deal of attention, especially from members of his own profession. The greater part of this communication was devoted to the consideration of the mode of making appointments of medical officers to the hospitals in this city; and I believe I am correct in stating that the general impression which it left on the minds of those who heard it was, that a good deal of what we call 'jobbery' goes on with reference to those appointments, an impression—to say the least, not removed by those who took part in the debate.....The two forms of nepotism to which I now desire to direct attention may be spoken of as, 1st—That exercised by an individual who has the sole power of appointment entrusted to him; 2nd—That practised by a corporate body. To illustrate the first, let me refer to the Law Directory of Mr. Thom's valuable statistical volume (*Official Directory*), where at page 940 the names of the officers of our courts of law are recorded; to illustrate the second, to the honoured names which for generations have been connected with some of our most valued medical institutions in this city. Now, if the practice of nepotism be wrong, I would merely repeat that it does not appear that the medical men are much worse than the judicial functionaries, with whom they may thus be compared. The public, however, looks with a very different eye on these two forms of nepotism.....The fault lies hardly so much with those who yield to the temptation as with those who offer it. The remedy lies in this, that the temptation be withdrawn—that this kind of patronage be no longer entrusted to individuals or to corporations, all of one profession, and therefore more prone to conspire together than when composed of heterogenous elements. The transition from nepotism to money considerations as regards appointments is easy; for nepotism is, in one point of view, merely an appointment from money consideration. The father who nominates his son to a lucrative post in point of fact puts so much money in his own pocket; his son's allowance is saved, his father has no longer to pay the young man's tailor's bill, etc. Hence we find this very natural result, that, when a corporate body of professional gentlemen is prolific, so that sons and nephews are forthcoming in plenty, and at the right time, nepotism prevails. But when, from any cause, the corporate body is sterile, or, at least, has not produced sons at the proper age, purchase in some shape takes the place of nepotism. There is, certainly, no possible objection to a body of medical men building an hospital with their own money and trying to make it pay as a teaching establishment. But what the public naturally say is this—If your hospital is a joint-stock company, well and good; but then don't pretend that it is a charity, and ask me to subscribe to it in order that your shares may go up in value.....The case which I next put is one in which the person who sells his resignation has a vote or voice in the nomination of his successor. In such a case to accept money is corrupt; it is not only selling the resignation but the vote; it is taking a bribe to betray a public trust.....Let not the honest men among the governors of our charitable institutions shut their eyes to the fact that whether there be five of them, or five hundred, the sale of such posts is wrong, even although it be a sale apparently for the benefit of the charity over which they preside. Of course, if they sell the post of medical officer, and divide the whole, or a part of the booty among themselves, this is a breach of public trust. The remedy lies with the Court of Chancery, which might be put in motion to compel the medical trustees to account for all the money received in the performance of their trusts. There are few persons who have the hardihood so far to outrage common honesty as to defend this amount of corruption; yet, strange to say, even this has found its defenders. In conclusion, let me say that I am very well aware how imperfectly I have dealt with my subject. I trust, however, that I may have succeeded in pointing out that purchase in some of its forms can no more be defended than bribery at an election. I would remind some of those able and distinguished men who on a former occasion before this society advocated purchase in the case of hospital appointments, that they have been misunderstood, and their authority has been cited in support of systems of purchase of which I cannot doubt they also would strongly disapprove. Although I admit that in this age, and with a society such as this, soundness of argument goes further than authority, and that which is said has more effect than who it is that says it; yet it is certain that the weight of an eminent man's name is often cast into the balance, and the lighter the scale the more need for that kind of weight. It is, therefore, all the more necessary that men of authority should be careful in defining their views, otherwise they are liable to be suspected of countenancing what in reality they would shrink from as dishonest and dishonourable."

Mr. J. Haughton, Drs. Murray and Davys, Mr. Hancock, LL.D., Mr. Gernon, Mr. Foote, and Mr. Shaw, F.T.C.D., took part in the debate; and, without exception, condemned the system of selling hospital offices.

THE ADMINISTRATION OF CHLOROFORM.

PRELIMINARIES.

1. UNLESS very feeble, the patient should fast for three hours before the inhalation.

2. Ten minutes before the inhalation, a dose of brandy should be given in water—a teaspoonful to a child, one or two tablespoonfuls to an adult.

3. The patient should, whenever convenient, be wholly undressed, and invariably everything tight about the chest or neck should be removed.

4. If possible, let the patient be in the recumbent posture, and on his back. Let the chest and neck be well exposed. Whatever form of apparatus be used (a piece of lint, a handkerchief, or Skinner's inhaler, are perhaps among the best), you may begin boldly. There is no risk with the first inhalations; and the patient may be instructed "to draw full breaths." So soon as any effect is manifest, you must be more cautious. Watch carefully the respiratory movements, and the colour of the cheeks, lips, and eyes. If the patient struggle much, proceed with increased caution.

SIGNS OF DANGER.

Lividity of Face.—Remove the chloroform, and let the patient have air. Open the mouth and draw out the tongue.

Stertorous Respiration.—Stop the chloroform, open the mouth, draw forward the tongue, and watch carefully.

Irregular Gasping Respiration.—Stop the chloroform, dash cold water on the face, and flip with the towel.

Death-like Pallor.—This, the most dangerous sign of all, must be met without a moment's loss of time. Flip with the wet towel on the cheeks, chest, abdomen, etc. Open the mouth, and if, as is usual, breathing has ceased, begin artificial respiration at once. With outspread palms, press the front of the chest forcibly down, whilst an assistant, at the same time, presses the abdomen. Make these movements not oftener than fifteen times in the minute. Air should be heard to enter the trachea. Whilst this is being done, let assistants continue most vigorously to flip the skin in all accessible positions—it cannot be done too much. If the collapse continue, let an ounce of brandy be injected into the rectum. Do not remit the artificial respiration until the patient is quite rallied. If the collapse persist, the efforts at rallying should be persevered with for an hour at least. If a large catheter be at hand, it may be well to introduce it into the trachea, and inflate the lungs by the mouth. Remember that irregular inspiratory efforts may occur long after death in all other respects has apparently taken place. Do not be deceived by them, but continue your efforts.

REMARKS.

The plan of artificial respiration recommended is, we believe, all things considered, the most convenient. The catheter in the trachea is, when practicable, the most effectual plan. Its introduction is not difficult. If the artificial inspirations be made too rapidly, they defeat their own object; nor should they be too forcibly made. If it be needful to continue them more than a few minutes, the operator will find it convenient to kneel astride the patient's trunk.

The administrator ought always to have with him brandy, an enema-syringe, and a large flexible catheter. He ought always, when convenient, to require his patient to be undressed, since it may be very desirable to have the surface accessible.

PROSECUTION UNDER THE VACCINATION ACT.—At Leeds lately, John Hickersgill, tanner, Willow Grove, Burley, was summoned on a charge of having neglected to vaccinate his child. The defendant read from a paper seven reasons why he objected to have the operation performed. Whereupon the magistrate sentenced him to pay a fine of twenty shillings and costs or seven days. The defendant elected to go to prison.

PROPOSED AQUARIUM FOR BRIGHTON.—With the object of drawing more attention to the study of ichthyology it is proposed to follow at Brighton the example already set at Paris, Berlin, Hamburg, and other places, and provide a large aquarium in connection with a library, lectures, and other facilities for studying the habits of fish. The site chosen is near the foot of the Chain Pier, commencing at the Tollhouse, where a space of ground extending for 700 feet by 100 feet in width is to be enclosed by means of a sea wall and a roadway, and towards the carrying out of this part of the work the corporation of Brighton contribute the sum of £7,000. Here a spacious aquarium, reading-room, museum, etc., will be constructed. The aquarium will be of the most comprehensive character.

ASSOCIATION INTELLIGENCE.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH:
GENERAL MEETING.

THE second general meeting was held at the Midland Institute, Birmingham, November 11th, 1869: Present—J. VOSE SOLOMON, Esq., President, in the Chair, and forty-three members and visitors.

The Council.—It was carried: "That no member be elected a representative member of Council for this Branch, unless he have attended two general or Council meetings during the year".

New Members.—Dr. Crispe, Mr. Hodges, and Mr. Morris, members of the Association, were elected members of the Branch.

Communication.—1. Mr. PULVERMACHER exhibited several of his Belts and Portable Batteries.

2. Dr. SOLLY showed a large Multilocular Ovarian Cyst, filled with fatty matter, successfully removed from a married woman, aged 35, by Mr. Furneaux Jordan in the Queen's Hospital. Its nature had been recognised two years previously by the existence of a small movable tumour in the left iliac region. It increased very slowly during the first eighteen months, but, during the last six months, it made rapid progress, and the patient's general health began to give way. The cyst, with its contents, weighed seven pounds. There were no unfavourable symptoms after the operation, except chloroform sickness, which was much relieved by the subcutaneous injection of morphia, and the use of counter-irritation. The pulse ranged between 90 and 104 until the sixth day, when it fell to its normal standard. The treatment consisted in the use of beef-tea, brandy, and opium injection by the rectum, combined with the constant use of hot poultices to the abdomen.

3. Dr. SAWYER exhibited a well marked example of Lardaceous Degeneration of the Liver, taken from a man who died at the Queen's Hospital, under the care of Dr. Fleming.

4. Dr. SAWYER also showed an interesting specimen of Plugging of the Pulmonary Artery, from a patient who had been under Dr. Heslop. A firm white clot sprang from the columns of the right ventricle, passed along the pulmonary artery, followed mainly its right division, and extended for a considerable distance along numerous branches into the right lung. Death had occurred from syncope.

5. Dr. HESLOP showed a Foreign Body which had been passed *per anum*, and made some remarks on the advantage of not giving aperients in cases in which foreign bodies had been swallowed.

6. Mr. GARNER read a paper entitled "A few practical remarks on Vaccination". He stated his conviction that, by taking simple and necessary precautions, it is impossible to produce from the inoculation of vaccine lymph anything but a vaccine pock. Lymph, instead of deteriorating by its passage through the systems of healthy babies, would increase in efficiency and infective power by careful and selected transmission. Vaccination direct from the calf was quite unnecessary. He insisted on the necessity of careful selection of lymph, and the use of perfectly clean and sharp instruments kept specially for the purpose. He recommended puncture for arm to arm vaccination, and scarification or abrasion for vaccination with preserved lymph. The pocks should be made well on the deltoid, never on the inner aspect of the arm. The local effects should not be less than four or five pocks. Of 7,500 inspected successful primary vaccinations, in 13 he found it necessary to repeat the operation, and in 2 only of the 13 the vaccination was repeated a third time before success was attained. He had never seen a case of insusceptibility to vaccination. He strongly urged the great advantages of arm-to-arm vaccination. In only two out of ten thousand vaccinations and revaccinations had sequelæ followed which at all endangered life. One was a case of erysipelas (which recovered) following a primary vaccination with tube-lymph; the other was a revaccination followed by an eruption at the seat of puncture, and on other parts of the body, of successive crops of large ill-conditioned pocks, which rapidly filled and sloughed out leaving large cavities. The process continued several months, and was attended by grave constitutional disturbance. He had seen several cases of axillary abscess, due, he believed, to the punctures being made too deep or too near the inner side of the arm, or both. He had never seen syphilis following vaccination. He had seen three cases where the operation was followed by an eruption of vesicles very like those of vaccinia, which in two instances assumed a chronic character; but had never tested by inoculation their true vaccine nature. He had seen many cases where eczema, impetigo, and other skin affections had been attributed to vaccination; but did not consider them caused—though probably hastened—by the operation.—Mr. GREENE, although he agreed with all Mr. Garner had said, contended that much feeble and deteriorated lymph was in use.

and urged the necessity of the maintenance, at the public cost, of a constantly available supply of heifer-lymph.—Dr. FLETCHER (Broms-grove) denied the deterioration of lymph by human transmission. He believed that cow-pox had its origin in human small-pox, stating that the disease was unknown in bulls and cattle kept in the fields.—Dr. HESLOP stated, that at the Children's Hospital he had never seen a case of vaccino-syphilis; and expressed his approval of the present arrangements for public vaccination in Birmingham.—Mr. F. Jordan, Mr. Oakes, Mr. Yates, and Dr. Mackey, also took part in the discussion.

GLOUCESTERSHIRE BRANCH: ANNUAL MEETING.

THE second annual meeting of this Branch took place at the Gloucester Infirmary, on November 16th; T. EVANS, M.D., President, in the Chair. There were present eighteen members and two visitors (Mr. Wilton and Mr. Cole).

The *Annual Report* of the Council to the members of the Branch was read. From this, it appeared that the Branch, though only established a year, consisted of forty-seven members. The total number of the profession in the county is about two hundred, of whom nearly one-fourth are members of the Branch—a proportion equal to the total strength of the Association with reference to the medical population of the country. The Council were happy to record the fact that, during the first year of the existence of the Gloucestershire Branch, the following papers by its members had been received with thanks:—1. On Pemphigus, by E. Cripps, Esq. 2. On Subcutaneous Injections, by E. T. Wilson, M.B. 3. On Rheumatism, by A. Fleischmann, Esq. 4. On Belladonna in Abdominal Affections, by D. Devereux, Esq. 5. On Gravel, by E. T. Wilson, M.B. 6. On Spontaneous Fracture of Stone in the Bladder, and Subsequent Removal by Lithotomy, by John Bubb, Esq.—It was also a matter for satisfactory notice, that the whole of the subscriptions (with barely an exception) had been received by the General Secretary.

Papers.—1. Dr. WILSON was compelled by a prior engagement to postpone the reading of a paper promised by him.

2. Mr. DEVEREUX read a paper on Belladonna in Abdominal Affections.

3. Mr. JOHN BUBB read a short paper on a case of Spontaneous Fracture of a Stone in the Bladder, which he had removed by lithotomy a month previously; and exhibited the stone, which weighed 5 drachms 15 grains. It was ovoid in shape, with a projection portion from its side, which lifted up like the lid of a box, and was separated from the rest of the stone. One edge of this separated portion was brown in colour; and the fracture was very evidently not recent. He thought that, in all probability, it was caused by the generation of some gaseous agent from chemical changes in its constituents, and ended by asking the members present for their experience of such cases.

Both authors received the unanimous thanks of the meeting. Mr. Devereux's paper gave rise to a general discussion, in which the idiosyncratic effects of belladonna and of henbane were canvassed. The President mentioned a case in which a small dose of the latter was uniformly succeeded by blindness; and Dr. Sankey mentioned a case in which extraordinarily large doses were tolerated. Dr. Batten, Mr. Cripps, Mr. Fleischmann, and others, took part in the discussion.

Officers.—The following officers of the Branch for 1870 were elected:—*President*: W. H. O. Sankey, M.D. *Secretary*: A. Fleischmann, Esq. *Council*: W. Allard, Esq.; R. W. Batten, M.D.; T. R. Colledge, M.D.; E. Cripps, Esq. *Representatives in the General Council*: H. W. Rumsey, M.D.; W. H. O. Sankey, M.D.

Dr. Cook and Mr. Bubb were unanimously chosen as scrutineers.

New Member.—Dr. Campbell was elected a member of the Association and Branch.

Dinner.—The members and visitors, to the number of eighteen, sat down to an excellent dinner at the Spread Eagle Hotel; and a successful meeting was brought to a pleasant termination.

FRENCH HOSPITAL AND DISPENSARY.—The third annual banquet in aid of the funds of this excellent institution, the benefits of which are extended to all nations, will take place at Willis's Rooms on the 15th inst., under the presidency of Lord Napier of Magdala.

FATAL SUICIDE IN THE STREET.—A tradesman of Rochdale is said to have cut his throat quite through the windpipe and jugular vein, in the street, with a number of people looking on; to have then walked about forty yards, and wiped the knife deliberately on his coat-sleeve. He then fell down, and expired in about ten minutes. He was suffering from delirium tremens. The knife used was a common pocket one, which he had just bought in an ironmonger's shop.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, NOVEMBER 23RD, 1869.

GEORGE BURROWS, M.D., F.R.S., President, in the Chair.

ON ADENOID VEGETATIONS IN THE NASO-PHARYNGEAL CAVITY; THEIR PATHOLOGY, DIAGNOSIS, AND TREATMENT.

BY DR. WILHELM MEYER, COPENHAGEN.

(Communicated by JOHN MARSHALL, M.D., F.R.S.)

THE author states that there exists a peculiar form of defective speech, often accompanied with imperfect hearing, dependent on the presence of exuberant growths in certain parts of the naso-pharyngeal cavity. These vegetations, when examined microscopically, are found to be composed of the so-called "adenoid" tissue, and are accordingly to be regarded as overgrowths or morbid growths of the closed glandular structures allied to the lymphatic glands found naturally in or beneath the mucous membranes of the pharynx, the fauces, and the base of the tongue. The presence of these vegetations in sufficient quantity impairs the power of pronouncing the nasal consonants, and gives a "dead" character to the speech. They also impede respiration through the nose, and compel the patient to keep open the mouth, thus giving a vacant aspect to the face. If accompanied by deafness, the vacant look is still more remarkable. The nostrils are usually compressed. Other signs and symptoms are present, and the affection is sufficiently serious to merit attention. The author briefly described the naso-pharyngeal cavity, in order to define with accuracy the usual seats of these overgrowths. The character of the vegetations themselves was next described. These vary in form and consistence in different situations, being sometimes cristate, and at others cylindrical or flat; sometimes they are solid and firm, and at others soft and highly vascular. The latter easily bleed when examined with the finger. Their microscopical structure also varies slightly, the firmer kinds containing the most characteristic adenoid tissue. Their relation to the normal structures in the naso-pharyngeal mucous membrane is very apparent. Certain changes in the surrounding mucous membrane, in the tonsils, in the soft palate, and in the nasal fossæ, had been noticed. The *symptoms* depend on the seat and size of the vegetations. Besides the peculiar effect on the speech, and the open state of the mouth, the nostrils are flattened. The patient often has a deficient secretion from the nostrils, and sometimes blood accumulates in the mouth. Deafness is occasionally present. In using an ear-catheter in such a case, the stream of air entering the tympanum is arrested temporarily, without any apparent reason; and sometimes a bubbling sound is heard during insufflation. The *diagnosis* is partly dependent on the presence of the above-mentioned signs and symptoms in a persistent or chronic form. These, however, may also indicate other affections of the nasal organs, such as chronic inflammation of the mucous membrane and polypi, or chronic inflammation of the soft palate, or enlargement of the tonsils. Hence, the physical examination of the parts concerned is indispensable as a means of diagnosis; and of these, touch is more easy and more sure than sight as a method of research. Digital examination of the cavity may always precede, and nearly always supersede, the use of the rhinoscope. Very full and practical instructions were offered for conducting this examination. The *frequency* of the occurrence of these adenoid vegetations of the naso-pharyngeal cavity had been tested, in Denmark at least, by careful inquiries prolonged over about eighteen months. The statistics of this affection were shown in a tabular form, and were otherwise explained. It occurs especially in youth. The *causes* of these vegetations were then briefly discussed, and especially their relation to deafness. As to *prognosis*, it seemed possible that they may diminish or become of less moment as age advances; but this was uncertain.

Their *treatment* was fully discussed. They may be most easily and rapidly removed by a ring-shaped knife, mounted on a long slender handle, which if passed through one or other nostril, and manœuvred so as to sweep over the mucous surface affected with these vegetations. This proceeding is aided by the forefinger of the left hand passed over the tongue. Two or more operations are sometimes necessary. The bleeding is free, but not excessive. Sickness sometimes supervenes. A complete cure is usually accomplished,—the voice becoming improved, the speech perfect, the nostrils expanded, the mouth closed, the aspect of the face is changed, and any accompanying deafness is relieved. As an auxiliary means, the use of the nasal douche is of great importance. Nitrate of silver, or the galvanic cautery, may also be employed, with or without the previous application of the knife, according to special circumstances, which were fully indicated. Many little practical details

are required to be attended to in order to ensure success. To illustrate the remarks and conclusions above detailed, two typical cases were described, together with the treatment employed and the results obtained. In conclusion, the importance of this local disease was enforced, as a reason for bringing it under the notice of the profession in England. Illustrated photographs of patients, taken before and after the operation, with drawings of the vegetations, of their microscopic structure, and of the instruments used in removing them, were added to the paper.

Mr. SAVORY thought that there would be some difficulty in distinguishing these "adenoid" growths from undue prominence of the crypts and follicles of the mucous membrane of the pharynx; to which the structures described appeared to be very similar. The growths seemed also to be confined to the part where the mixture of glands with ducts and ductless glands was found. It would be easy for one less experienced than Dr. Meyer to fall into a mistake.—Mr. THOMAS SMITH, while admitting the value of the paper, said that the frequency of the disease suggested its resemblance to ordinary naso-pharyngeal catarrh. In this, there were granulations, consisting of enlargement of the small follicles or crypts. Allusion had been made to the large development of the so-called "pharyngeal tonsil." This was often very prominent in cases of cleft palate, in consequence of being pushed forward in the effort of the constrictor muscle of the pharynx to close the cleft in swallowing.—Mr. C. HEATH said that Mr. Coles, a dentist, had informed him that he had always found the pharyngeal tonsil pushed forward in cases of cleft palate.—Mr. MARSHALL said that it was not alleged that the structures described were new growths: they consisted of hypertrophied normal structures, producing symptoms which lasted not only for months, but for years. But that there was something more than ordinary hypertrophy, was shown by their readily bleeding when touched—which rarely occurred in cases of simple hypertrophy. Dr. Meyer had, with him, examined the children in the Orphan School at Havestock Hill, and had found in two of the children the flattened nose and open mouth, with inability to produce nasal sounds. This state had existed since their admission to the school; and in them Mr. Marshall felt an obstruction to the passage of the finger into the naso-pharyngeal cavity. He had thought the subject, as brought forward by Dr. Meyer, worthy of the consideration of the profession.

CLINICAL SOCIETY OF LONDON.

FRIDAY, NOVEMBER 12TH, 1869.

JOHN E. ERICHSEN, ESQ., Vice-President, in the Chair.

DR. HENRY THOMPSON communicated a case of Ascites successfully treated by Copaiba. G. W., a coachman, aged 60, was admitted into the Middlesex Hospital, under Dr. Thompson's care, on November 30, 1868, with ascites, puffy ankles, pulmonary oedema, and scanty urine without albumen. His health had been good till July 1868. During the following three months various remedies were employed, quinine and iron amongst others, but his condition became worse and worse, the increase of fluid in the peritoneum being so rapid that paracentesis was three times required. In March the administration of copaiba was commenced, the dose being gradually increased until fifteen minims were taken every six hours. The improvement was immediate. The quantity of urine increased from fourteen ounces daily to several pints, and the belly measurement diminished from day to day. He left the hospital convalescent on May 10, and is now in good health. In his comment on this case Dr. Thompson pointed out that although the quinine and iron may have contributed to the result, yet improvement commenced before they were given, and considered that the copaiba acted beneficially as a diuretic.—A paper by Dr. LIVEING on two cases of ascites with albuminuria similarly treated was communicated by the Treasurer. In one of these cases the ascites was associated with anasarca of the lower half of the body; in the other there was no anasarca. Both patients had been ill for several months. Here, as in Dr. Thompson's case, the beneficial action of the remedy (which was given alone) manifested itself in increased discharge of urine and diminution of the ascites and dropsy. Both patients left the hospital with albuminous urine, but otherwise well.—Dr. CLAPTON related the case of a patient with ascites which threatened death; the patient would not allow tapping to be performed, but was greatly relieved by taking copaiba in capsules. He had tried copaiba several times since in cases of hepatic ascites, giving one drachm doses, but with little result. He therefore thought there was a minority of cases in which the remedy acted well.—Mr. ERICHSEN said that copaiba seldom acted as a diuretic when given in gonorrhœa.—Dr. DOUGLAS POWELL did not think that diuresis necessarily carried off ascitic fluid. There was often a re-collection of fluid before the final absorption in cases of ascites.—Dr. GREENHOW believed that copaiba in ascites simply from heart-disease was not of much use. He thought diuretics were frequently of value in ascites.

Mr. J. J. H. BARTLETT described a case of Hereditary Syphilis appearing after Vaccination, complicated with Paralysis of both Arms. The case appeared to be one of those in which the vaccinal fever raised the disease into activity, which, though present in the system, was dormant. The paralysis was not simply infantile, but was most likely caused by some deposit high up on the spinal cord and on its membranes, and the lesion pressed almost equally on both halves, as both arms were affected. The cases in which paralysis occurred in hereditary syphilis were very rare, for none such are mentioned in their works by Diday or Lancereaux.—Mr. ERICHSEN observed that the case illustrated a new point in hereditary syphilis.—Mr. BARWELL referred to a case in which a child was supposed to have acquired syphilis from vaccine lymph, but none of the other five or six children vaccinated exhibited similar symptoms. The eruption was apparently not syphilitic.—In answer to Mr. ERICHSEN, who asked if any member had any remark to bear on the question of syphilis lying dormant in this way, Dr. CHOLMELEY observed that vaccination was done just at the time when secondary syphilis was wont generally to appear. Vaccine lymph appeared to act as an irritant, as many other things, in producing skin eruptions.

Mr. CALLENDER brought before the Society the history of a case in which Colotomy was performed for the relief of Cancer of the Rectum, which illustrated the advantages gained by opening the colon in cases of this nature, and tended to confirm the statements made by Mr. Curling in the various communications in which he has advocated the operation. The patient, after suffering from symptoms of cancer of the lower bowel, was suddenly unable to pass fæces, and the descending colon was at once opened, with great relief of the urgent symptoms, and with entire removal of the great local pain from which the patient had continuously suffered. Two months after the operation he was quite convalescent. The discomfort from the artificial anus was practically none.—Mr. ERICHSEN said that the great relief afforded by colotomy in cancer had been demonstrated in Paris as elsewhere. There was no difficulty in the operation. There were two other classes of cases. Firstly, where the colon was contracted and the operation was performed to relieve the pain caused by the passage of fæces over an ulcerated surface. Here the colon was deep seated. Secondly, in children where there was imperforate anus. He had only seen one survive any length of time. He had here never performed Amussat's operation with success.—Mr. HENRY REEVES observed that at the London Hospital, where two cases had lately been performed under the influence of chloroform, both patients died of chloroform vomiting. The horizontal incision was in these adopted.—Mr. COOPER FORSTER had performed the operation several times; he had made the vertical incision called Callisen's operation, but which was claimed at Guy's Hospital for Mr. Hilton. It was better than the transverse incision.—Mr. ERICHSEN believed that the merit of introducing the vertical incision was due to Mr. Hilton.—Mr. BARWELL had performed the operation for imperforate children in two cases, but both patients had died of diarrhœa.—Mr. MOORE had always employed the vertical incision. He thought the relief afforded for cancer of the rectum fully justified the operation.—Mr. CHRISTOPHER HEATH thought that if the bowel was distended with water the operation was made cleaner and easier.—Mr. REEVES said that gruel had been used in the cases at the London Hospital.—Mr. COOPER FORSTER wished to know why fæces returned from below after the operation.—Dr. BURDON SANDERSON said that the direction of the peristaltic action depended on the pressure which was in health least from below, but here the pressure was greatest from below.—Mr. HENRY ARNOTT related a case, showing the advantage of the vertical incision, in which the transverse incision was made, and as the incision was small, there was great difficulty in finding and recognising the gut.—Mr. CALLENDER said that the operation usually performed at St. Bartholomew's Hospital consisted in an oblique incision. The incision was made in the outer border of the quadratus lumborum muscle, where the bowel was generally found adjacent.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

MONTHLY MEETING, NOVEMBER 20TH, 1869.

JOHN LIDDLE, Esq., in the Chair.

THE Secretary, Dr. Vinen, stated the result of the recent interview with Mr. Goschen on the subject of Registration of Diseases. Mr. Goschen was favourably disposed towards their views. At a second meeting held at Dr. Richardson's, it was determined that a deputation should also wait upon the Registrar-General.

Mr. Oram, Assistant-Inspector of Factories, and Dr. Steele, Superintendent of Guy's Hospital, were proposed as Associated Members.

Dr. BALLARD read a paper on Scarlet Fever and its Fatality, as affected by Age, Sex, Season, and Epidemicity. His remarks were based upon a registration of disease in his parish of Islington, extending over the 12 years 1857-1868, and including three epidemics. His tables gave a total of 2,375 pauper cases. Making 10,000 living his basis of calculation, and taking the whole population into account, his tables showed that under 5 years of age there were 418 cases; from 5 to 10, 544; from 10 to 15, 224 cases; from 15 to 20, 72 cases; from 20 to 40, 24 cases; and so on. He next gave the numbers for each year, and from these he proceeded to refute the statements of various authors as to the influence of age. An author asserted that *early* infancy and extreme age were exempt from attack. Dr. Ballard had in his register a case of a child only 5 weeks old; and he had another 74 years of age. Dr. Ballard's tables showed him a percentage of $2\frac{1}{2}$ under 9 months old. Children under 10 years of age were most liable to attack, and the greatest prevalence was between the ages of 5 and 10. Scarlatina attained its maximum during the fifth year of life, being a year later than that of measles. From 10 to 15, a rapid decline of liability to attack was shown. His tables gave no indication of the period of first dentition, or of second dentition being particularly liable. With regard to sex, there was shown to be a slightly greater liability on the side of male children under the age of 5; and on the side of females, between the ages of 5 and 10; and, subsequently, with regard to seasons, spring and winter were shown to be nearly alike in the liability to disease: the numbers increased considerably in the summer and attained their maximum in autumn. With regard to temperature, the disease seemed more disposed to spread when the mean temperature was between 56 and 60. The fatality of the disease seemed to lessen from infancy, when it was greatest, up to the age of 15 and onwards. The fatality was also greater in males than in females up to puberty, when the state of the disease became reversed. It was also shown to be less fatal in summer and most fatal in winter. In the first half of the year there was shown to be, on the whole, most fatality when the disease was least prevalent. Dampness in the weather seemed also to have much more influence in promoting fatality than even a low temperature. Dr. Ballard concluded in some remarks upon the influence of what is called "Epidemic Constitution".—A short discussion on the subject of the paper followed, in which Dr. Tripe, the Chairman, Dr. Iliff, Dr. Gibbon, Dr. Stevenson, and others took part, but the statements of Dr. Ballard remained unshaken.

CORRESPONDENCE.

A NATIONAL REGISTRATION OF DISEASE.

SIR,—I notice that last week a deputation, not directly connected with the British Medical Association, waited upon the President of the Poor-law Board, to urge upon him the importance of publishing returns of cases of disease coming under treatment by the Poor-law medical officers. It is gratifying to be able to recognise the high scientific standing of the gentlemen who composed this deputation; and yet, judging from the report of the proceedings, it is impossible to resist the conviction that it would have been well if they had also enlisted the experience and the influence of the British Medical Association in their cause. They would at least have been armed with material with which the doubts expressed by the President could have been at once dispelled.

Mr. Göschén seems to have mentioned two conditions which it was necessary to fulfil before the purpose of the deputation could be carried out:—

1. That the labours of Poor-law medical officers should not be increased.

2. That an uniform system of registration and nomenclature of disease should be agreed upon.

The history of the movement for the registration of disease would have prevented any hesitation on these grounds.

The metropolitan registration of disease of 1857 and 1858 was discontinued, mainly, I believe, in consequence of the expense and difficulty of obtaining returns with sufficient regularity; but in 1859 I suggested to the Committee of the Manchester and Salford Sanitary Association a plan for obtaining weekly returns, which was fully carried out, and which has been continued, with scarcely the omission of a single return, ever since. In 1862, this plan was submitted to the Lancashire and Cheshire Branch and approved; and in 1864, at the meeting of the Association at Leamington, I was fortunate enough to obtain the appointment of a committee on the subject. With a few valuable modifications, this committee also adopted the scheme; and I think that the progress which the movement has so far made would have at

once justified the consent of the President of the Poor-law Board to the request made by the deputation.

In the first place, a short uniform schedule of diseases has been drawn up, consisting chiefly of epidemic diseases and such disorders as are readily recognised; and very few medical men would refuse to fill up these returns, if medical science would be benefited by their so doing. Secondly, a simple uniform plan of registration has been adopted at Manchester and Salford, St. Marylebone (London), Birmingham, and Newcastle-on-Tyne; and by this means a regular representative record of the relative proportion of different diseases occurring within short periods of time, has been secured, and, even now, in weekly or monthly returns, about 250,000 new cases of sickness are recorded annually.

I think that these facts should, without delay, be brought before the notice of Mr. Göschén, in the hope that they would materially strengthen the petition of the deputation. Might we not hope that the Committee of Council would assist in doing this?

I am, etc., ARTHUR RANSOME.

Hon. Sec. to the Committee on the Registration of Disease.
1, St. Peter's Square, Manchester, November 15th, 1869.

ON BICHLORIDE OF METHYLENE.

SIR,—In reading the account of a death during the administration of (scarcely from) the bichloride of methylene, clearly and fully reported by Mr. Marshall in the JOURNAL of October 23rd, there is one point which must have struck many as the principal cause of the fatal result; viz., "the want of expiratory power, which was increased by the necessary bandage round the abdomen to prevent struggling." One naturally asks, Why was the bandage round the abdomen used? Was it necessary? Would it not have answered the purpose better if the bandage had been placed round the extremities, or if the patient had been held by some intelligent assistants? By these means the breathing would not have been interfered with. An operation being determined on in this case, an anæsthetic could not be refused, notwithstanding the discredit likely to be caused. And it has been shown by Dr. Richardson in the JOURNAL of November 6th, and elsewhere, that the bichloride of methylene is the safest (both theoretically and practically) yet available.

In the JOURNAL of November 6th, Dr. Richardson says that a practice has been suggested of first putting the patient to sleep with the light bichloride, and of keeping up any required prolonged effect with chloroform; and he pronounces it as unnecessary and excessively dangerous, and predicts fatal accidents from it. Now, it may be quite unnecessary in private practice, where extra cost is a matter of no moment; but in hospital practice it is important to know whether it is less safe to do this than to use either anæsthetic alone, for by it both time and money are economised. It is gratifying to see that Dr. Richardson's objections to this practice are only theoretical; and I scarcely think that the race-horse analogy holds good. He compares the continuation with the heavier anæsthetic, chloroform, to the weighting of the jockey after the start. Would not the same argument prove the sole use of it from the beginning still less safe? but we must not be deterred by phantom racehorses from conferring the mixed benefit of economy in time and cost. In support of this method not being "excessively dangerous", the following notes of cases are offered from my records:—

	Bichloride of Methylene.	Chloroform.
F. 35	10 minutes.	Some minutes.
M. 60	14 "	8 "
M. 46	15 "	3 "
M. 58	16 "	10 "
M. 49	17 "	27 "
M. 29	3 "	6 "
M. 76	11 "	10 "
M. 21	5 "	1 "
F. 23	1 minute.	15 "
F. 40	2 minutes.	55 "
M. 18	3 "	18 "
M. 50	3 "	15 "

The first eight of these were commenced with bichloride of methylene given with Dr. Junker's apparatus, and, as the patients did not quickly come under its influence, chloroform was substituted.

The last four were rapidly anæsthetised with the bichloride by means of the cylinder (a great advantage in nervous patients), and the effect was kept up for some minutes with chloroform, at much less cost. In the first of these four cases, the bichloride was continued five minutes. The practice here described is, I believe, still frequently resorted to in our ophthalmic department. In none have I observed any untoward symptoms; and, had I to give it in hospital practice again, I should

have no hesitation in continuing it; but, as I before remarked, the greater cost of the bichloride is not a matter of moment in private practice, hence the substitution is unnecessary.

I am, etc., RICHARD RENDLE,
Nov. 1869. *Surgical Registrar Guy's Hospital.*

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

NATURAL SCIENCE SCHOLARSHIP.—Clare College offers a scholarship, of the value of £50 a year, tenable for three years and a half, for Natural Science. The examination (in Chemistry with Physics, Comparative Anatomy and Physiology, and Geology) will be on March 30th, and will be open to all students who are willing to commence residence in October 1870. Further information may be obtained from the tutor of the College.

MEDICAL NEWS.

UNIVERSITY OF LONDON.—The following are lists of the candidates who have passed the recent examinations in Medicine and Surgery.—

M.D. Examination. Entire.

Casey, Edward, King's College
Cavafy, John, Westminster Hospital
Clothier, Henry, University College
Eager, Reginald, Guy's Hospital
Hilliard, Henry Charles (Gold Medal), Guy's Hospital
Loy, Thomas Richardson, University College Hospital
Ridge, John James, B.A., B.Sc., St. Thomas's Hospital
Tibbits, Edward Thomas, University College

Logic and Moral Philosophy only.

Coombs, Carey Pearce, St. Mary's Hospital
Parsons, Henry Franklin, St. Mary's Hospital
Richards, William Alsept, King's College
Thomas, Edward Wynne, University College

B.S. Examination. Pass Examination.

First Division.

Dukes, Clement, St. Thomas's Hospital

M.S. Examination.

Michell, Thomas, M.D., London Hospital

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, November 25th, 1869.

Gray, Robert, Armagh, Ireland
Oakes, Charles, Dudley Grove, Bayswater
Pinder, John William, Horsforth, Leeds
Waterworth, Edward Allan, Newport, Isle of Wight

The following gentlemen also on the same day passed their first professional examination.

Noott, William Mathias, Middlesex Hospital
Tothill, Thomas Henry Frederick, St. Bartholomew's Hospital

As an Assistant in compounding and dispensing medicines.

Sutcliffe, William Henry, Jersey

MEDICAL VACANCIES.

THE following vacancies are declared:—

ABERGAVENNY UNION.—Medical Officer for the Abergavenny District and the Workhouse: applications, 8th; election, 23rd.

ANDERSON'S UNIVERSITY, Glasgow.—Professor of Chemistry.

BALLINASLOE DISTRICT LUNATIC ASYLUM.—Apothecary: applications, 11th Dec.; election, 13th Dec.

BOURN UNION, Lincolnshire.—Medical Officer for the Billingborough District.

CATRINE, Ayrshire.—Certifying Factory Surgeon.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Two Assistant-Surgeons.

COLERAINE UNION, co. Londonderry.—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Articlave Dispensary District: election, December 7th.

GERMAN HOSPITAL, Dalston.—Physician; Surgeon: applications, 3rd Jan.; election, 24th Jan.

GRANARD UNION, co. Longford.—Medical Officer for the Workhouse: 1st.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton.—Assistant-Physician: applications, 15th Dec. Resident Clinical Assistant: applications, 6th Dec.

ISLE OF THANET UNION.—Medical Officer for Ramsgate.

ISLINGTON DISPENSARY.—Physician.

KINGSBRIDGE UNION, Devon.—Medical Officer for District No. 13.

LINCOLN UNION.—Medical Officer for District No. 3.

LIVERPOOL BOROUGH PRISON, Walton.—Surgeon: applications, 10th Dec.

LIVERPOOL CANCER AND SKIN HOSPITAL.—Two additional Medical Officers: applications, 8th; appointments, 9th.

LIVERPOOL ROYAL INFIRMARY LUNATIC ASYLUM.—Medical Superintendent: Dec. 6th.

MALE LOCK HOSPITAL.—Dispenser: Dec. 6th.

MODBURY, Devon.—Admiralty Surgeon and Agent for.

NAAS UNION, co. Kildare.—Medical Officer for the Kildare Dispensary District: 7th Dec.

NEATH UNION, Glamorganshire.—Medical Officer for the Glyncoirwg District.

PETERBOROUGH INFIRMARY AND DISPENSARY AND FEVER HOSPITAL.—House-Surgeon.

RADCLIFFE INFIRMARY, Oxford.—House-Surgeon: Dec. 15th.

ROYAL FREE HOSPITAL.—Junior House-Surgeon.

ROYAL KENT DISPENSARY.—Medical Officer for Greenwich.

ST. MARYLEBONE GENERAL DISPENSARY, Welbeck Street.—Physician-Accoucheur.

ST. MATTHEW, Bethnal Green.—Medical Officer for the Workhouse.

ST. PANCRAS AND NORTHERN DISPENSARY.—Resident Medical Officer: vacancy, 25th December.

SELBY UNION, Yorkshire.—Medical Officer for the Cawood District.

SORN, Ayrshire.—Parochial Medical Officer for the North District.

STOURBRIDGE DISPENSARY.—House-Surgeon and Secretary: Dec. 14th.

WEYMOUTH UNION.—Medical Officer for the Weymouth District.

WORCESTER INFIRMARY.—House-Surgeon: applications, 10th Dec.; vacancy, 11th January. Resident Dispenser: applications, 10th Dec.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

HOPE, William, M.B., appointed Physician-Accoucheur to the St. George's Hanover Square Dispensary, *vice* Dr. Lee, resigned.

***RITCHIE, C. Currie, M.D.,** appointed Honorary Physician to the Hulme Dispensary, Hulme.

TILEY, W. G., Esq., appointed, by the Postmaster General, Medical Officer of the Northern District Post Office, *vice* J. G. Winstone, Esq. (appointed in September last), who retires on account of ill health.

BIRTHS.

HERBERT.—On November 25th, at Bradford, Yorkshire, the wife of Henry C. Herbert, M.D., H.M.'s 40th Regiment, of a daughter.

MOORE.—On November 18th, at Wolverhampton, the wife of *R. Bond Moore, L.R.C.P.I., of a son.

PICARD.—On November 25th, at Abbey Road, W., the wife of P. Kirkpatrick Picard, M.D., of a son.

RHODES.—On November 20th, at Weymouth, the wife of Charles Rhodes, M.D., of a son.

WILSON.—On November 22nd, at Cheltenham, the wife of *Edward Wilson, M.B., of a daughter.

WOLFE.—On November 28th, at Glasgow, the wife of *J. R. Wolfe, M.D., of a daughter.

WORLEY.—On November 19th, at 1, New North Road, Hoxton, the wife of *W. C. Worley, L.R.C.P.Lond., of a daughter.

MARRIAGES.

LEESON, Henry B., M.D., F.R.S., of Bonchurch, Isle of Wight, to Maria Jane SQUAREY, of Upper Wimpole Street, London, at Trinity Church, Marylebone, on November 9th.

MALONE, Captain Anthony, R.M.L.I., to Eliza Carter, second daughter of *W. C. HOFFMEISTER, M.D., of Cowes, Isle of Wight, on November 23rd.

DEATHS.

COTTON.—On November 27th, aged 49, Elizabeth, wife of *Richard Payne Cotton, M.D., of Clarges Street, Piccadilly.

FOLLIOTT, James, Esq., Surgeon, aged 34, at Stapeley Cottage, near Nantwich, on November 25th. Friends will please accept this intimation.

LOCKING, John, M.D., formerly of Market Rasen, at Connaught Square, on November 20th.

MCARTHUR.—At Kirn, Dunoon, N.B., on November 20th, Charles Baird, son of C. B. McArthur, Esq., Surgeon, Glasgow.

THE SYME TESTIMONIAL FUND has reached a sum of more than £1000.

THE BURTON-UPON-TRENT INFIRMARY has been opened for the reception of patients.

MANCHESTER ROYAL INFIRMARY.—The surgical and medical clinical prizes for the best reports and commentaries on six surgical and six medical cases have been awarded to Mr. William A. Patchett.

TRANSFORMATIONS OF HYDRATE OF CHLORAL.—M. Personne, in a recent memoir, has shown that hydrate of chloral, when in contact with blood in a living animal, is split up into chloroform and formic acid (as Liebrich believes), which are ultimately converted into chloride of sodium and formicate of soda.—*Chemical News.*

ROYAL MEDICAL SOCIETY OF EDINBURGH.—At a general meeting of this Society, held on November 20th, 1869, the following gentlemen were elected Presidents for the ensuing year: Alexander Bennett, M.B. and C.M., Edinburgh; John N. Fleming, Esq.; David Page, Esq.; Charles E. Underhill, B.A. Cantab.

DONATIONS.—Mr. W. Dalton of Bournemouth, lately of Cheltenham, has presented nearly three hundred volumes of medical and other books to the Cheltenham Permanent Library, and a valuable collection of surgical instruments to Charing Cross Hospital.—An anonymous benefactor last week deposited at the Bank of Messrs. Glyn, Wells, and Co., the sum of £1,000, for the Infirmary for Epilepsy and Paralysis in Charles Street, Portman Square.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.

WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Mr. Haynes Walton, "On Sympathetic Ophthalmitis"; Mr. J. Sampson Gamgee (Birmingham), "On Compound Fracture".—Epidemiological Society, 8 P.M. Dr. Blaxall, R.N., "On the later History of the Outbreak of Fever in Mauritius".—Entomological Society.

TUESDAY.—Ethnological Society of London, 8 P.M. Lieut. S. P. Oliver, R.A., "Report on the Prehistoric Remains in the Channel Islands"; The Rev. W. C. Lukis, "On the Megalithic Monuments of Brittany".—Pathological Society of London, 8 P.M. Dr. Murchison, "Gall-stone impacted in Common Duct"; Mr. Hulke, "Effects of Impacted Calculi"; Mr. Hulke, "Encysted Hydrocele"; Mr. Davy, "Injury to Tendon"; Mr. Davy, "Ruptured Spleen"; Dr. Sutton, "Cyst of Stomach"; Dr. Crisp, "Calculus from Bladder of Dog"; Dr. Crisp, "Diseased Ovaries in Fowl"; Dr. Kelly, "Malformations of Heart"; Dr. Leared, "Cancer of Lung"; Mr. Maunder, "Nerves of Arm divided to Arrest Tetanus"; etc.

WEDNESDAY.—Royal Microscopical Society, 8 P.M. Professor Rymer Jones, F.R.S., "On Deep-sea Dredgings from the Vicinity of China and Japan".—Hunterian Society, 7.30 P.M., Council Meeting. 8 P.M., Dr. Daldy, "On Serious Spinal and Cerebral Symptoms, associated with Imperfect Development of the Cranium."

THURSDAY.—Royal Society.

FRIDAY.—Clinical Society of London, 8 P.M. Mr. Croft, "Case of Tumour removed from the Orbit"; Mr. Cooper Forster, "Cases in which Torsion has been employed"; and other papers.—Royal Astronomical Society.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

THE HOSPITAL FOR WOMEN, SOHO.—"A Member of the Association" has addressed to the JOURNAL a long letter in reply to Dr. Protheroe Smith and Dr. Meadows, and in attempted substantiation of his charges against this Institution. Another member has also written on the same side. Both have enclosed their cards; but neither of them is willing to attach his name to his letter. Under these circumstances, we must decline to publish their communications.

ROYAL COLLEGE OF PHYSICIANS.—In our account of the proceedings of the College of Physicians in last week's JOURNAL, we inadvertently printed the third resolution relating to Professional Examinations, as it stood in the Report laid before the College by the Council. In place of the words "as nearly uniform as possible", it was agreed to substitute "the same", so that the resolution as adopted by the College runs thus: "3. That the course of study required, and the number and nature of the examinations to be undergone, be the same in the three divisions of the kingdom".

ERRATA.—In the description of the operation in Mr. Erichsen's case of removal of the tongue (JOURNAL, November 27th, p. 584), for "running obliquely upwards and outwards... on each side and along the base of the lower jaw", read "running obliquely downwards and outwards... on each side along the base of the lower jaw."—In the report of the Manchester Medical Society, page 587, for "stereopic slit", read "stenopæic slit".

PEDICULI AND SKIN-ERUPTIONS.

SIR,—Your reply to my letter displays ability and fairness that I fully appreciate. You have lodged me cleverly on the horns of a dilemma from which I have no escape. I must, as you justly put it to me, take up one of two positions. I must either mean to say that lice are a "frequent cause" of prurigo—in which assertion, as you truly point out, others have preceded me, and so my claim to novelty falls; or I must "claim to have discovered not that lice are a common cause of prurigo, but, that they are the one sole and invariable cause of all forms of that malady"—in which case, you allow that my claim to originality is just, and you significantly add "that it will not be contested by any dermatologist." I must, in short, claim to have advanced either what is true but not new, or else what is new but scarcely likely to be true. I confess that this is my only alternative, and I have no desire to avoid it. You could not have more accurately defined my pretensions than by

saying "that I claim to have discovered that lice are the one sole and invariable cause of all forms of prurigo."

In my former letter I confined myself strictly to the point then in question, viz., whether, in the matter of prurigo, I had or had not been an advocate of Professor Hebra's views. But, in my anxiety to be as brief as possible, I have failed, as it seems, to explain clearly what my own views are. I can do this in a few words on the basis of the plates in Hebra's Atlas, to which you have referred me; but it will be convenient that I should first amplify your very brief definition of my doctrine, for, in the form you put it, everything depends on what is meant by the word prurigo.

Hebra, you say, when he speaks of what is "popularly known as prurigo senilis", uses some "less conventional name", and the disease which he *does* call prurigo "is believed by him to be totally distinct from the so-called prurigo senilis." I cannot quite agree with you here. But, however that may be, I beg to say on my own behalf that, when I speak of prurigo, I mean what is commonly known as prurigo, and by the words prurigo senilis I mean nothing more than ordinary prurigo, occurring in old people. The only matter in which I depart from established custom in defining prurigo is, that I do not include the so-called local forms of prurigo (for example P. podicis, etc.) which I think are quite distinct in almost every possible way from general prurigo, and which would be more correctly named pruritus podicis, etc.

The only difference that exists between prurigo senilis and any other form of general prurigo, is that which is well expressed by one of the authorities (Rayer), to whom you have referred me. I will quote his words:—"Dans la vieillesse (prurigo senilis, Willan) l'éruption papuleuse du prurigo est ordinairement plus considérable qu'à tout autre âge. Aussi la peau offre-t-elle un grand nombre d'égratignures et une desquamation furfuracée abondante. La démangeaison est insupportable et plus permanente que dans le prurigo formicans, dont les symptômes extérieurs sont cependant les mêmes."

You may ask me perhaps, "Where precisely do I draw my line around what I style prurigo?" What proportion exactly of skin-disease cases am I to be understood as attributing to the presence of body-lice? I may say that I mean, by the term prurigo what others mean; but then do I include a good deal less, or, possibly considerably more, than is ordinarily included by the name? To this I should reply (if I may borrow dermatological terms) by saying that the disease has so abrupt a margin, so definitely circumscribed an area, that its limits are obvious. The leading symptom of prurigo, namely the terrible itching, so far exceeds in intensity the itching of any other disease, that it can scarcely ever be a matter of discussion as to what is and what is not to be considered as prurigo. This test, however, may be easily cavilled at. It may be said: "While some patients are so querulous and others so phlegmatic, how then can the disease be diagnosed by the intensity of the sensations complained of?" The answer to this is, that the disease invariably writes down on the patient's skin, with the precision of a clinical thermometer, the exact degree of itching that he suffers from. We can judge, by the extent of injury that the patient is willing to inflict upon himself for the sake of gaining a momentary respite from his torments, very accurately of the degree in which he is tormented. Now, as the leading subjective symptom of prurigo is terrible itching, so its leading objective symptom is the deep marks of the furious scratching, which that itching provokes. In no other disease do we find any approach to the intensity of the itching, or to the reckless style of the scratch-marks of prurigo. Neither of these symptoms, as they present themselves in a case of prurigo, even of prurigo mitis, is ever fairly rivalled even by the severest case of lichen, scabies, eczema, or pruritus.

You have referred me to the "chapters of Daniel Turner on phthiriasis", which you say "prove that the older surgeons knew well enough that lice are the frequent cause of intolerable itching of the skin (prurigo)." I accordingly open Turner's book, as chance will have it, at the page where he confides to his readers the valuable secret of Sir Theodore Mayern's "Prescription to take away the Wrinkles of the Queen's Belly after Childbirth"; the insertion of this instructive formula shews very forcibly that Turner in his *Treatise on Diseases of the Skin* aimed at being exhaustive, and yet I find in his book no mention of anything at all corresponding to prurigo, either under that name or any other. In his chapter on the "Lousy evil," he refers indeed to body-lice, which, he says "are those found upon the foul Clothes, either Linen or Woolen, of common Beggars, Jail-Birds, and others, suffering themselves to be eaten up, as we say, with nastiness." Further on, he proceeds: "This Lousy evil, by the Greeks termed *Φθειρίασις* etc.," but he is evidently quite unconscious that the "lousy evil" consisted of anything more than the mere presence of lice on the clothes, unless we are to take into account his statement that "It is recorded by Authors, both antient and modern, that diverse Persons have come to their ends being devoured of Lice." If the older surgeons knew very well that lice are the frequent cause of prurigo, Turner appears to keep their secret remarkably well.

I turn next, as you direct me, to Rayer's Atlas. I find, indeed, as you say, that "Rayer has actually delineated a louse by the side of his portrait of prurigo." But now let me quote from his text accompanying these portraits: "Quelques pathologistes pensent que l'état de la peau dans le prurigo senilis est favorable à la production et à la propagation des pediculi corporis. Enfin Willan prétend avoir observé dans un cas de prurigo un insect particulier, mais la description qu'il en donne est inexacte et incomplète"; further on he says "le prurigo n'est pas contagieux." From this it is clear that he only introduced the louse in deference to the prejudices of Willan, whose opinion he respected. He says "Willan a publié une bonne description du prurigo", as indeed, he most undoubtedly has.

Willan's mistake in supposing that prurigo senilis was the cause, instead of the effect of the presence of body-lice, finds a hesitating support in the written opinion of one of the most able and advanced of the cultivators of cutaneous pathology in the present day, M. Hardy, says (Deuxième partie, p. 86) "Chez les vieillards, où la fréquence du prurigo a fait admettre une variété sous le nom de prurigo senilis, absence de poux est fort rare dans une éruption prurigineuse, et de même, la présence de poux entraîne toujours chez eux du prurigo, de sorte qu'on ne sait réellement alors si ce sont les poux qui engendrent le prurigo, ou si c'est le prurigo qui attire les poux."

Here M. Hardy, in his mere statement of the facts, comes nearer to the truth than any other author that I have ever studied; but his explanation of them, if I may call it so, is a mere mystification. Indeed, he expressly declines to give any opinion about the matter, and professes that he feels quite unable to afford one. Nevertheless, he is far ahead of Professor Hebra in his progress towards the truth.

If I am to be styled a disciple of any one in respect of my views of prurigo, let me be called a disciple of Hardy, rather than of Hebra. But I am far from agreeing with Hardy, for I most strenuously assert, not only that body-lice are the invariable and sole cause of general prurigo in all its described varieties, but

that each of the various symptoms, subjective and objective, of this disease, can be directly traced to, and satisfactorily accounted for by, the presence of the lice on the skin; for example, the sensation of formication to their crawling over the skin; that of needles being thrust into the skin, to their bite; the broad flat white papules, I maintain, are the analogue of gnat-bites, and so on.

You say that you have been assured that the connection between prurigo and lice was long ago a common doctrine at University College. Permit me, as an old student of that school, to assure you that, except in so far as that doctrine was expounded by Willan, as referred to in the passage from Rayer that I have quoted, it was first taught there by myself. The late Dr. Hillier, who at the time had charge of the cases of skin-disease there, kindly permitted me, several years since, to make use of his cases in conducting my investigations, and it was solely in consequence of the demonstrations that I made to him, that he became a teacher of the doctrine to which you refer.

On referring to the plates of Hebra, to which you have directed my attention, I find that he has several excellent plates of prurigo, which he has labelled prurigo, he has other equally excellent plates of body-lice disease, which he has labelled body-lice disease. My only wonder is that so shrewd an observer should have failed to learn even from his own plates that prurigo and body-lice disease are convertible terms, in place of being, as he thinks, distinctive names for two widely different diseases.

In speaking of prurigo as being invariably caused by lice, I must not be understood as denying the existence of idiopathic general pruritus, which is perfectly distinct from prurigo, and by no means associated, as prurigo generally is, with "poverty, hunger and dirt." I have now under observation a case of this, the patient's condition is altogether the reverse of the condition most favourable to the production of prurigo. He is young, his physique is perfect, (he has rowed stroke in one of the Oxford and Cambridge boat-races) he has lived in luxury all his days. The skin of a person affected with idiopathic general pruritus, presents a very different appearance from that of the skin of a sufferer from prurigo. The difference is almost as great as that produced in the appearance of the skin by the operation of wet cupping.

Now that I have, as I trust, clearly explained my views, I hope for a criticism of them from the able pen of Mr. Hutchinson. I am, etc.

9, Weymouth Street, W., November 16th, 1869.

BALMANNO SQUIRE.

Mr. Squire's letter supplies, for the most part, its own comment. If we admit that the term "prurigo senilis" is to be defined to mean "the intolerable itching caused by lice", then we may also admit that lice are the invariable cause of prurigo senilis. The apparent difference of opinion is, to a large extent, merely one as to the use of words. Mr. Squire admits that Daniel Turner wrote a chapter on the "Lousy-evil", but because he did not employ the term prurigo senilis discredits his knowledge as to the irritation attending the presence of lice. Surely the name prurigo senilis is not essential. "A rose by any other name, etc." It is the same with Professor Hebra who, although perfectly familiar, as his portraits abundantly prove, with the facts, prefers, and we think very judiciously, not to use the term "prurigo senilis" in connection with these cases. We believe that no one who has visited Hebra's clinique any time during the last twenty years can doubt that a doctrine closely similar to that advocated by Mr. Squire has been there taught. We do not hint that Mr. Squire borrowed his opinions from Hebra, but it is our duty as honest critics to assign priority where we believe it really belongs.

G. H.—The result of the examinations for the Fellowship of the College of Surgeons, which terminated on Friday last, cannot be published until confirmed at the next meeting of the Council; but we have heard that all the candidates were successful.

We are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Nov. 24th; The New York Medical Gazette, Nov. 13th; The Parochial Critic, Nov. 24th; The New York Medical Record, Nov. 15th; The Boston Medical and Surgical Journal, Nov. 11th; The Madras Mail, Sept. 22nd; The Indian Medical Gazette, Oct. 25th; The Northern Daily Express, Nov. 15th; The Northampton Mercury, Nov. 20th; The Islington Gazette, Nov. 23rd; The Yarmouth Independent, Nov. 20th; The Sunday Times, Nov. 21st; Saunders's News-Letter, Nov. 22nd; Nature, Nov. 25th; The Preston Guardian Supplement, Dec. 4th.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. E. Newbold, Macclesfield; Mr. Alfred Cooper, London; Mr. Harry Leach, London; An M.D.; Mr. G. Rigden, Canterbury; Dr. Wm. Newman, Stamford; The Assistant Secretary of the Royal Microscopical Society of London; Mr. H. N. Edwards, Shrewsbury; Mr. J. H. Hiron, Birmingham; J. T. B.; Mr. F. W. Wright, Derby; Mr. Rodgers, London; Medicus; F.R.C.S.; Viator; Dr. Leet, Dublin; Mr. C. T. Thomas, Macclesfield; Mr. R. T. Smith, University College Hospital; S. L. H.; Mr. F. Gull, Ipswich; Dr. J. Hardie, Manchester; Dr. J. Williams, Swansea; Dr. Manley, Manchester; Dr. A. Wiltshire, London; An Irish Surgeon; Dr. Bent, Bridgwater; Dr. Felce, London; Dr. Wolfe, Glasgow; The Secretary of the Medical Club; Dr. A. B. Steele, Liverpool; Dr. Wickham Legg, London; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. C. J. B. Williams, London; Mr. Joseph Lister, Edinburgh; Dr. Jas. Russell, Birmingham; Dr. Protheroe Smith, London; Dr. Leslie, Birmingham; Mr. J. D. Lawrie, Bradford; Dr. H. C. Andrews, London; Mr. Green, London; Dr. J. Brunton, London; Dr. C. Drysdale, London; Dr. F. J. Brown, Rochester; A Practitioner of Twenty-five Years' Standing; Mr. J. A. McBride, Cirencester; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Treutler, Kew; The Registrar of the Medical Society of London; Mr. Eyton Jones, Wrexham; The General Manager of the British Imperial Insurance Corporation (Limited), Manchester; Dr. Mac Cormac, Dublin; Dr. Swete, Weston-super-Mare; Mr. A. Fleischmann, Cheltenham; Dr. Mapother, Dublin; Mr. W. Howitt, Lancaster; Mr. T. Pridgin Teale, Leeds; Dr. Heywood Smith, London; Messrs. Letts, Son, and Co., London; Mr. J. Harday, West Haddon; Dr. P. Best, Eastgate; The Hon. Sec. of the Royal Medical and Chirurgical Society; Mr. T. Watkin Williams, Birmingham; Mr. J. Williams, Brecknock; Dr. F. H. Parsons, Barking; The Hon. Sec. of the Ethnological Society of London; Mr. J. A. McBride, Cirencester; Mr. S. Jones, London; Dr. Reed, Manchester; etc.

Results of Meteorological Observations, for the week ending Saturday, November 27th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.							Mean amount of Clouds (0-10). Mean amount of Ozone (0-10).		WIND.											RAIN.		
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.			Number of days it blew in certain directions.											Mean Force 0-12.	Number of days it fell.	Amount in inches.
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm, etc.					
BATH Dr. Barter, F.M.S.	29.679	1.053	40.2	40.0	39.8	98	55.0	27.0	28.0	47.3	33.6	80.0	..	6.6	6.0	0.3	..	..	..	..	1	1	..	4.7	3.5*	4	1.70
BOURNEMOUTH Dr. Compton, F.M.S.	29.705	1.100	41.1	40.3	39.3	93	55.2	29.2	26.0	48.2	34.1	66.0	25.3	5.0	1.5	1	..	..	..	..	..	3.7	1	1.3	1.3	5	0.93
DOVER Dr. Parsons.	29.705	1.016	43.2	41.8	40.1	89	51.6	22.6	29.0	46.0	29.4	..	..	6.7	..	0.3	0.3	..	..	0.7	2.3	1.7	1.7	..	3.6	4	0.37
DUBLIN Dr. J. W. Moore.	29.651	0.922	42.0	40.7	39.1	90	51.8	28.7	23.1	45.5	36.6	..	23.9	5.9	..	0.3	..	..	0.3	0.3	1	2.8	1.6	0.7	2.6	4	0.37
KEW Dr. Treutler, F.L.S., etc.	29.722	0.981	41.4	40.6	39.6	94	50.2	28.1	22.1	45.1	35.7	79.7	22.0	6.6	1.1	0.7	0.3	..	0.3	..	2	1.7	1.7	0.7	1.7	2	1.19		
LLANDUDNO Drs. Nicol and Dalton.	29.600	0.974	43.7	41.6	39.1	84	51.9	35.0	16.9	47.4	39.9	..	..	7.1	..	..	2	0.3	..	..	0.3	4.3	..	..	1.8	6	0.56
MALVERN Messrs. W. and J. Burrow.	29.664	1.020	40.7	39.2	37.3	88	50.0	29.3	20.7	46.4	36.8	86.5	20.2	6.3	4.3	..	..	..	..	..	0.7	2.3	2.3	1.7	3.2*	3	1.11
NORWICH (BETHEL STREET) C. M. Gibson, Esq.	29.663	0.958	40.1	39.3	38.3	93	48.0	30.0	18.0	44.3	35.1	..	28.8	..	8	..	..	..	2	..	2	0.3	2.7	..	6.5*	4	0.70
SCARBOROUGH Dr. Fox, M.R.C.P.	29.599	0.889	39.0	37.0	34.4	84	47.5	29.7	17.8	44.2	34.5	81.9	25.0	6.4	3.5	..	0.3	1	0.3	..	1.3	2.3	0.7	1	4	3	0.78		
SIDMOUTH Dr. Mackenzie, F.M.S.	29.722	1.098	43.6	42.1	40.3	88	59.0	28.8	30.2	49.9	33.7	..	..	4.6	5	3	..	..	..	..	..	2	2	..	0.3	4	0.78
VENTNOR, I. OF WIGHT J. B. Martin, Esq., M.R.C.S.E.	29.707	1.004	44.3	42.4	40.1	85	54.2	33.2	21.0	48.0	37.9	..	..	5.3	6	2	0.7	..	..	..	0.3	2.3	1.7	..	3.9	5	1.11
WORTHING W. J. Harris, Esq., M.R.C.S.E.	29.698	1.110	43.1	41.7	40.0	89	54.7	29.7	25.0	47.9	36.3	71.0	22.1	7.4	?	1.3	..	..	..	..	1	1.3	0.3	3	1.3	4	1.52

* Mean hourly velocity in miles.

REMARKS.—Atmospheric pressure underwent a very considerable and rapid diminution on the first two days of the week, which amounted at almost all stations to one inch, and which represented the entire range of the barometer during the week; from this depression the barometer never quite recovered, so that its mean height for the week is on an average half an inch or more above that of the week before. Mean temperature has decreased again, and the range has been about the same as the week before. The degree of humidity still continues high. Winds have been somewhat variable, the prevalent direction has been W., but S.W. and N. winds have not been wanting. Their force has on the whole been moderate; and it is noteworthy that the great and rapid fall of the barometer which occurred in the beginning of the week was unaccompanied by any gale of any strength throughout the country. The amount of clouds has been greater, and rain has fallen at all stations. The amount of ozone is variable;—greater at some stations and less at others. The weather of the week has been generally damp and foggy, with short glimpses of bright sunshine. On the 27th rain appears to have fallen all day without intermission at nearly all stations. The general health is excellent. Scarlatina has almost disappeared at Worthing.

Kew, December 1st, 1869.

W. J. TREUTLER.

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REPORT OF THE DIRECTORS,

PRESENTED AT THE 45TH ANNUAL GENERAL MEETING, HELD AT THE SOCIETY'S OFFICE,

FRIDAY, NOVEMBER 26TH, 1869.

THE Directors have to report that during the year ending June 30th, 1869, there were issued 478 Policies, assuring £270,025, and yielding in Annual Premiums £9,272; that £148,630 were paid under claims by death; that the total Revenue was raised to £227,880, being an increase of over £8,000; and that £50,208 were added as Surplus Income to the Accumulated Fund, which was thereby augmented to £1,649,114.

Three years of the present Quinquennium having now elapsed, it may not be inopportune to note the fact that in all the elements of successful progress these years bear a favourable comparison with those corresponding to them in the previous period. On the one hand, the new business has been greater, the Revenue has increased in an augmented ratio, the additions to the Assurance Fund, amounting in the aggregate to £174,043, have been larger, both absolutely and relatively to the receipts, and the Investments have been made to yield a higher rate of interest. On the other hand, both the death-claims, relatively to the amount assured, and the expenditure, proportionately to the income, have been sensibly less.

These facts are conclusive as to the profitable working of the Society. A word or two on the subject of its security may be permitted at a time of not unnatural uneasiness as to the position of Assurance Institutions. Above and before all things, the Directors have ever kept in view for themselves, and endeavoured to impress on others, that security, absolute and unquestionable, is the one consideration to which all others should be subordinated; and in reference to this Society, they have at all times given to the public the amplest materials for forming a clear and correct judgment on that point.

[CONTINUED.]

REMARKS

ON

THE TREATMENT OF CHRONIC UTERINE CATARRH.*

BY W. S. PLAYFAIR, M.D., M.R.C.P.,

Assistant Obstetric Physician to King's College Hospital, and Physician to the Evelina Hospital for Sick Children.

AMONG morbid conditions of the uterus, there are few or none which give rise to so much distress, and prove so little amenable to the methods of treatment generally employed, as that which is variously described by writers on gynaecology by some such name as chronic uterine catarrh, uterine leucorrhœa, chronic endometritis, and the like.

Commencing often insidiously with symptoms which at first do not give rise to much suffering, the patients are apt to postpone the disagreeable necessity of putting themselves under a course of treatment involving local examinations from which women naturally shrink. Even when the symptoms become more marked, effective treatment is seldom adopted sufficiently early, patient and practitioner too often contenting themselves with general measures which are of comparatively little use.

Soon, the whole train of phenomena so common in old standing uterine disease become established, such as pain in the body and back, profuse and irregular menstruation, abundant and intractable leucorrhœal discharge, reflex disorders of various distant organs, and eventually serious derangement of the general health. When the sufferings of the patient compel her to submit to local treatment, it too often happens that but little benefit is obtained; and, in the worst forms of the disease, months or years are passed in fruitless endeavours at cure; one doctor after another is consulted in vain; until at last she resigns herself to being a confirmed and hopeless invalid.

This may perhaps be considered an overdrawn picture; and undoubtedly it is only in long neglected and severe forms of the malady that some benefit is not derived from the ordinary methods of treatment adopted, such as rest, occasional leeching, the use of sedatives, vaginal injections, the application of various substances to superficial erosions of the cervix. The experience of all who see much of female disease will remind them, however, of numerous instances in which the improvement has been only temporary, and in which the symptoms have invariably recurred when the patient returned to her ordinary mode of life. There can be no higher authority on such a point than Scanzoni, who says, with regard to it, "We may esteem ourselves fortunate if we can but moderate somewhat the hypersecretion of the mucous membrane, and moderate its consequences. As for ourselves, we do not remember a single case where we have been able completely to cure an abundant uterine leucorrhœa of several years' standing. Many women, whom we have been called upon to treat, had to attribute to a neglect of the disease a bodily and mental debility which they would keep for the rest of their days, or hysterical attacks which deprived them of all enjoyment of life." (*Scanzoni's Diseases of the Sexual Organs of Women*, translated by A. K. Gardner, M.D., p. 202.)

It can scarcely be said that the want of success in treating old standing cases of this kind is the result of ignorance of the nature or seat of the disease. Of late years, so much attention has been paid to morbid conditions of the uterus, that we are able to speak with more confidence than formerly as to the state of the parts concerned. No doubt, all uterine pathologists are not agreed as to the exact morbid alterations. There are those who believe with Dr. Henry Bennet, that the chief seat of the disease is in the cervix itself; and that it consists either in inflammation of its exterior, or of the lining of its cavity; and who contend that, generally speaking, the interior of the uterus is little, if at all, implicated. There are others, prominent among whom in this country may be mentioned Dr. West, who maintain that the lining membrane of the body of the uterus is itself at fault, as well as that of the cervix—an opinion that is shared by a large majority of the best and most recent writers, such as Scanzoni, Courty, Thomas, Graily Hewitt, and others, and one that is rapidly gaining ground.

While accurate views of the seat of disease in these aggravated forms of the complaint are taught in our standard works, it is undoubtedly the case that English writers seem to deprecate any persistent endeavours at treatment by such local applications as they would undoubtedly employ, were they dealing with similar conditions of the mucous

membrane in other and more readily accessible parts of the body. Thus Dr. West refers to only one such mode of treatment—that of intra-uterine injections, the use of which he unqualifiedly condemns. Dr. Graily Hewitt, in whose elaborate work we have a complete *résumé* of the most recent English opinion, thus writes: "Whether topical applications, caustics, etc., may have a good effect in curing this very troublesome affection, remains to be seen. On the whole, I believe that the best treatment of disordered conditions of the uterus consists in the application of those remedies having an action on the whole organ, which have been already described; and that, when local treatment is necessary, it may be, unless in some very rare and exceptional cases, limited to the application of remedies to the os and cervix uteri, douches, lotions, caustics, etc."

On the Continent and in America, intrauterine treatment in obstinate cases, either by injections or by some means by which the disadvantages of such injections are sought to be obviated, is much more frequently and systematically used.

It is because I believe that, in neglecting such means, we deprive ourselves of the benefits to be derived from one of the most valuable—I may say *the* most valuable of the curative agents at our disposal, that I have written these observations.

Before proceeding farther, and discussing the methods by which such applications are to be made, and the cases suitable for their use, I would wish to guard myself from a possible misconception. I wish strongly to insist that I do not recommend them indiscriminately in all cases of uterine catarrh, but only in those obstinate and long-standing cases of disease which either resist other treatment, or in which it seems probable that such a plan may assist in effecting a more speedy cure. But more particularly I would wish not to be considered as taking too one-sided a view of their management. No one can lay greater stress on general and constitutional treatment in uterine disease than I do. By all means, let us do our very best to improve the general health of our patients by proper diet, regimen, and such a medicinal course as in the special case may seem advisable. Other local remedies, such as rest, leeching, vaginal douches, and the like, I consider of the greatest importance, when properly selected and applied. It is only in addition to, or as supplementary to these, that I advocate a method of treatment which I believe to have been too much neglected in this country.

It is of importance, in considering this subject, to bear in mind the pathological alterations which exist in the mucous membrane lining both the cervical canal and the cavity of the uterus. There can be no doubt that, when a profuse muco-purulent discharge issues from the os uteri, there must be a morbid condition of the interior lining membrane. Whether the discharge comes from the cavity of the uterus strictly so called, or from the elaborate glandular apparatus lining the cervical canal, is a question which has been hotly contested, and which seems to me to be of secondary practical importance. My reason for saying this is, that, in any attempts to apply our remedies to parts beyond the os uteri, either by intrauterine injections or other means, it is impossible to limit the application strictly to one or other portion. It is on the whole mucous membrane that our remedies act; and, indeed, the probability is, that the entire mucous lining is implicated in the more aggravated forms of the disease. The real error that is generally committed, is limiting our treatment to the superficial erosions or ulcerations that exist around the os and on the exterior of the cervix. No doubt, these form an important part of the malady; and, from the facility with which they are inspected by means of the speculum, one can understand why they have acquired an undue prominence in the eyes of practitioners. But the disease is more deeply seated. The inflammatory condition of the mucous membrane, which has given rise to destruction of the epithelium and to hypertrophy of the subjacent papillæ on the exterior of the cervix, extends up the cervical canal, and, by continuity of structure, even as far as the fundus; so that the lining membrane of the entire uterus undergoes profound alterations. Nor are the changes limited to the mucous membrane. The underlying tissues are necessarily implicated. The cavity of the uterus and cervix become enlarged and patulous (an important point with reference to treatment), and engorgement and hypertrophy from plastic effusion are seldom absent. Hence the well known alterations which so constantly accompany obstinate cases of uterine catarrh, such as thickening, induration, and enlargement, both of the cervix and body of the uterus, and a patulous condition of the os, through which a sound can be passed with facility.

If, then, in attempting the cure of such a case, we deal only with those lesions which are more readily accessible, if we content ourselves with general hygienic means and the cure of superficial erosions, we shall probably produce considerable amelioration of the patient's sufferings, but we shall fail to effect a lasting cure. By rest, occasional leechings, and the more ordinary topical remedies, the weight and bearing down will be greatly relieved, and the discharge temporarily diminished; but, as

* Read before the Midwifery Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

soon as the patient returns to her ordinary avocations, all her old troubles will come back. As long as there is any considerable amount of muco-pus issuing from the os uteri, there must be a morbid condition of the structures beyond the os; and no case can be considered cured until this has completely stopped. To do this, as I contend, the disease must be attacked at its seat; and the question for us to consider is, how this may be most effectually and easily accomplished.

The means by which this has been generally attempted is by the injection of fluids, such as we would apply to external erosions, into the interior of the uterine cavity. No doubt, by this means a powerful influence can be exerted on the uterine mucous membrane; but, although such injections have found many zealous supporters, they have always been regarded with suspicion by the majority of the profession, for fear of the serious consequences which have been occasionally attributed to them. Dr. West objects to them on two grounds—the fear of exciting active uterine inflammation, a fear which he himself believes to be over-rated; and the risk of the escape of some of the fluid through the Fallopian tubes into the peritoneum, and of consequent peritonitis. Either of these objections, if valid, would of course be fatal; but it is very doubtful if they are of much importance. The former would apply equally to the introduction of any powerful agent into the uterine cavity, by whatever means this was done; but the experience of all who have practised this method of treatment goes to show that this fear is groundless. At first, no doubt, the application of any caustic to the interior of the uterus appears to be a somewhat formidable procedure; but, on reflection, there seems to be no reason why agents which act beneficially on those parts of the uterine mucous membrane external to the os should not have an equally good effect on the more deeply seated parts of the same membrane. But this is a question that can be settled far more satisfactorily by practical experience than by *à priori* reasoning; and we have the united testimony in favour of the practice of a number of physicians whose veracity is unimpeachable, and who are constantly in the habit of passing even powerful caustics into the cavity of the uterus, without ever witnessing any untoward results. Thus, in France, intrauterine cauterisation is, or has been, practised by such men as Recamier, Maisonneuve, Ricord, Velpeau, Trousseau, Nonat, Avard, Courty; in Germany, an equally large list of names might be mentioned; while in America the treatment receives the sanction of some of the most distinguished practitioners; and, in the most recent works on female diseases published in that country, such as those by Thomas and Byford, it is strongly advocated. All sorts of remedies have been used, including a strong solution of nitrate of silver, or the same in substance, tincture of iodine, acid nitrate of mercury, etc. Courty, the author of one of the latest and best works on female diseases, is in the habit of introducing into the interior of the uterus a piece of solid lunar caustic, which he leaves to melt and gradually run over its lining membrane. Nor does he seem to have ever met with any bad results from this apparently heroic practice. It is evident, therefore, that the fear of intrauterine applications setting up severe inflammation need not deter us from the practice. The danger of injected fluids passing through the Fallopian tubes into the peritoneal cavity seems also to be exaggerated. In 1840, Vidal de Cassis made an elaborate series of experiments on the dead body in reference to this point, which have been recently carefully repeated by Hennig of Leipsic. The result is to show that, even when the cervix is tightly tied round the nozzle of the syringe, and excessive force is used in injecting, the fluid does not pass along the oviducts, although it may enter the blood-vessels. In every instance in which the os was left open, the injected liquid flowed back through it, and never entered the peritoneal cavity.

There can be no question, however, that very unpleasant, if not dangerous, symptoms are apt to follow the use of intrauterine injections. These are chiefly intense uterine colics, with fainting and severe nervous disturbance. These phenomena have been witnessed and described by a large number of observers. Thus Courty, himself a strong advocate of intrauterine treatment, tells us that he has seen such distressing results follow the use of injections, that he discountenances them entirely. The probability is, that the colics are the consequence of the injection of too large a quantity of fluid; the body of the uterus becoming distended, and contracting on its contents. It is, therefore, the amount of the injection, and not its nature, that is at fault; and, if we were to take the precaution of using a very small quantity of fluid, or of dilating the cervix by a laminaria tent previous to the injection, all unpleasant results might be avoided.

Personally, I do not feel qualified to speak on the subject. I have used intrauterine injections in a few cases, but in too few to speak with confidence as to their effects; and in these I have taken care to see that the os was unusually patulous, and I have injected a very minute quantity of fluid. One objection to them is, that the excess of fluid is apt to

run out of the os on to the vaginal walls, where the application is not wanted, and where it may produce considerable pain. I believe, too, that their good effects can be obtained quite as effectually, and far more safely, by other means.

What we require is, that our remedy, whatever it may be, should be evenly applied to the whole of the intrauterine surface; and any amount of fluid in excess of this is clearly superfluous. For these reasons, I am inclined to think that this method of treatment should not be resorted to under ordinary circumstances.

Several other modes of intrauterine cauterisation have been practised. Thus various *porte-caustiques* have been invented, by which solid nitrate of silver is introduced. The objection to all such instruments is their size and clumsiness, and the consequent risk of their irritating the uterus unduly in their passage.

The use of medicated tents, in which various substances, such as iodine, chromic acid, etc., are incorporated, has been especially advocated by Professor Thomas of New York. These are introduced into the uterine cavity, and allowed to remain several hours, during which their active ingredients are in contact with the uterine mucous membrane. Of this plan I have no practical experience; but it seems to me that there are grave objections to leaving a foreign body so long in the interior of the uterus, and repeating the application as often as once a week. It is only fair to say, however, that the elastic dilating pressure of sponge-tents has been strongly recommended by Dr. Emmett and others as of itself one of the most efficient means of diminishing hypertrophied conditions of the cervix, and of curing granular erosions of its surface and cavity.

The plan which I have myself invariably employed is much more simple in its mode of application, and answers every purpose. I use several small probes, made of flexible metal, attached to a wooden handle,* or fine probes of flexible whalebone. Round these I wrap a thin film of cotton-wool, which, by a little practice, can be so arranged as not materially to increase the bulk of the probe. Having ascertained by examination the position of the uterus as accurately as possible, I pass an ordinary speculum. The peculiar glairy and tenacious mucus, which is characteristic in these cases, will probably be seen issuing from the os; and, before making any alternative application to the more deeply seated parts, it is necessary that this should be wiped away. Were we to introduce our remedies without doing this, we would probably fail to touch the diseased mucous membrane, which is covered and protected by the abundant discharge. For this purpose, therefore, I first introduce one of the probes, bent as nearly as possible to the direction of the uterus, covered with cotton as described, and swab out the cavity of the cervix and uterus as completely as I can. A fresh probe, the cotton on which is saturated with the fluid which we wish to use, is then introduced; and, on being gently moved about, our remedy is applied smoothly and evenly, but not in excess, to every part of the mucous membrane. As a rule, there is no difficulty experienced in passing the instrument. As I have already observed, it is one of the peculiarities of these cases, that the whole of the cervical canal is in an enlarged and patulous state. The consequence is, that our probes, which should be as little bulky as possible, enter without the least difficulty, and without the employment of any force or roughness, which is to be scrupulously avoided. It is, indeed, curious to observe how, as the case improves under treatment, the patulous state of the cervical canal diminishes, and more and more difficulty is experienced in passing the instrument; and I have learnt to look upon this as one of the most reliable signs of improvement.

Dr. Thomas recommends the use of a tangle-tent before making any intrauterine applications. This I cannot but consider as objectionable, not only as rendering the treatment much more complicated and difficult, but as being in itself likely to provoke considerable irritation; and I believe it to be unnecessary in the large majority of cases requiring intrauterine applications. Still it occasionally happens that there is a profuse muco-purulent discharge, without any external erosion, and without a patulous condition of the os. In such cases, it would be impossible to make any topical application without previously opening the cervix.

Various remedies have been used for the purpose—the same, indeed, as are applied to external erosions on the cervix; such as a strong solution of nitrate of silver, tincture of iodine, or even the acid nitrate of mercury, each of which has its advocates. The two former I have myself frequently employed; but for a considerable time I have used one application only, which has given me the best results, and which I believe to be infinitely superior to all others. This is carbolic acid, which I use nearly concentrated, just sufficient water being added to the pure crystalline acid as will keep it in a fluid state—*i. e.*, about 20

* These may be had of Matthews, Portugal Street, Lincoln's Inn Fields.

parts in 100. It would be difficult to exaggerate the good effects of this application in the treatment of uterine disease. When applied to superficial granular erosions on the cervix, it often heals them in a marvellously short space of time; one or two applications sometimes effecting a cure. In a recent paper by Dr. Lloyd Roberts of Manchester, published in the *Practitioner*, its value is dwelt upon; and I can fully corroborate what he says upon this point. It is also much used by my colleague Dr. Priestley. For application to the interior of the uterine cavity, it has some special advantages. Neumann of Vienna has pointed out that, when applied in a concentrated form, it causes the tissues to shrink and mummify, but that they do not swell; nor does it seem to produce an eschar, as do the stronger caustics, such as potassa fusa, acid nitrate of mercury, and even nitrate of silver. We can thus use it freely, without fear of inducing contraction of the cervical canal—a result which has occasionally followed the use of other agents. Nor does it give rise to pain. I have occasionally heard patients complain of a sense of discomfort for a time, which was probably due to the passage of the probe. As a matter of precaution, I always recommend patients to remain in bed or on the sofa for the rest of the day on which it has been used. In obstinate cases, I use it once a week, applying it freely not only to the interior of the cervical and uterine cavity, but also over any superficial erosions that may exist. The latter always soon begin to heal and skin over; but the true uterine catarrh generally requires a somewhat protracted treatment. I can say, however, with regard to this plan, what Courty also says with regard to his own favourite treatment of leaving a piece of solid nitrate of silver within the uterine cavity—that I have not yet met with a case of uterine leucorrhœa, even though of many years' standing, which has not either been entirely cured or very greatly ameliorated. Nor have I ever seen any bad consequences follow a plan which some may be inclined to consider hazardous. That it requires some caution in its application, I not only willingly admit, but even insist on. If forcible attempts be made to pass any instrument through the os uteri, especially if the operator is not accustomed to uterine manipulations, very unpleasant consequences are likely enough to follow. But, if due gentleness be used, and the cases be properly selected, I believe the treatment to be perfectly safe.

When the uterus itself, or the cervix, is enlarged and hypertrophied, which is very frequently the case when the disease is of old standing, much benefit is to be obtained from the use of pledgets of iodised cotton, placed next the cervix through the speculum, and maintained in position by another pledget of cotton soaked in glycerine. This I use, when necessary, in conjunction with carbolic acid; and in this way even considerable thickening and hypertrophy is rapidly absorbed. In one or two cases, in which there has been an excessive amount of granular erosion on the exterior of the cervix—the hypertrophied papillæ projecting in a fungous or cockscomb-like growth—I have derived much advantage, and considerably hastened the cure, by making a few superficial incisions before applying the carbolic acid. This is the plan advocated by Huguier in his *Lectures on Uterine Catarrh*, and approved by West; and, although seldom necessary, it does undoubtedly prove of occasional service. It acts by allowing the caustic to reach the deeper seated follicles, which might otherwise escape its influence.

My object has been to advocate the systematic use of a method of treatment too much neglected in this country, and regarded with unfounded dread; and my end will have been fully attained, if I induce any member of this Association to try a plan which will, I feel convinced, give them material aid in dealing with some of the most obstinate cases that come under our observation.

ON ATROPHY INDUCED BY CICATRIX, AND ITS SURGICAL VALUE.

By T. PRIDGIN TEALE, M.A., F.R.C.S., Leeds.

IN the following paper I propose to link together a series of facts which show that such tissues as derive their nutrition by vessels passing through cicatrices have a tendency to waste—a tendency which does not become evident until some time has elapsed from the completion of cicatrization, and continues for months, or even years, until, in some instances, the dependent tissue fades away completely. My attention was first clearly fixed upon this interesting process by the following case, described in my paper "On the Relief of Symblepharon by Transplantation of Conjunctiva" (*Ophthalmic Hospital Reports*, vol. iii, Oct. 1861).

CASE I.—Joseph Jessop, a puddler, was struck in the right eye by a hot cinder, which produced a slough of conjunctiva and cornea, ending in symblepharon. The middle portion of the lower eyelid (about one-third of an inch in breadth) was adherent to the eyeball, and encroached

upon the cornea to which it was cicatrised, so as to conceal the lower margin of the pupil, and slightly to interfere with vision.

In April 1860, twelve months after the accident, the following operation was performed, in order to release the eyeball from the adherent lid. The eyelid having been freely dissected from the globe, so as to set the eye at liberty, two flaps of conjunctiva from the uninjured upper part of the eyeball were dovetailed into the site of the symblepharon, but *the portion of skin forming the apex of the symblepharon was left adherent and undisturbed on the cornea.*

Shortly after the operation, the isolated skin left on the cornea began to waste, becoming more flat and translucent, and *in eighteen months it had vanished, leaving the cornea transparent, and flattened* from the loss of substance sustained at the time of the injury. The site of the adherent skin could only be detected by oblique illumination; sight had improved; and the movements of the eyeball were restored by the interpolated conjunctiva.

Here we have the clear and unmistakable fact, that a portion of skin became atrophied and disappeared, after its isolation by cicatrix had been rendered complete by operation. Let us first inquire into the nature of the process by which these changes are brought about, and then ascertain whether the same principles may not be applied in many departments of surgery.

We are familiar with the fact that cicatrix, visible on the surface of the body, both during its formation and for months or years after its completion, contracts. This process of contraction, going on over the whole cicatricial surface, not only draws parts together, but narrows and strangles the channels which pass through the cicatrix, lessening the calibre of arteries, strangling veins at their exit, and thereby rendering them visible on the surface of the scar. Under this same process, a rectum may be strictured after too free destruction of its circumference for cure of piles; or the urethra may be strictured after amputation of the penis where the surgeon fails to provide against such a result. All these characters of visible cicatrix are familiar to us on the surface of the body. Are they less true for unseen—subsurface cicatrix, that layer of new material by which, for instance, a transplanted flap of skin grows to the raw surface made by the surgeon? Such a flap, on its transplantation, is at once glued to its new bed by a material in which vessels are rapidly formed, which aid in maintaining in life and vigour the skin thus suddenly deprived of a great portion of its blood-supply. These newly formed, numerous, and vitally important vessels, traversing as they do cicatrix, are doomed, after a time, to be one by one reduced or cut off. Does the flap, then, become atrophied? Certainly not. The gradual lessening of the blood-supply traversing the treacherous cicatrix is balanced by the compensating enlargement of the unembarrassed vessels of the sound pedicle, whereby the flap is enabled to maintain its normal nutrition—in fact, to "keep up to the mark." Sever the pedicle, however, and isolate thereby the transplanted portion of the skin completely by cicatrix, and the intruded flap, like the island of skin on the cornea in the case of symblepharon, must lose condition, and undergo atrophy with a completeness proportioned to the curtailment of its blood-supply.

It will now be my endeavour to show that the principles here worked out in one case of symblepharon are neither exceptional nor limited to a single class of cases, but that additional illustrations may be drawn from—*a*, Symblepharon; *b*, Cutaneous Nævus; *c*, Subcutaneous Nævus; *d*, Rhinoplastic Surgery; *e*, Growths encroaching upon the Cornea; *f*, Syndactomy. Finally, I shall deduce suggestions for the treatment of tumours not amenable to extirpation by the ordinary methods.

a. SYMBLEPHARON.—Case I.—Joseph Jessop (quoted above).

CASE II.—James Spence (*Ophthalmic Hospital Reports*, loc. cit.); inner third of lower lid adherent to eyeball, and extending over the cornea as far as the pupil.—March 30th, 1861. Transplantation of conjunctiva, and isolation of skin adherent to cornea.—August 19th, 1861. The apex of skin left on the cornea was becoming atrophied, being transparent at its margin, and shrunk to the level of the surface of the cornea, on which originally it formed a considerable prominence. I have recently seen Spence, and find that two-thirds of the skin which covered the cornea has disappeared, leaving the cornea transparent.

CASE III.—Joseph Wood; extensive conjunctival symblepharon, concealing the lower half of the cornea and greater part of the pupil. Reading, with face to light, No. 20 Jäger; with back to light, barely No. 19.—January 1864. Transplantation of conjunctiva.—April 2nd, 1864. The opacity was nearly level with the cornea. He read letters of 16.—April 30th. He read words of 16.—August 13th. He read 16 easily with his back to the light; words of 16 with face to the light. About one-eighth of an inch of the margin of the opacity was nearly transparent. In this case of very extensive adhesions of lid and conjunctiva to cornea, we have an improvement of vision carefully gauged by test-type, an improvement *directly* and *intentionally* brought about by

cutting off the blood-supply by the interpolation of a cicatrix between the opaque mass and its chief base of nutrition.

b. CUTANEOUS NÆVUS.—In 1863, I removed by enucleation a large nævus, overlying and perhaps involving the parotid gland, in a child aged four months (*vide Medico-Chirurgical-Transactions*, vol. 1). A portion of the skin covering the tumour was involved in the disease. In reflecting the skin covering the tumour, I preserved as part of the flap the nœvoid skin, with the firm belief that in course of time this diseased skin would regain its natural appearance. The result justified my anticipation. One-third of the nœvoid skin sloughed, but the remainder became united to the surface of the wound by cicatrix, and, at the end of three months, had the usual appearance of cutaneous nævus, being of the size of a shilling. At the end of a year, *all appearance of the nævus had faded away.*

A similar result has been obtained by Mr. Furneaux Jordan, who has devised an operation for nævus of the face and orbit, which he has mentioned in the *Lancet* (1866, vol. ii, p. 618). "Where the skin is not greatly implicated, I made an incision through it, and completely through the nævus, dividing it into two halves; then each half of the tumour is cut out piecemeal by curved scissors. *The partially implicated skin will in time become natural.*"

In treating cutaneous nævus of the face and eyelid, Messrs. Curling, Startin, Brodhurst, and others, have used subcutaneous ligature, which, whilst preserving the diseased skin, has induced its recovery by the production of internal cicatrix and the destruction of the subcutaneous part of the disease.

The principle involved in these changes is explained and applied as follows in my paper on enucleation of nævus. "When a portion of skin covering a nævus is involved in the disease, it is not necessary to sacrifice such diseased skin, as it may be dissected off the surface of the tumour, and, being retained as a cover to the wound, will regain gradually its normal appearance. The vessels of the nœvoid skin are mainly fed from the nævus itself, but, after removal of the nævus, the diseased skin becomes united to the deep surface of the wound by new material, *i.e.*, by internal cicatrix. There being in all cicatricial structures a tendency to contract, the new vessels which pass through the cicatrix become gradually more narrowed and choked off, until at last the diseased skin, being mainly dependent for nutrition on its lateral continuity with healthy skin, is brought back to its normal state and appearance. This change does not occur immediately after the operation, but goes on gradually, in the course of months, simultaneously with the process of contraction of the cicatrix."

c. SUBCUTANEOUS NÆVUS.—Believing that in the various methods of destroying nævus by subcutaneous ligature, setons, nitrate of silver, probes, etc., the great factor of cure is the internal cicatrix, which, by its contraction, cuts off in all directions that free and excessive intercommunication of blood-vessels on which the special character and growth of nævus depends, and induces a retrograde nutrition; *i.e.*, atrophy, I determined to put this notion to the test in the following case.

Enoch Lee, aged two years, was brought to the Leeds Infirmary on account of a nævus in the skin over the left shoulder-blade. At birth of the size of a shilling, the nævus had grown, chiefly subcutaneously, until it had attained the size of a five-shilling piece, and stood out from the surface as a prominent tumour. A portion of the surface, of the size of a two-shilling piece, was red, being involved in the disease. The nævus could be felt as a well-defined flat tumour, with distinct margin, extending under the skin beyond the area of diseased skin.

March 1867. Having introduced the wire of the *écraseur* at the margin of the tumour, I passed the chain round the edge of the whole tumour, and then split it into two, like a muffin. Henceforth, the two halves must reunite by cicatrix, and their freedom of vascular intercommunication must be progressively more and more reduced by the ever contracting cicatrix.—May 22d. All suppuration resulting from the operation had ceased.—October 1869. Since the cessation of suppuration, the tumour has gradually decreased, and is now perfectly level with the surrounding skin. With the hand, unaided by the eye, its situation can hardly be detected; all distinction from surrounding tissue has ceased, there being no trace whatever of the defined margin of the subcutaneous portion. The discoloured skin is not materially altered.

This operation was specially devised and carried out in order to put to the test the views which I held as to the effect of cicatrix in producing atrophy, and which I clearly explained to my class before performing the operation. The result has amply justified both my anticipations and the practice based upon them. The only traces of operation to be found are two small white scars where the wire of the *écraseur* was passed through the skin.

d. RHINOPLASTIC SURGERY.—The principles which teach us how to produce wasting of nævus and other structures which we wish to remove, in rhinoplastic operations teach us how to avoid the induction of atrophy

in transplanted structures which we wish to retain in good condition. About the time when the wasting process in the first-mentioned case of symblepharon was nearly complete, I was on the point of making a new nose for a young woman named Wood, and was somewhat discouraged to find, on reference to authors, that in some instances the new organ, though satisfactory at first, after a time deteriorated and became atrophied. (*Vide Skey's Operative Surgery*, p. 524): "It will occasionally happen after some days from that of the operation, that the new structure begins to lessen in size, and continues to diminish, till it becomes almost absorbed."

It seemed to me that the custom of cutting through the pedicle after the transplanted skin had become established in its new bed, must be a source of atrophy and disappointment. I therefore deduced the rule that *the pedicle of a transplanted flap of skin ought never to be severed.* In two cases in which I have made a new nose, the pedicle was left undisturbed, and the new organ remained without deterioration for several years.

e. GROWTHS ENCROACHING UPON THE CORNEA.—I have several times acted upon this principle in dealing with growths partly upon the cornea and partly over the sclerotica. Instead of dissecting the growth from the cornea, I have aimed at inducing atrophy of the portion lying on the cornea by dissecting the conjunctival portion down to the sclerotica, and so placing an intercepting cicatrix between the growth and the vessels of the sclerotica and conjunctiva. The following case is an illustration, though not a perfect one.

CASE.—Fennel Parrott, a sailor, aged 20, noticed a small growth near the caruncle of the right eye, which, as it grew, encroached upon the cornea, on which structure it was double the size of a hemp-seed. At the end of six months it was dissected off the cornea, but the growth returned; and twelve months later he put himself under my care.

October 26th, 1866. Leaving the corneal portion intact, I dissected off the conjunctival portion and neighbouring conjunctiva down to the sclerotica, so as to bind that portion of cornea by cicatrix.—December 27th, 1866. The growth had almost disappeared. In a letter just received, he tells me that there has not been any further improvement.

I have mentioned this case not as proving the success of the treatment, but as indicating a direction which, in certain cases, our surgical efforts can be aimed, feeling confidence in the soundness of the principle laid down.

f. SYNDECTOMY, OR CIRCUMCISION OF CONJUNCTIVA.—The operation of syndectomy may be fairly claimed as an illustration of the subject of this paper. Introduced by Dr. Furnari, for the treatment of inveterate pannus, a disease of the conjunctival surface of the cornea, characterised by the development of great vascularity, this operation consists in the excision of a band of conjunctiva and subconjunctival tissue, one-eighth of an inch in breadth, producing thereby an annular cicatrix immediately surrounding the diseased cornea, which, as it heals and contracts, cuts off the free and unnatural communication of vessels by which the diseased condition is kept up. Here we have the intentional production of a cicatrix which so reduces the over-supply of blood-vessel to a diseased surface, as to restore that surface to health.

NOTE ON THE IMPROVEMENT OF CERTAIN CORNEAL OPACITIES AFTER DIVISION OF SYNECHIA ANTERIOR.—Akin to this subject, though not strictly embraced in the title of the paper, is one to which I have for some time directed attention.

In some cases in which, from sloughing or perforation of the cornea by ulcer, the iris had become involved in the resulting opaque scar, I had noticed that iridectomy, performed for the purpose of artificial pupil, or of relieving the iris from its drag upon the cornea, appeared to induce improvement and fading of the corneal opacity. Mr. Hulke tells me that he has also observed the same. This impression, and the definite results obtained by cutting off blood-supply in cases of symblepharon, led me, in future cases of synechia anterior, to detach the iris from the cornea, with the expectation that, when deprived of direct vascular connection with the iris, the opacity would diminish. I have obtained this favourable result in several cases, in which there has been an improvement of vision that could be measured by test-types. In some instances, no improvement could be observed. I hope at a future time to publish these cases more fully.

SUGGESTIONS FOR TREATMENT OF ABNORMAL GROWTHS NOT AMENABLE TO EXTIRPATION BY ORDINARY METHODS.—From the illustrations already given, I trust that I have shown that we possess, in the contractile character of cicatrix, and its effect on blood-vessels which traverse it, a power of controlling the nutrition of neighbouring parts which may be made subservient to the purposes of surgery. There are many abnormal growths of slow progress, such as fibrous tumours of the uterus, which at some period of their career become almost stationary—nay, even recede and undergo atrophy, in which the nutrition is so nicely poised that a small variation of nutritive power determines their increase or

decrease. The wasting of large overgrown tumours, dating from a serious illness, is a case in point. The shrinking of large fibroid tumours of the uterus, after boring and internal bruising of their structure, as employed by Mr. Baker Brown, seems to me to be consequent upon the production of internal cicatrices, which so far interfere with their freedom of blood-supply as to initiate the wasting process. The subcutaneous crushing and breaking up of tumours (*Cyclopadia of Surgery*, vol. iv, p. 403), employed by French surgeons in some cases with success, is another instance in which internal—i.e., subcutaneous—destruction of a portion of a tumour has induced the wasting of the whole. One case is thus described (*Cyclopadia of Surgery*, loc. cit.): "I saw Thierry treat in this manner a lipoma of the mastoid region in a Paris banker, who was anxious that the operation should leave behind no visible cicatrix. The tumour was no larger than a small pullet's egg, yet it required for its crushing three sittings, at intervals of three weeks. Resolution took place at last, and, after a lapse of six months, the tumour had completely disappeared, but Thierry entirely failed in another case, etc."

In all these instances we see much to encourage us to inquire whether we may not so plant—if I may use the word—cicatrices around or in the interior of tumours which we cannot, or prefer not to extirpate, as to determine the balance of nutrition against growth, and in favour of atrophy. May we not hope, like the French surgeon, to be able to cause the disappearance of tumours without the production of visible cicatrix?

In conclusion, let me say that, should any readers of this paper have met with facts which seem to confirm the views here expressed, I shall esteem it a favour if they will kindly communicate them.

ON LOCOMOTOR ATAXY.*

By J. LOCKHART CLARKE, M.D., F.R.S., etc.

THE effects on the voluntary control of muscular movements produced by dividing the posterior roots of the spinal nerves, as shown in the experiments of Claude Bernard, Brown-Séquard, Leyden, and others, are of great importance in reference to the muscular incoordination of locomotor ataxy. (*Leçons sur la Physiologie et la Pathologie du Système Nerveux*, 1858, tom. i, p. 261.)

In one of his experiments on a frog, Claude Bernard cut the posterior roots of the nerves that supply both the anterior and posterior limbs. When placed in water, the animal remained quite motionless. If it was excited by pricking its head, which retained sensibility, it executed certain movements with all its limbs; but these movements were of a disorderly character, and not at all in that harmony with each other which is necessary for coordinate movements, such as swimming. In order to ascertain whether these disorderly movements were due to cutaneous anæsthesia, or to the loss of muscular sensibility, Bernard stripped off the skin from all the limbs of another frog, in which the nerves had not been divided. When placed in water, the animal moved with all its usual agility, and swam in its accustomed manner. Moreover, Bernard divided the cutaneous nerves of a sparrowhawk and of a dog, without producing any disorder of the voluntary movements.

On another occasion, he cut the posterior roots of the lumbar nerves on the right side in a young dog. The left leg executed perfectly the movements of progression; while the right leg, which was rendered insensible by the operation, was dragged along after it, and a little raised and somewhat bent. In another dog, he divided two or three of the posterior roots on the right side in the lumbar region. The animal was no longer able to support itself on the corresponding leg, which was in a state of semiflexion. Nevertheless, movements of an apparently involuntary character occurred in that leg whenever the animal moved. Moreover, we are told that the limb, which was completely deprived of its sensibility, was reduced to extreme weakness.

The experiments of Rosenthal and Leyden, with regard to the effects of division of the posterior roots on the voluntary movements, tend to the same general conclusions as those of Claude Bernard. There are two experiments, however, that deserve especial notice. In one of these, three posterior roots were divided in the lumbar region on the right side, and only one root on the left side. The right leg became paralysed, while the left leg retained its power. When the animal was placed in water, the left leg assumed its usual position, while the right leg hung extended and inert. In another frog, two posterior roots were divided on the left side only, in the lumbar region. When the corresponding limb was forcibly extended, it remained in that position,

unless the opposite limb was excited. The act of jumping was awkwardly performed, because the limb that was deprived of its sensibility was not drawn up.

Let us now turn to some similar experiments performed by Brown-Séquard. In 1855, this distinguished physiologist published an account of the effects observed in several cases after dividing a variable number of the posterior roots of the spinal nerves. ("Recherches Expérimentales sur les Voies de Transmission des Impressions Sensitives," etc., *Mémoires de la Société de Biologie*, 1855, p. 31 et seq.) The most important of these experiments are the following.

EXPERIMENT I.—In a guinea-pig, rabbit, or dog, he cut all the posterior roots of the five or six last dorsal and two first lumbar nerves on the right side. After allowing the animal to rest for some time, he found that the power of voluntary motion was diminished in a remarkable degree in the right hind leg, but that its sensibility was exalted, while, on the contrary, it was diminished in a very evident manner in the left hind leg. Moreover, he found that the blood-vessels were rather dilated in all parts of the body behind, and on the same side as, the section of the nerves; and that the temperature of those parts was raised from one to three degrees above that of the corresponding parts of the opposite side. These are the same effects as he had long since found after section of one lateral half of the spinal cord in the dorsal region. Immediately after section of the nerves, the phenomena just described are strongly marked; so that sometimes the paralysis of voluntary movement seems to be complete; but, after some hours, these effects diminish.

EXPERIMENT II.—When the same roots were cut on the opposite side, sensibility and voluntary movement were retained only in a slight degree in the posterior extremities. At the end of eight or ten hours, the animal could execute tolerably strong voluntary movements, but was still unable to support itself on its hinder extremities.

EXPERIMENT III.—All the posterior roots were cut from the caudal extremity to the superior part of the lumbar region. After the operation, it was found that the sharpest irritation of the posterior roots, or of the posterior columns of the cord from the extremity to about the middle of the lumbar region, did not appear to cause any pain; but, starting from the latter point, sensibility began to be manifested, and continued to increase in degree in proportion as the irritation approached the part of the cord which retained its nerves entire.

EXPERIMENT IV.—In a new-born puppy, after the carotids were tied, the spinal cord was divided across close to the medulla oblongata. The cord was then laid bare through nearly the whole extent of the dorsal, and through the upper part of the lumbar, region. After having satisfied himself that the reflex function was still active, and that pinching the skin of one of the limbs was followed by movements in all four, Brown-Séquard cut the posterior roots of the eight last dorsal and two first lumbar nerves. After the operation, he found that pinching the skin of the anterior limbs excited reflex movements in those limbs only, and that irritation of the hind limbs was followed by movements in those limbs alone. Artificial respiration was then practised. The reflex function was exalted; but the movements were still limited to either the anterior or the posterior limbs, according as the one or the other was excited. There was, therefore, no longer any transmission of nerve-force from the posterior to the anterior extremities, or *vice versa*; although the spinal cord itself between the lumbar and cervical enlargements remained uninjured.

Of the remarkable phenomena resulting from these experiments, Brown-Séquard could then see only one explanation, which I shall not lose time in stating, since he has, I think, most properly abandoned it for another, which rests upon a better foundation. This latter explanation is given in an interesting paper in the *Journal de Physiologie* for 1861, in which the most probable cause of the phenomena resulting from the experiments is stated to be an alteration in the nutrition of the spinal cord, in consequence of irritation of the sensory or excito-motor nerves. ("Remarques sur quelques Points de la Physiologie de la Moelle Epinière et du Cerveau," *Journal de Physiologie*, tom. iv, 1861, p. 584 et seq.) That irritation of the posterior roots does really produce this effect, appears to be satisfactorily proved. For instance, crushing with forceps those of a single pair on one side is followed by the same effects as division of the corresponding lateral half of the spinal cord; so that irritation of the centripetal nerve-fibres weakens the action of the corresponding lateral half of the cord at the place of insertion of roots that are irritated.

If the posterior roots of a pair of dorsal nerves be irritated on each side, anæsthesia and paralysis of the posterior extremities immediately follow; and, if several pairs of nerves be excited, the same kind of effects increase in proportion to the number of nerves and the degree of irritation. Moreover, it was found that the functions of the cord, as a centre of reflex action, and as a conductor of voluntary movements and

* Continued from page 345 of number for September 25th.

sensitive impressions, diminish in proportion to the degree of irritation of the sensory roots.*

We have already seen that section of the posterior roots abolishes the tone or tension of the muscles to which they distribute fibres. (M. T. G. Brondgeest, *Archiv für die Holländischen Beiträge zur Natur und Heilkunde*, vol. ii, 1859 and 1860.) Whether this loss of muscular tone be due to the curious changes which, according to Brown-Séquard, take place in the condition of the spinal cord on section of the posterior roots, is not determined; but it certainly must add to the paralysing effects of those changes. In the experiments above described, *all* the fibres of the posterior roots were divided, and therefore *all* the muscles to which they were distributed were paralysed or relaxed; but in locomotor ataxy, except in the very advanced stage, only *some* of the fibres of those roots are injured, and in a very irregular manner; so that some of the muscles would appear to escape, while others are paralysed or relaxed. The way in which this unequal tension of the different muscles produces incoordination of voluntary movements, I have already pointed out.†

DEATH FROM ACCUMULATION OF HAIR IN THE STOMACH OF A WOMAN.

By PALEMON BEST, M.B.Lond., Louth.

THE patient was C. C., a labourer's daughter, aged 30 years. On my first visit to her, in April 1869, she complained of severe pain in the stomach, vomiting and diarrhoea, great prostration, and suppression of catamenia. She said that these symptoms had lasted for several years, and were due to a tumour in her stomach. The patient was tall, thin, with an anxious expression of countenance, and marked pallor of the skin and mucous membranes. The tongue was small, red, with white fur at the back and middle; pulse 80, weak, regular; respirations 18, regular. There was no œdema of the feet. The urine was copious, with no albumen.

When she was undressed and laid on her back, with her knees raised, a tumour was readily felt, mainly occupying the epigastric region. The tumour seemed rather globular in shape, was smooth and hard, but not painful to touch; it was very moveable, more so on the left than on the right side, and could be pushed upwards and to the left for a considerable distance under the rib-cartilages of the left hypochondrium. It did not accompany the movements of the diaphragm in respiration. The lower margin of the tumour extended obliquely from the right hypochondrium downwards across the epigastric and umbilical to the upper portion of the left lumbar region. This margin, although rounded, was very clearly defined, and sometimes seemed to have a notch about its middle; at other times, this notch could not be felt. The upper margin of the tumour was not perceptible on palpation; and percussion did not separate the dulness it occasioned from that caused by the surrounding organs—the liver, heart, and spleen. Although the tumour appeared close to the anterior surface of the abdominal cavity, the passage of flatus along the stomach between it and the tumour could be seen and felt, as in the descending colon in cases of enlargement of the left kidney. Long continued pressure and movement of the tumour induced pain and vomiting.

The vomited matter consisted of solid food and dark coloured sour fluid; it only very rarely contained streaks of blood after much straining. The pain in the stomach, which passed to the back between the shoulders, was much increased after taking food; and this act had nearly always induced both pain and vomiting during the last six or seven years. The vomited food and liquid never fermented. The number of stools in twenty-four hours varied from two or three to seven or eight; they were dark coloured, watery, not very offensive, and about equal in quantity. She had never suffered from constipation lasting several days and followed by profuse diarrhoea. The quality of food had no influence on the vomiting or purging.

She had never had jaundice. She had enjoyed good health until twelve years of age, when she suffered from a severe attack of ague. The catamenia appeared at the age of 15. About this time (1854), she began to suffer from pain in the stomach and vomiting and diarrhoea, but was able to keep her situation as servant, or attend to domestic duties at home, until about six years ago. Since this time, she had been constantly under medical treatment, and unable to undertake any employment. Mr. W. C. Calthrop, who had attended her at various times since 1856, at this time (January 1863) detected a hard nodular tumour at the epigastrium. She stated that the tumour was then very

much smaller than now (1869), and could be pushed entirely out of reach beneath the rib-cartilages of the left hypochondrium. Mr. Calthrop believed that she had "scirrhus" of the stomach. She continued under his care, the tumour increasing in size, and other symptoms not materially changed, until 1865, when she sought parochial relief, and became a patient of the district medical officer whom I succeeded in April last. She remained under this gentleman's care from 1865 to April 1869, except during a short interval which she spent in the Hospital for Diseases of Women or the Surgical Home in London, her symptoms undergoing no other change than increase in her debility and in the size of the tumour.

Such were the leading features of the case on my taking it; and I was fairly puzzled by them—at one time thinking that there was an enlargement of the left lobe of the liver; at another time believing that it might be some unusual form of splenic enlargement, which, by pressure on, or adhesion and perhaps projection into, the stomach, caused the distressing vomiting and pain. The hardness of the tumour was probably too great for it to be colloid cancer of the stomach; and the age of the patient, the moveability of the tumour, and its long duration, were other objections to this view, and, *à fortiori*, to its being either scirrhus or encephaloid cancer.

The treatment at first pursued was that suggested by my partner, Mr. Bogg, who visited the case for me before I had seen it, and considered that the tumour was due to an accumulation of fæces in the transverse colon. Although I differed from this opinion, free purgation by mouth and by enemata was employed at intervals during three weeks, but without effecting any improvement. Bismuth and soda and hydrocyanic acid also failed in improving the patient's condition. Citrate of iron was then tried, and a decided improvement followed its use; the patient felt much stronger; her spirits improved; and in June the catamenia, which had been absent for four years and a half, reappeared, and were again seen at the proper time in July and August. The vomiting continued about the same; the diarrhoea was much less troublesome; but the size of the tumour remained the same. In the autumn, she frequently walked distances of about half a mile and back. On September 7th, when stooping to glean in a harvest-field, she was seized with violent pain in the abdomen, and became so faint that she was obliged to be carried home. Peritonitis immediately set in. Opium, hot fomentations, and turpentine stupes, were used; and she took brandy, milk, eggs, beef-tea, etc. Temporary improvement occurred, but was followed by renewed attacks; and, after much suffering, she died on October 25th, 1869.

Permission to make a limited examination of the body having been obtained, this was done on October 27th by Mr. Calthrop and myself. The peritoneal coverings of the stomach and intestines were glued together by recent lymph. The peritoneum contained about ten ounces of dark coloured fluid, composed probably in part of brandy. On lifting the stomach to discover the tumour, it was found that this lay within the stomach, which I opened by a long horizontal incision along its anterior wall, from the cardiac nearly to the pyloric extremity. A black tumour covered with hair was removed from the stomach and œsophagus.



It formed an accurate mould of these organs, and somewhat resembled a very small black swan. (It has been photographed.) The exact weight of the tumour was thirty ounces (avoirdupois). On section, it

* For further information, see the paper from which these statements are taken.

† It would be an interesting experiment to divide in an irregular manner *only some* of the fibres composing each posterior root of the nerves.

was found to consist almost entirely of hair, with but little food and mucus; it was quite solid, and could be easily cut with a scalpel, owing to the softening of the hair by the action of the gastric juice. Many of the individual hairs composing it were ten or twelve inches in length. The stomach was otherwise empty and much hypertrophied; it weighed thirteen ounces (avoirdupois), and was removed with great difficulty, owing to the adhesions to the posterior surface. The mucous membrane was of a greyish-white colour. On the posterior wall was a perforation of the size and shape of a shilling, the surrounding mucous membrane appearing quite healthy. At some distance from this perforation were three growths arising from the posterior wall; two of these were about the size of a shilling, the other was as large as a half-crown; the greatest thickness of these growths was at their centre, and at the circumference they were very little thicker than the surrounding posterior wall; they appeared to arise from the mucous membrane itself; for, on removing this structure from the muscular coat in the vicinity of one of these growths, the growth was most easily removed with the mucous membrane. The greatest thickness of the largest of these growths was less than an inch; that of the posterior wall of the stomach, about a quarter of an inch; each growth somewhat resembled in appearance a very small inverted saucer; two of them were preserved in spirit, and, after two days' maceration, they exhibited a lobulated cauliflower-like structure.

The uterus and liver were the only other organs examined; the former was quite healthy; the latter rather fatty.

REMARKS.—The inability of any of the many medical men who saw this case to arrive at a correct diagnosis, is probably mainly due to the extreme rarity of cases resembling it. During my studentship and since then, I have never heard of a similar one.

The œsophageal portion of the tumour was, I believe, forced from the stomach into this position by the contraction of the stomach on the mass of hair within, during vomiting and digestion; several of the hairs in the œsophageal portion being easily traced into the larger mass in the stomach; and, but for the presence of the perforating ulcer in the stomach, the patient might have lived long enough for the œsophageal end of the tumour to be protruded into the mouth, so that a correct diagnosis must have been made.

The perforation of the posterior wall of the stomach, which led to the peritonitis that caused death, was probably due to an ordinary simple chronic ulcer of the kind frequently met with in young women. The rupture of the floor of this ulcer was probably hastened by the presence of so large a foreign body in the stomach, during the act of stooping.

The three projections from the mucous membrane of the posterior wall might be due to the irritation caused by the mass of hair.

That this mass of hair was swallowed since the discovery of the cancerous masses which Mr. Calthrop believed he felt six years ago, and that by its pressure on them it caused their partial absorption, is more than I can believe possible; although I feel it right to mention this gentleman's opinion on account of the long connection he has had with the case, the great interest he has taken in it, and his great kindness in forwarding to me all the information which he could collect relating to the patient's previous history.

The patient's relations and friends, after the *post mortem* examination, all bore testimony to the extraordinary habit of eating her hair in which she had, during the last fifteen years, indulged. Whether this habit relieved any morbid feeling at the stomach, must be left for others to decide, when the specimen is exhibited at the Pathological Society.

P.S.—The photograph is incorrect in showing so many of the hairs projecting from the tumour; when first removed, there was scarcely a single hair projecting from the rest.

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

TOXIC ACTION OF QUININE.

By JOHN C. THOROWGOOD, M.D.

MR. HEMMING's account of the lady, who, after taking a few grains of quinine, came out in a rash resembling scarlatina, recalls to my mind the case of a young woman, among my out-patients at the Victoria Park Hospital, who, at her second visit, told me I had been giving her quinine. It was true that I had prescribed quinine for her; and she told me she knew it to be so from her having come out in a rash all over the body, after two or three doses had been taken. What remained of the rash when I saw her, reminded me of the measles; and she told me that on four, if not five, occasions, when quinine had been prescribed, this same rash had invariably appeared.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

ST. BARTHOLOMEW'S HOSPITAL.

OPERATION DAY, DEC. 4TH, 1869.

MR. SAVORY performed Amputation of the left upper extremity at the Shoulder-joint in a woman about forty years of age. She had been a patient in the Hospital two years ago with an extensive ulcer in the forearm and elbow. Various remedies were then employed without success, and at last amputation of the arm was resorted to. Examination of the diseased part after removal afforded evidence of the malignant character of the ulceration. The stump healed satisfactorily. Three months ago, a cancerous mass commenced in the cicatrix of the stump; and, on her being again admitted to the Hospital, it was resolved to amputate the remainder of the limb at the shoulder-joint. The patient lost exceedingly little blood.

Mr. Savory removed the lower extremity of a boy about ten years of age, for acute destructive Disease of the Knee-joint. When admitted three months ago, it was hoped that rest and proper treatment would offer a fair chance of ankylosis. At first, it was expected that no severer measure than excision of the joint would have to be resorted to. He, however, did not progress as might have been expected; his pulse and temperature rose, his appetite failed, and his state was altogether unfavourable. Mr. Savory opened the joint, and gave exit to some pus, after which the symptoms somewhat abated, but only for a few days. The pulse rose to 160 per minute, and, proportionately with it, the temperature; and his state in other respects became most serious. On the 2nd and 3rd of December, he somewhat improved; and, this continuing to-day, Mr. Savory determined on seizing the favourable opportunity, and amputating the limb to save the boy's life. The limb was amputated immediately above the knee-joint. An anterior elliptical flap was made, and the posterior flap formed by the knife being brought directly backwards. When it was dissected backwards, and the bone sawn through, an admirable stump was obtained. The affected joint was enlarged; and, when opened, presented, Mr. Savory observed, a very fine specimen of acute disease involving all the structures of the joint. Very marked granulations had sprung up in the position of the external condyles.

Mr. Savory also removed from a young woman a large Fibro-cellular Polypus, which originated in the posterior nares, and hung down into the pharynx. By supporting the polypus by means of the finger from the mouth, Mr. Savory was enabled to obtain a firm grasp of the growth with the forceps when passed through the nares.

Mortality in the Hospital from Amputation of the Lower Extremity.

—We saw several cases of recent amputation of the thigh in Mr. Holmes Coote's wards which had been entirely treated with simple dressing. Mr. Coote during the year has treated in his wards four cases of amputation of the lower extremity above the knee, and two cases below the knee, on the same plan, and without one fatal result. He is opposed, unless in cases of sloughing, to the carbolic acid treatment in any shape. Mr. Holden, we were informed, had treated eight cases of amputation of the lower extremity successfully in the same manner.

MIDDLESEX HOSPITAL.

DIFFUSE ORBITAL ANEURISM IN A BOY.

(Under the care of Mr. GEORGE LAWSON.)

IN the Percy Ward of the above Hospital there is now a lad, aged 15, suffering from what appears to be a diffuse or consecutive aneurism of the orbit. It was caused by an accident five years ago. The boy was jumping off a wall about four or five feet high, when he fell on the end of a stick, which struck the inner side of the left orbit, and pushed, he says, "the eye outwards." There was considerable bleeding at the time—he thinks, "about a pint." The eye was as prominent a week after the accident as it is now. In his present state, the globe is protruded about half an inch from the orbit. The movements of the eye in different directions are in no way impeded. The conjunctival and subconjunctival vessels are tortuous and dilated. The lids close easily over the globe. No tumour can be felt within the orbit by an examination made with the finger pressed within the orbital walls. There is no visible pulsation of the eye; nor is a pulsation communicated to the fingers when they are placed firmly against the globe. A distinct *bruit*

is heard over the left temple and forehead, and even slightly on the opposite side of the head. This is increased after running, or by any other exertion. The *bruit* is audible to the lad, and is a constant source of annoyance to him. Pressure on the carotid at once arrests the "shirring sound", which he compares to that produced by the blowing off of steam from a locomotive in motion; and so completely does it control the *bruit*, that the boy frequently compresses the vessel with his finger, to stop the noise within his head, when it is most troublesome to him. Unfortunately, digital pressure cannot be maintained by the lad for more than one or two minutes at a time, on account of the giddiness and faintness which it produces, independently of the pain in the neck, which also renders this treatment intolerable. Under these circumstances, Mr. Lawson hesitates to ligature the carotid.

KING'S COLLEGE HOSPITAL.

INTERESTING CASES NOW UNDER CARE.

WE have this week seen in this Hospital a case of Secondary Syphilis (*rupia*), under the care of Mr. Partridge, in which the temperature has shown the remarkable diurnal variation which we believe has before been noticed in some cases of syphilis. This man's temperature table is well worth study, and the effect of iodide of potassium is well exhibited in the lowering of the temperature which has taken place since its administration.

Mr. Wood has under care at present a case of Atresia Vesicæ in which he has performed the first of his usual plastic operations for remedying this condition. The subsequent operation will probably be performed in two or three weeks.

Mr. Partridge has a case of the same kind, but of more usual character, in which the anterior wall of the bladder is complete; but, from the absence of a sphincter vesicæ and upper wall of urethra, the boy is unable to hold his urine except when lying on his back. Thus the entire dorsum of the penis is cleft, and at the symphysis pubis the finger can easily be pushed into the neck of the bladder. This deformity is very rare.

To those interested in Excision of the Knee-joint, two convalescent patients of Sir W. Fergusson's will repay a visit; they were operated on about nine weeks ago, and in both the result seems excellent; one of them has angular curvature of the spine in addition to the knee-joint disease.

FEMORAL HERNIA: OPERATION: RECOVERY.

(Under the care of Mr. HENRY SMITH.)

C. W., a woman aged 50, was admitted on January 27th with a strangulated femoral hernia on the right side. She had had an occasional femoral hernia for seventeen years on the same side, which appeared only on unusual exertion, but disappeared again without serious inconvenience. On the 26th, however, she felt pain in the right groin, and was sick, which continued during the whole of the day. She had taken physic, after which the symptoms appeared to increase. The taxis was tried without success by a medical man who saw her, and by Mr. Smith, under chloroform, in the Hospital. The tumour was of the size of a large walnut, and very painful. An operation was then performed, and the gut, which was much congested, returned, and opium prescribed. Although she was very sick during next day, and the abdominal pain was considerable, she rallied on the second day, and ultimately left the hospital on February 29th, well.

GREAT NORTHERN HOSPITAL.

THE remarkable case of Eruption produced by the Bromide of Potassium which Dr. Cholmeley communicated last week to the Clinical Society can be examined in this Hospital by those interested in dermatology.

Mr. Adams has under care in the same hospital a case of great interest in which he has divided the neck of the femur subcutaneously for Ankylosis of the Hip after "rheumatic fever;" the thigh was flexed on the pelvis, but is now straight. Mr. Adams will no doubt publish the case in detail in due course.

BIRMINGHAM GENERAL HOSPITAL.

A FATAL CASE OF HYSTERICAL PARAPLEGIA.

(Under the care of Dr. JAMES RUSSELL.)

DR. REYNOLDS has contributed an important paper to this JOURNAL "On Paralysis, and other Disorders of Motion and Sensation dependent on an Idea." The class of cases which he describes approaches closely to those included commonly under the designation of hysteria; the diagnosis will depend principally upon the signification attached to the

term "hysteria." One element is common to Dr. Reynolds's cases, and to a considerable proportion of those termed hysterical—namely, a perverted condition of the will, produced through the influence of the imagination, or by an abnormal development of the emotional element of the mind—and thus certain forms of hysteria will be brought into connection with those so well described in the paper to which I have referred.

But, looking beyond these cases, and fixing our attention upon that morbid state of the emotions which characterises hysteria, it seems probable that a degree of parallelism may be established between hysteria and certain forms of chorea and epilepsy, and that the comparison may throw light upon the condition of the nerve-centres in the former disease. In the two last-mentioned maladies—particularly in chorea—the emotional element has a large share in influencing the characteristic phenomena which they present. Now, referring to the usually accepted explanation of a fit of epilepsy—viz., spasmodic closure of cerebral arteries—it seems not unlikely that the same condition of the cerebral arteries may be answerable for some of the phenomena presented by chorea and hysteria, as well as for those observed in epilepsy, and that the influence of the emotions in producing such phenomena may be connected with the condition of arteries just specified. Of course I speak only of the more transient phenomena. Again, in many cases of chorea, and also in certain cases of epilepsy, good grounds have been advanced for the hypothesis that the starting point of the mischief consists in impaired nutrition of particular portions of the cerebral tissue, either through occlusion of the minute arteries by fibrin, or through some other means. Does not analogy permit a like suggestion as regards some of the cases of the so-called hysteric class?

Now cases of hysterical affection, particularly of the paralytic type, are attended by one serious danger; viz., that, if the nature of the malady be mistaken, and the stimulus of the will be habitually withheld from the inactive muscles, the nutrition of that part of the nerve-centre which presides over those muscles becomes impaired, and that which was at the beginning a mere perversion of function, is finally converted into real organic disease. This occurrence will be more likely to happen in the instance of the lower extremities, because, in the case of other parts of the body, especially of the arms, there are counter-acting influences connected with the necessities of life, which come in aid of the patient, and in time compel the exertion of the will. I have just had a case in the Hospital, in which four or five years ago the girl suffered from spinal disease. The posterior region of her head exhibits numerous locks of hair which became completely grey in the course of her illness. She continued to keep her bed after the subsidence of her symptoms, and made no effort to move. I have succeeded, after much trouble, in restoring a certain amount of walking power, but I have little hope of her regaining fully the function of locomotion. The following case, however, illustrates the fact more clearly.

S. A., aged 40, had been subject to hysteric fits from an early age. She married at 22; her husband was dissipated and squandered his money, and her married life was one series of troubles. Her sleep became disturbed, and she now describes with great animation a number of visions which appeared to her. Her trouble continued after her separation from her husband. The hysteric fits increased in number and frequency. She emaciated, and suffered from painful digestion. Subsequently she had incessant vomiting for an entire month, and was supported solely by milk, and sherry and soda-water. Four years ago—two years after the catamenia ceased—she began to lose the power of her lower extremities, but without any other symptoms referable to the spine. She has kept her bed, or lain on the couch, absolutely for three years, never attempting to walk; and during the last year has occasionally passed her urine in the bed. Twelve months ago, she had symptoms which she referred to her uterus, and she is now quite insane on the subject of her "womb", although that organ is healthy. Her memory has lately become indolent, her spirits more depressed, and she has lost flesh rapidly. She has also contracted the habit of taking laudanum. She is greatly emaciated. The muscles both of the upper and lower extremities are much reduced in bulk. She can kick her legs freely as she lies, but cannot support herself in the erect posture. Sensation is normal. Her urine is generally ammoniacal, but occasionally slightly acid. The subsequent portion of her case may be told in a few words.

At first she declared that she was unable to feed herself, but a little firmness restored the use of her arms. She subsequently fell into a condition of complete dementia; became quite paralysed in her lower extremities; passed her evacuations involuntarily; bed-sores formed; and she died five weeks after admission.

On *post mortem* examination, the only departure from a state of health exhibited by the brain was shrinking of the convolutions; the grey matter being thin and pale. The cord appeared smaller than natural; it was perfectly healthy throughout, and no admixture of any foreign ele-

ment could be discovered by the microscope. The vertebral canal was all through quite healthy. We were not permitted to examine the other part of the body.

STAMFORD AND RUTLAND INFIRMARY.

FRACTURE OF THE LEFT OLECRANON PROCESS: FAILURE OF UNION: ABSCESS WITHIN THE JOINT: EXCISION OF OLECRANON, WITH USEFUL ARM.

(Under the care of Dr. WM. NEWMAN, Surgeon to the Infirmary.)

W. S., aged 22, a labourer, was admitted into the Stamford Infirmary on April 2nd, 1869. Twelve months previously, in lifting an iron plough, single handed, from a cart, the plough fell over and struck him violently on the left elbow. The elbow was painful and swollen for some days; then he went to a bone-setter, who told him that there was a little bone out of place, and that he had put it all right. Soon afterwards he went to work as usual. The elbow (so said his mother) was always large after the accident, and she could feel something move about when the joint was handled.

Six weeks before admission, he went to work as a platelayer on the Midland Railway, and again struck the same elbow. A month afterwards, the joint was reddened, swollen, and very painful; and, after some days' poulticing, much matter was discharged from an opening at the back part.

On admission, the upper arm was somewhat wasted; the fore-arm could be flexed readily enough, but not extended beyond an obtuse angle. The whole arm was much weakened. The ring and little fingers were cold and numb. When he raised the hand over his head, there was no power to retain the fore-arm in the flexed position, and he could not steady or influence the downward movement; the fore-arm fell at once. Between the olecranon and the internal condyle of the humerus there was a sloughy, ill-conditioned wound. A probe passed at once through this into the cavity of the joint; and pus, mixed with synovial fluid, dripped very freely. The whole joint was much swollen, and its distinctive outline spoiled; but the olecranon was abnormally movable, drawn up by the triceps tendon, and seemed to be thoroughly separated from the body of the ulna.

April 8th, 1869. Chloroform was given, and the conditions examined. Evidently the olecranon was loose. Dr. Newman made a straight incision three inches long over the olecranon, leaving to the inside the sloughy wound, and opening into the joint. The olecranon was found to be quite detached from the ulna, and only held in place by the still attached triceps tendon. This process was removed; it was uniformly smooth and necrosed. The articular surfaces of the humerus and ulna were thoroughly exposed, and appeared slightly reddened, but healthy. The fore-arm was placed at an obtuse angle on a pillow, and the incision of the operation closed by some iron-wire sutures. The wound was ordered to be dressed with carbolic acid lotion.

He progressed well after the operation; and on May 25th he left the Infirmary. The joint was much smaller; the patient could move the fore-arm very fairly well; both wounds were now quite well; there had been no discharge for the past week.

On June 11th, he came again to show himself. He was very well in health. His upper arm was increasing in size. He could move his elbow very fairly well, and had no local pain. The joint was decreasing in size. The ring-finger, noted as numb on admission, had now recovered itself; the little finger was still cold and numb, and bent in towards the palm.

On June 29th, 1869, Dr. Newman sent the man to Northampton, and showed him to the members of the South Midland Branch at their annual meeting, reading also the notes of the case. The arm was, to all appearance, nearly as useful as the other, and the thickening about the joint had been almost entirely cleared away.

REMARKS BY DR. NEWMAN.—I do not find direct reference to the removal of a non-united olecranon in surgical works; and I am glad to put this case on record as illustrative of the operation, and of rapid recovery with a very useful arm.

The *Lancet* (March 27th, 1869) gives the details of a case somewhat similar as having occurred in Guy's Hospital under the care of Mr. Birkett. Here the olecranon seems to have been removed, as the most ready means (short of actual excision) of dealing with an inflamed and suppurating elbow-joint, and with the end of retaining for the patient a strong and very useful arm.

In the case which I have recorded, it is worthy of notice that the tendon of the triceps must have acquired, in the process of repair, a new and very firm attachment to the ulna, thus securing a power over the fore-arm which had, since the fracture, been quite lost.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

NOVEMBER 27TH, 1869.

JAMES PAGET, Esq., F.R.C.S., President, in the Chair.

DR. CHOLMELEY brought before the Society the following case, in which the Cutaneous Eruption which occasionally results from the administration of Bromide of Potassium presented unusual characters. —H. C., a pallid, dark-haired Scotch lad, of leuco-phlegmatic temperament, aged 13, was admitted into the Great Northern Hospital on August 30th, 1869, for epilepsy. The bromide of potassium was given in ten-grain doses three times a day, but without benefit. On September 20th, Dr. Cruicknell, who had charge of the patient during Dr. Cholmeley's absence, determined to try the salt in larger doses, and, beginning with fifteen grains, quickly increased it to twenty-five grains three times daily. Marked improvement as to the epilepsy immediately followed; but, on September 26, an eruption appeared on the patient's face and legs, and quickly became copious and very painful; at the same time, there was general *malaise*, with pain in the head, and the fits became more frequent. The bromide was then discontinued, and nitrate of silver given. The eruption was described as being "like varicella, but the vesicles, instead of drying up, became in many places confluent, and the clusters thus formed showed a tendency to enlarge, and exhibited numerous points of suppuration". When Dr. Cholmeley again saw the patient—October 18th—he had a band of eruption up each side of the face and across the forehead, while the front and outer side of each leg were covered with it from knee to ankle. On the face it consisted of irregularly circular, elevated, flattened, light-brown-crusted, varying in size from a pea to a fourpenny-piece, surrounded by slightly red areolæ, and so adherent that they could not be removed without causing bleeding. On the legs, the skin between and around the spots was vividly red, exquisitely tender, hot, and painful, the pain being of a burning, tingling character. Movement of the legs caused very severe pain; the smallest spots, which were also the most recent, consisted of circular elevated conical vesicles filled with a milky-white semi-fluid matter, and seated on a slightly elevated hardened base; the largest spots were from one to two inches long, irregularly oval or oblong, elevated, flattened on the surface, and covered with flaccid moist cuticle, or light-brown crusts, under which the surface presented "numerous milletseed-like yellowish-red prominences". Dr. Cholmeley was convinced that it was a severe and confluent acne excited by the bromide of potassium. The eruption began by a minute red hot and tender pimple, on the summit of which there very quickly formed a small yellowish-white tense conical vesicle, pierced by a hair; if the vesicle were ruptured and gentle pressure applied, a smooth yellowish-white substance was obtained, which proved to be sebaceous matter with the bulbous root of the hair; if the vesicle were let alone, it rapidly enlarged, and then was found to contain pus. The crusts of the older spots were partially dissolved by ether, which, on drying, left a greasy stain, while the remaining portion of the crust was found to consist of epithelium and damaged pus-cells and blood-corpuscles. When the eruption had, after seven weeks, nearly died away, the bromide was again given in full doses; and, on the sixth day, the eruption began again to come out very actively, most on the legs, movement being again very painful. Dr. Cholmeley remarked that, while it was well known that acne sometimes appeared during the administration of the bromide, it was not with us a very common occurrence. In France it seemed to be much more common; and some French physicians, as Voisin and Falret, expected its occurrence in every case, at least, where the patient was epileptic. Voisin had described five forms of eruption as induced by the bromide, and his fifth form closely resembled that in the present case, only being much less copious. Voisin had seen six cases of it. But in France the bromide is given in much larger doses than with us, from 7 to 9, 10, and even 11 grammes being given daily, and for long periods. Lastly, as showing the bromide to possess a stimulating power over the cutaneous structures, Dr. Cholmeley had seen an obstinate long-continued acne disappear entirely while bromide of potassium was being taken for a nervous affection. —Dr. BUZZARD said that, at the Hospital for Epileptics, Queen Square, out of fifteen cases treated by him with bromide of potassium, no fewer than eight had presented eruptions about the body. In three cases out of the eight, the eruption had been limited to a few vesicles, but, in several, it had been severe. He was in the habit of continuing the bromide in spite of the eruption. In two cases in which most marked benefit had been apparent, there had been no eruption. —Dr. TILBURY FOX said, the case of Dr. Cholmeley was a form of acne,

and abroad was called seborrhœa. The milky points were no doubt formed by a collection of sebaceous matter. He objected to the term confluent acne, because the glands did not run into one another, but only the collection of sebaceous matter.—Dr. BEIGEL had very seldom seen an epileptic patient with healthy skin, and he was of opinion that the bromide rarely produced an eruption. Some of his patients had been for years on bromide of potassium, but no eruption had appeared.

Dr. OPPERT related eight cases of Syphilis in which good results had been obtained by the Subcutaneous Injection of Solution of Corrosive Sublimate. In four of the cases the symptoms had entirely disappeared. In one of the others it was necessary to discontinue the injections on account of the local effects. In all the cases, the favourable action of the remedy showed itself within a very short time after the commencement of the treatment. The toxic action of the drug was observed in one instance only. In his comments on the cases, Dr. Oppert drew attention to the special advantages of this method of administering mercury, as well as to the objections to which it is liable. He recommends its employment in cases in which other remedies have failed or cannot be applied, and particularly when the state of the digestive organs forbids the continued use of mercury internally. The local pain and the liability to the formation of abscesses at the seat of injection are the most important drawbacks. They are best avoided by restricting the quantity of sublimate injected each time to one-twelfth of a grain. He recommended the side of the chest as the most suitable place for injecting the remedy. In answer to Dr. Burdon Sanderson, who considered the side of the chest particularly inconvenient in all cases, and especially with corrosive sublimate, Dr. Oppert said he preferred the chest, because there was more danger of irritation in the arms and legs, where indurations were more likely to take place.—Dr. BEIGEL said that he had often employed mercury in this manner with variable results. The results of experiments by Lewin, of Berlin, with mercury alone and in combination with iodide of potassium, were extremely doubtful.

A case of Tumour of the Upper Jaw was exhibited by Mr. HEATH, and a case of Addison's Disease by Dr. GREENHOW.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, NOVEMBER 16TH, 1869.

RICHARD QUAIN, M.D., President, in the Chair.

A REPORT by Dr. MOXON and Mr. J. HOGG, on Dr. Tilbury Fox's case of Fungous Foot, was read; also, a report by Dr. BRISTOWE on Dr. Powell's case of Lympho-Sarcoma.

Dr. TUCKWELL brought forward a case of Lympho-Sarcoma affecting the spleen, the lumbar and mesenteric glands, from a woman who had long suffered from ulcer of the leg. The spleen was full of growths of varying sizes. The liver was affected only in its under surface. There were a few nodules in the peritoneum. There was no evidence of albuminoid disease.—Referred to Committee.

Mr. J. D. HILL exhibited a Diaphragmatic Hernia through the œsophageal opening, from a man aged 55, who died of acute bronchitis. The sac contained the stomach and omentum. There was a stricture at the termination of the œsophagus which had not been examined. There were several scirrhous growths found in the body.—Referred to Mr. Callender and Mr. Arnott.

Mr. BARWELL showed a Ventral Hernia from a man who died, after being slightly relieved for the time by operation. The intestine had passed through the muscular wall, where it was strangulated by a hard ring.

Mr. NUNN exhibited several casts of a case of Dislocative Rheumatism. There was softening of the ligaments of the joints, allowing spontaneous dislocation of the joint and future ossification of the surrounding tissue. The flexors of the joints had overcome the extensors.—Mr. W. ADAMS considered the case one of chronic rheumatic arthritis.

Mr. NUNN also showed casts of Fibrous Tumours behind the bursa of the patella and elbow. They were not accounted for by the occupation of the patient.

Dr. CAYLEY exhibited, for Mr. Alderson of Hammersmith, a Fibrous Tumour of the left Ovary, associated with a large cyst capable of holding two gallons, from a female aged 60. The tumour was of three years' growth, and the cyst ruptured into the rectum.

Dr. JOHN MURRAY presented the liver, uterus, and appendages of a woman who died of *ante partum* Hæmorrhage, in her eighth month of pregnancy, in the Middlesex Hospital, whither she was brought drenched with blood. All means were taken, and, ultimately, delivery of the child by craniotomy, to arrest the hæmorrhage; but she died of exhaustion. There were extravasations of blood into the liver and ovaries, and under the serous surfaces. Although her history was not that of a bleeder, still, the obstinate character of the hæmorrhage and the extra-

vasations into the internal organs, favoured such a hypothesis. There was no fatty or other degeneration of the organs.

Dr. WICKHAM LEGG exhibited about a pint of Cherry-stones from the ileum of a woman who had been, on several occasions, in University College Hospital. We referred to this case in a recent number.—Mr. T. SMITH alluded to a case in which a large number of cherry-stones had been passed after colotomy.—Dr. BUCHANAN, while resident in University College Hospital, had suggested gutta-percha pills as a test in Dr. Legg's case, believing the cherry-stones to be outside; but the woman did not pass them *per anum*.

Mr. ADAMS brought forward a Spleen, weighing eighteen ounces, infiltrated with Fibrous matter; and a Heart, showing soft vegetations on its margin. They were obtained from a female, aged 48, who died seven months after the commencement of the illness, with ascites. She had repeated attacks of evening fever, occurring two months before any local mischief had apparently taken place.—Dr. ANSTIE considered the case one of ulcerative endocarditis and pyæmia.

Dr. MOXON exhibited an Embolism of the Pulmonary Artery from a man who was under the care of Mr. Birkett, in Guy's Hospital, for a wound of the foot, which healed up after a slight attack of erysipelas. There was, however, no œdema of the leg, and but slight pain in the course of the femoral vein. While convalescing and walking about, he was suddenly seized with dyspnoea, and died. A large clot, with branchlets, was found in the pulmonary arteries. There were remains of phlebitis in the femoral vein. The plug in the pulmonary artery, he considered, was detached and carried bodily from this part. Its upper end was evidently broken.—Referred to Drs. Murchison and Bristowe.

Dr. WHIPHAM exhibited the Heart and Ribs of a man who had shot himself. The apex of the heart was blown away, and part of the left ventricle; in addition to which, the lungs were torn by the two bullets used.

Dr. BRISTOWE exhibited a Cerebral Clot: it involved the left corpus striatum and optic thalamus, but the anterior part of the hemisphere was not affected. The patient's speech was entirely lost at first, and was beginning to return when she died. He was unable to speak with certainty as to the presence or absence of aphasia.

MEDICAL SOCIETY OF LONDON.

NOVEMBER 22ND, 1869.

PETER MARSHALL, Esq., President, in the Chair.

Mr. DE MÉRIC exhibited a Hypertrophied Clitoris and Nympha, which he had excised from a patient. He stated that infiltrated fibrinous deposits were common, but hypertrophy connected with syphilis rare.

Mr. DE MÉRIC also mentioned a case of Elephantiasis, with Psoriasis of the Foot, which yielded to iodide of potassium, etc.—Dr. TILBURY FOX objected to the term elephantiasis in these cases; he limited it to true leprosy.

Mr. HENRY LEE brought before the Fellows a patient whose Hip he had excised three years ago. The lad had perfect motion of the joint, and walked daily seven or eight miles.

Mr. LEE also produced a case of Excision of the Knee-joint, where the operation had been performed six months. The peculiarity of this case was that he had left half of the patella, which was ankylosed.

Mr. LEE then detailed six unusual cases happening in his practice.

I. An old lady, 90 years of age, fractured her hip-bone. Six months afterwards she died, and provisional callus was found to have been thrown out, sufficient to keep the ends of the bone in apposition.

II. A syphilitic patient had lost nearly the whole of the tongue; but the disease was stopped by the use of the calomel bath and the free administration of sarsaparilla.

III. This was a case of Disappearance of the Testicle in a patient suffering from Inguinal Hernia, for which the patient wore a truss. On leaving off the truss the testicle descended.

IV. The patient struck her arm; an abscess formed, and remained open for five months. Fibrous ankylosis took place. Another abscess formed. The elbow-joint was excised. An unhealthy wound remained, and the arm was amputated. A good stump formed, which became very sensitive. After months of suffering, the median and ulnar nerves were dissected out, the extremities of which were enlarged, forming cartilaginous bulbs. The pain returned after a time; all the nerves were then divided near the armpit, but the pain was unrelieved. The humerus was then removed at the glenoid cavity. The wound readily healed, and the patient remained free from pain.

V. An officer was suddenly prostrated. He had an eruption on the skin, and pain in the bones. One leg was extremely swelled, then the other, with pain and redness of the skin, but with little œdema. The

right eye became affected; he lost his sight. The disease was unaffected by remedies. He had ecchymosed spots beneath the conjunctiva, and a black patch on the tunica albuginea. The cornea sloughed.

vi. The subject of this case has Double Vision. With one eye, he sees two distinct objects with either eye; and, when both eyes are open, by pressing on the globe, four objects are seen.

HARVEIAN SOCIETY OF LONDON.

NOVEMBER 18TH, 1869.

E. HEADLAM GREENHOW, M.D., in the Chair.

Mr. GANT read a paper on Fracture of the Patella: with Four Cases. The author gave a general view of the pathology and treatment of this fracture embodying the results of his own experience. Having spoken of the structural conditions, signs, and causes of fractured patella, he dwelt more particularly on the two recognised modes of union—ligamentous and osseous. The difference depended probably on the less or more complete contact of the fragments during the process of union. Hence, the probability as to the one or the other taking place would vary according to the direction of the line or lines of fracture, whereby the fragments were subjected to displacement by muscular action. *Ligamentous* union usually took place in transverse fracture; with rare exceptions, where osseous union may have occurred, nearly complete contact having been maintained. Union by ligament would form even when separation of the fragments extends to an inch and a half; beyond this distance, thickened aponeurotic fascia served as the only bond of connection. Thus, the fragments might remain severed to an extent of four or five inches. *Osseous* union took place more frequently in longitudinal and in comminuted fractures, the fragments remaining in apposition. Hamilton had recorded two such cases; and Sir A. Cooper succeeded in obtaining bony union in some longitudinal fractures. The proof of this mode of union having occurred in these cases, and in the author's experience, had rested on two facts: permanent apposition of the fragments, and the absence of any mobility between them. Specimens of bony union would be more conclusive evidence; and this was supplied by a specimen described in the BRITISH MEDICAL JOURNAL of November 13th, under the head of "Museum Notes". The treatment which Mr. Gant had found most successful consisted in a due observance of the position necessary to entirely relax the quadriceps extensor muscle, and the application of the simplest retentive apparatus. The limb should be extended, and flexed on the abdomen, until the fragments would naturally fall into apposition; and this position should be maintained by a sufficiently elevated inclined plane. Any swelling or distension of the synovial capsule, and any synovitis consequent on the injury, having subsided, aided by an evaporating lotion, the fragments might even be brought into contact. Thus, where the swelling had diminished in the course of three or four days, the fragments might be readily and painlessly retained in position by the application of a bandage immediately above and below them, encircling the limb in a slightly figure-of-8 form, and tied together at the sides. Sometimes, the additional security of a compress just above the upper fragment might be necessary. Of Malgaigne's hooks, he did not approve, from what he had seen in the practice of other surgeons. For permanent support, after union of the fragments, the author had used with advantage a laced elastic knee-cap, having a leathern receptacle to compress the patella. This should be worn until the union had become firm and unyielding. The four cases adduced occurred in 1864; but they were selected as having been authenticated by notes carefully taken by Mr. John B. Foster, then House-Surgeon at the Royal Free Hospital. The principal points of importance in these cases were the following. 1. The fracture in all four cases was transverse, and occurred in the left patella. 2. Three of the fractures were caused by muscular action; the fourth by direct violence. 3. The ages of the patients were: 56, 49, 40, 33. 4. The periods when union was found to be firm, and the support of a back splint in starch used only as a precaution, were: ten weeks, six weeks, eight weeks, six weeks. 5. The extent of separation between the fragments, originally, and at the end of these periods of union, was as follows: original separation in all the cases, two inches, slightly more or less; union separation, one-quarter of an inch, contact, one-quarter of an inch, one-eighth of an inch.

LONGEVITY IN ONE FAMILY.—The Rev. Thomas Farmer, formerly vicar of Chirbury, died in the year 1838, in the 92nd year of his age; his wife, in 1854, aged 99. John Farmer, of Dudstone, brother of the Rev. Thomas Farmer, died in 1843, aged 99; and his widow in 1857, aged 88. Aggregate, 378; average, 94½. To this may be added that of Edward Farmer, of Churchstoke, who died at the age of 86.—*Shrewsbury Free Press*.

REVIEWS AND NOTICES.

THE LIFE AND LETTERS OF FARADAY. By BENICE JONES, M.D., Secretary of the Royal Institution. Two vols., 8vo. London: Longmans, 1870.

SHALL we say that the honour of writing Faraday's life has been well bestowed, or that the task has fortunately fallen into most able hands? Either expression would be equally true; Faraday is fortunate in his biographer; Dr. BENICE JONES in his subject. The work consists of two 8vo volumes, and is illustrated by a portrait and by several engravings. Dr. Jones's plan has been to contribute but little of his own, and to allow the letters, extracts from diaries, etc., to tell their own tale. Where the biographer himself appears it is almost always as a narrator—scarcely ever as a commentator—and his narratives are always clear and concise. The work is indeed characterised throughout by excellent taste; and it is needless to add that, as regards familiarity with the scientific investigations of Faraday, we have in Dr. Bence Jones one who could scarcely have been excelled.

Faraday's letters and diaries are by no means restricted to scientific subjects, and will be of great interest to many not specially concerned in the study of natural philosophy. They are full of acute observation on a thousand matters, and reveal in many places a deep fund of quiet humour. We should be glad, if space permitted, to make quotations from some of these. As it is, we must be content to recommend the perusal of the work itself to all who are interested in observing the inner life and the daily habits of thought of a philosopher whose insight was only surpassed by his devotion to truth. The unselfish industry of Faraday supplies a model which cannot be too closely studied by all who pursue science. The record of his life, as presented to us in these admirable volumes, is one from which the reader cannot rise but with purified feelings and increased zeal. We trust that they will be largely read by members of our profession, and especially by our students.

NOTES ON BOOKS.

Health and Meteorology of Newcastle and Gateshead. Fifth Report for 1869. By G. H. PHILIPSON, M.A., M.D.—This Report includes the months of September and October, and gives a summary of the occurrence of disease and mortality during that time. There is a very useful addition, in the form of tables giving a return of the cases coming under treatment in the union, charitable and public institutions of the two towns during each week. The returns are made by twenty-four medical practitioners to the Northumberland and Durham Medical Society.

On the Physical Characteristics of the Jewish Race.—By JOHN BEDDOE, B.A., M.D., President of the Anthropological Society, etc.—A good deal of this pamphlet is occupied with the question as to whether the existence of light hair and eyes among the Jews is compatible with purity of race. It seems unquestionable that xanthous Jews exist into whom there has been no recent importation of Gentile blood; and the fact that these red-haired Jews are found in countries widely separated precludes the idea that any special local cause, such as climate, has wrought the change. Dr. Beddoe suggests three possible sources of early admixture, which he thinks may explain the xanthous element observed among living Jews. The Jews may have intermixed with the inhabitants of Spain long before the Babylonian captivity, or with the Phoenicians; or, lastly, the known amalgamation of the Idumæans with the Jews may be the source whence the red hair, which probably characterised that people, has been derived.

Special Report of the Medical Officer of Health for Mile End Old Town upon the Epidemics of Scarletina and Relapsing Fever. By MATTHEW CORNER.—This Report contains some very valuable suggestions and recommendations for the prevention and check of scarlatina, some of which, almost identical with the recommendations lately compiled for and published by the Registrar-General, were framed by Mr. Corner a year ago. The author has done good work by insisting on the danger of schools as foci of infection, and by forwarding copies of his recommendations to all schools in his district. We agree with Mr. Corner in his estimate of the comparative uselessness of making new sewers unless the old ones are at the same time quite got rid of; unused drains, etc., are sources of fever outbreaks all the more dangerous because generally hidden and unsuspected; and, as Mr. Corner suggests, the truest economy would be shown by a liberal expenditure for the purpose of abolishing all "old, disused, and defective drains and sewers." The hamlet of Mile End Old Town had been free from relapsing fever up to the middle of November.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, DECEMBER 11TH, 1869.

DAVY'S GREAT DISCOVERY.

IT has been said that Sir Humphry Davy made his best discovery when he found out Faraday. Without doubt, the diagnosis of youthful ability is one of the most difficult and important of the tasks which devolve upon those who have gained prominent positions in life. So much may be done by timely help and advice; so much disappointment may be saved by the use of sound judgment, or incurred by the lack of it, that it is not easy to overrate the faculty which enables some men to recognise in those who are young, and as yet untried, the existence of real ability, or to feel certain of its absence. Dr. Bence Jones's *Life of Faraday*, just published, supplies us with most interesting details as to the early years of its subject. We trust our readers will not consider our space wasted if, guided by the facts there recorded, we attempt an estimate of the qualities which led Faraday's early patron to form a correct opinion as to his capacity, and to adopt a line of conduct from which the world gained so much.

In the year 1801, Faraday's father, a smith, living near Manchester Square, was in receipt of parish relief; and to young Michael, then ten years of age, one loaf weekly was allowed, which he had to make last for the time. It must not, however, be inferred from this fact that his parents were unthrifty. The event occurred in a time of great distress, when wheat was £9 a quarter. Both his father and mother were of respectable family; both were born in Yorkshire, and of industrious and excellent habits. From the age of five to that of twelve, the boy's time was spent partly at "a common day-school", where he acquired the rudiments of reading, writing, and arithmetic, and partly "at home or in the streets." Respecting this period, we have no facts further than that he states that he was "charged with being a great questioner." At the age of 13, he went on trial as an errand-boy to a bookseller named Riebau, and was employed in the delivery of newspapers. His year of trial over, he was bound apprentice; and, "in consideration of faithful service", his master agreed to take no premium. Here we must note his first certificate of merit. As bookseller and stationer, he worked zealously, and retained the esteem of his master, who also granted him the privilege of attending lectures on natural philosophy in the evenings. In connection with the business, he had the advantage of access to books; and we find him acknowledging his special indebtedness to the following: *Watts On the Mind*, the *Encyclopædia Britannica*, and *Marcel's Conversations on Chemistry*. At the age of 19, he formed at the lecture class two important friendships, one of which appears to have exercised considerable influence on his after life. One of his new friends was Mr. Huxtable, a medical student; the other, Mr. Benjamin Abbott, a clerk in the City. To the latter, most of the very interesting letters which illustrate Faraday's early life, and which Dr. Bence Jones well describes as "priceless", were addressed. Dr. Jones speaks of Mr. Abbott as belonging to the Society of Friends: we believe, however, that such was not the case at the time when Faraday's acquaintance with him began. Subsequently he joined that Society; and this fact may be held to imply much as to the seriousness of his character. Faraday would appear to have been most careful in the formation of his friendships. In a letter to Abbott, alluding to the importance of caution in this matter, he writes: "I feel no hesitation in saying that I scrutinised you long and closely before I satisfied the doubts in my breast, but now I trust they are all allayed."

In 1812, when aged 20, Faraday had, through the kindness of a customer, the privilege of hearing four lectures by Sir Humphry Davy; and in the same year, in the ardent hope of securing scientific occupation, he ventured, without any introduction, to write to Sir Joseph Banks, the President of the Royal Society. His application, as might be expected, came to nothing. Subsequently he wrote also to Sir Humphry Davy, and sent him, by way of credential, the manuscript notes of his four lectures. Sir Humphry replied favourably and kindly; and afterwards, when laid up by a wound of the eye, employed the bookbinder's apprentice as his amanuensis. Faraday's attractions to natural philosophy at this time seem to have been in part moral and in part the result of natural taste. He wished to escape from trade, which he thought "vicious and selfish", and to enter the service of science, which, he imagined, "made its pursuers amiable and liberal." Sir Humphry undeceived him somewhat on these points, and advised him to remain in his occupation. A little later, however, the post of assistant in the laboratory of the Royal Institution became vacant, and Sir Humphry offered it to him at a salary of 25s. a week, with rooms. These terms having been accepted, Sir Humphry's great discovery may, in some sense, be said to have been made. It was announced to the managers of the Institution with no enthusiasm, but in quiet and business-like terms, Sir Humphry describing his *protégé* as "a youth of 22 years of age, who appeared well fitted for the vacant situation"; adding, "his habits seem good, his disposition active and cheerful, and his manner intelligent." These terms, which now read so coldly cautious, were probably the most appropriate that then could have been employed. Faraday was no juvenile prodigy; he had given proof neither of genius nor even of uncommon talent; but he had shown that he possessed zeal, intelligence, energy, and great steadiness of character. It is said of Scotchmen that they are not of age till forty, Faraday was born of parents not far south of the border, and he, too, possessed the excellent quality of a slow and steady power of growth. His destiny as a man of science would appear to have been by no means sealed when he took service in the Royal Institution. More than once his letters display a hankering after his old employment, and once he actually writes: "At all events, when I return home, I fancy I shall return to my old profession of bookseller, for books still continue to please me more than anything else." We find abundant evidence of his steady interest in science, but none of overpowering enthusiasm; indeed, the absence of all excitement is most conspicuous. During 1815 and 1816, when aged 23, Faraday travelled for eighteen months with Davy on the Continent, acting as his assistant in the investigations which were undertaken at various places. On his return, he resumed duty at the Institution, joined a private philosophical society, and gave lectures to its members. In 1824, at the age of 31, he was elected a Fellow of the Royal Society. From this date we may, of course, consider his character developed and his fame achieved. It is not our purpose to follow him further, but to restrict ourselves rather to the attempt to estimate his early character.

It may be noted, in the first place, that he would appear to have enjoyed excellent health, and an even flow of spirits consequent thereon. We hear nothing whatever of sickness; and his exhortations to his friends to bear up cheerfully under the ills of life are sufficiently indicative of his own powers in that direction. During their travels on the Continent, Lady Davy's temper sorely tried him; but even respecting her attacks he is able to record, "At each quarrel I gained ground and she lost it; for the frequency made me care nothing about them, and weakened her authority, and after each she behaved in a milder manner." At the age of 49, he walked forty-five miles in about ten hours, and without unusual fatigue, and his powers in earlier life would appear to have been on a corresponding scale. As to his personal appearance, most of our readers are probably familiar with the photographs taken when he was advanced in years: he has preserved for us some brief particulars as to his features at the age of 22, when his French passport expressly mention "a round chin, a brown beard, a large mouth, and a great nose."

We need not enlarge upon his possession of the qualities of industry

and energy, to which allusion has already been made, and which every fact in his life illustrates. As regards his tastes, they would appear to have been chiefly for natural objects, and for the pursuit of natural truth. He thoroughly enjoyed observation and investigation. He loved books and reading. His remarks on the beauties of scenery, and his comments on men and manners, although always quiet, are most appreciative. For poetry and the fine arts, his taste would appear to have been but moderate. He enjoyed music, and "knew a hundred songs by heart." For sensual pleasures of any kind, there are no indications that he cared at all. In all probability, he found in pre-occupancy of mind a complete safeguard against all such temptations, and an efficient help to his religious principles. For conversation and letter-writing, he had a keen zest, and he records strong opinions as to their usefulness in forming character. As an indication of his appetite for knowledge and for work in its pursuit, we may quote from a letter written at the age of 20: "Time, sir, is all I require, and for time I will cry out most heartily. Oh, that I could purchase, at a cheap rate, some of our modern gents' spare hours; nay, days; I think it would be a good bargain both for them and me. As for subjects, there is no want of them. I could converse with you, I will not say for ever, but for any finite length of time."

Faraday had been educated in a strictly religious manner in connection with the small sect of Sandemanians; and he was himself, from the first, of a serious turn. In later life, he was accustomed to preach at their chapel in the Barbican. Yet, that his views as regards the conduct of life were at no time narrow, may be inferred from the facts that at Rome (aged 23) he attended a carnival masked ball, attired "in a nightgown and nightcap", and "came away well entertained"; and that at home he was a not infrequent visitor to the theatre. That he was a man of firmly fixed religious faith in early as in later years, is apparent throughout his biography; but, at the same time, we observe an almost entire absence of direct reference to religious subjects, and an absolute disuse of religious phraseology. We do notice, moreover, from beginning to end, from his first to his latest correspondence, a dignity of character, a self-respect, a consciousness of the worth and importance of human action, which must have had a large share in keeping him aloof from all that was vain and frivolous. It is rare to meet with a character in which noble self-consciousness of worth is so well balanced by humility. At the age of 21, he writes to Abbott: "I thank that Cause, to whom thanks are due, that I am not in general a profuse waster of those blessings which are bestowed on me as a human being—I mean health, sensation, time, and temporal resources." Then, after carefully guarding himself against a charge of unorthodoxy, he adds: "All I meant to say on that point was, that I keep regular hours, enter not intentionally into pleasures productive of evil, reverence those who require reverence from me, and act up to what the world calls good." Subsequently we find again: "My mind delights to occupy itself on serious subjects, and I am never better pleased than when I am in conversation with a companion of my own mind." In commencing one of his earliest lectures to a mixed audience (aged 25), he declined to concern himself only with the showy parts of his subject, since he "should deserve to be charged with a miserable mutilation of the science were he to omit a full consideration of it"; adding, "I will never sacrifice the real importance and integrity of my subject to noise and splendour. I must ask, as I have often before done, your kindness and liberality whilst I attempt to combine the instruction and amusement I owe to you with the respect due to myself."

Amongst the negative qualities which must have been apparent in Faraday's youth, and which were displayed conspicuously in after life, we must rank first his freedom from the disturbing influence of vanity and personal ambition.

This was, probably, in part the result of careful training, induced by principle. In a remarkable postscript to a letter to Abbott, at the age of 20, after an energetic disquisition on a chemical subject, he adds, "Pity me, dear A., in that I have not sufficiently the mastery of my feelings and passions. In the first part of this long epistle, you will

see the reasons I have given for continuing the subject; but I fancy I can now see the pride and self-complacency that led me on; and I am fearful that I was influenced by thinking that I had a superior knowledge in this particular subject. Being now aware of this passion, I have made a candid confession of it to you, in hopes to lessen it by mortifying it and humiliating it."

Amongst the useable qualities which Sir Humphry must have recognised from the first is Faraday's power in the use of words. His early letters, in spite of his very narrow school education, are, thanks probably to the bookseller's shop, models of clear and concise writing. His description of a French pig in his continental journal might rival the word-painting of Dr. Russell himself. We may safely assert that skill in composition—real dexterity in the use of words—is in itself no mean index of character. It usually marks a man who is not content with slovenly thoughts; a man who is ever striving at clear and definite ideas. And here we may note, also, that Faraday, when young was fond of definitions, and that he wrote to his friend Abbott asking him to transcribe and send him any clever ones that he met with. Together with a remarkable power in the selection of words, we have also a self-control and freedom from all excitement little less valuable. He appears to have been scrupulously truthful, and to have hated all forms of exaggeration. Closely connected with these qualities, we have also a judicial love of evidence and a distrust of all inference not associated with facts and experiment. When the great painters came to consult him about their pigments, he would give no advice, but, holding fast to the clue which had so often guided him, urged them to try for themselves; "to expose their washes and tints to bright sunlight, covering up one-half, and noticing the effect of light and gases on the other." This cautious advice, given in later life, is most characteristic of his youthful habits also. For French methods of research he entertained no respect. "They reason theoretically without demonstrating experimentally, and errors are the result."

When Sir Humphry had his first interview with Faraday, in one of the windows of the ante-room of the Royal Institution, in 1812, he met, we may suppose, a young man of modest but self-reliant demeanour, with a large nose, a great mouth, and a clear, steady eye—one of whom he already knew that he could write out good lecture-notes, and that he had shown a remarkable longing for scientific occupation. We cannot wonder that Sir Humphry thought him likely to be worth twenty-five shillings a week as a laboratory-assistant. During the next ten years, the two were closely engaged together in various pursuits. The character of the pupil was gradually unfolding, and Sir Humphrey must have come to see pretty clearly that, in devotion to scientific truth, and in capacity for its passionless pursuit, his *protégé* was one who had few rivals. The great discovery was probably made slowly, and by no means at a leap. We have endeavoured briefly to hint at some principal data on which it may have been founded. A few sentences with which Faraday concluded a lecture given when he was only 23, will, however, form a better epitome of his own early character than any which we can produce. "The philosopher should be a man willing to listen to every suggestion, but determined to judge for himself. He should not be biassed by appearances; have no favourite hypothesis; be of no school; and in doctrine have no master. He should not be a respecter of persons, but of things. Truth should be his primary object. If to these qualities be added industry, he may, indeed, hope to walk within the veil of the temple of Nature."

COMPENSATION CASES.

THE week has been remarkable for the number of actions for compensation for injuries which have occurred. Amongst the most interesting of these was that of a Jew girl named Harris, which was tried at the Court of Common Pleas, the defendants being the London and Brighton Railway Company. She was the daughter of a beerhouse-keeper, and had been, as she alleged, injured in an accident which occurred in June last. The defendants adopted the unusual and bold course of asserting, in the face of much medical testimony, that her case

was a fabrication. We regret to add that the defendants' counsel thought himself warranted in accusing the chief medical attendant of complicity. Part of her statement was, that, at the time the collision happened, she was in the act of seeking her ticket in her purse; and that she dropped fifteen pounds from the latter. Here was the first improbability. The injuries alleged to have been received consisted in various contusions with "concussion of the spine," the latter having been followed by hysteria and other nervous symptoms. Her story was supported chiefly by the evidence of a Dr. Budgett, who had attended her in conjunction with his son ever since a day or two after the accident. He deposed to the existence of bruises on the legs, and tenderness over the region of the spine; and stated that the pupils had been dilated, and the pulse slow (54 or 55). He had seen her vomit on several occasions; had no doubt that the vomiting was involuntary; he believed that it was caused by concussion of the spine; and even at the present time "could fix no date for her probable recovery." Dr. Budgett was severely cross-examined. His bill amounted, he said, to £220, and had not been paid; nor did he expect that he should get the whole of it, unless from the railway company. He admitted that his charges had been considerably higher than usual; that on the first day of his attendance, for instance, although she lived near him, they had amounted to two pounds—his son and he having been occupied nearly the whole day in putting on bandages. Three most able medical men were called in support of Dr. Budgett's view of the case. They had, however, only seen the patient on a few occasions. One of them replied carefully to the direct question put by Mr. Serjeant Ballantine—"Is she shamming?"—that his suspicions had been alive in the matter, and that he had come to the conclusion that she was not; and the other witnesses agreed with him. The medical testimony for the defendants was to the effect that the girl had no symptoms excepting those which hysteria would explain. Dr. Maclure (the surgeon to the company), Mr. Power, and Dr. Ramskill, were examined. They all deposed that her pulse was of normal frequency; that she had no paralysis; and that, in fact, with the exception of spinal tenderness, they could discover little or nothing amiss. The discrepancy in the medical evidence was not, however, such as would probably have much influenced the jury, since none of the medical witnesses went so far as to allege imposition. The evidence by which mainly the company gained its point was that given by servants and others as to the conduct of the plaintiff since her alleged accident. One of these stated that the girl went out on the morning after the accident, apparently quite well; that she came back, and, to the surprise of the servant, announced her intention of going to bed, with the alleged intention of "getting a few hundreds out of the company." After this, and during the time that her medical attendants believed her confined to bed, it was proved that she had frequently been up, engaged in household occupations and singing comic songs. It was stated also that she had admitted that she had taken out with her only four shillings and sixpence, instead of the fifteen pounds which she asserted she had lost. It was proved that, at the time when she was believed to have been almost fasting, she indulged to the full a most excellent appetite; and that she was able to induce vomiting at will. The jury, as might be expected, brought in a verdict for the defendants. There can be little doubt that this verdict was perfectly just. The girl's initial statement as to the money was, considering her station in life and the occasion of her journey (to a licensed victuallers' *fête*), absurdly improbable. The facts as to her conduct during her illness were deposed to by several independent witnesses. She appeared to have thought it quite sufficient if she could deceive the doctors, and had not even attempted to impose on those about her. Altogether, the case may perhaps be expected to do something in teaching a much needed lesson as to the scepticism which is often desirable in receiving the statements of patients who seek damages for "spinal concussion." We learn, however, from a private source, that the plaintiff is still very ill, that her medical witnesses still believe in her case, and that her friends intend to move for a new trial.

In another case, a lady, advanced in years, received an injury to her

leg in alighting from a carriage on the Metropolitan Railway. She had been confined to her room for several months, and her health had suffered. She alleged carelessness as regards the step of the carriage, but the jury returned a verdict for the defendants. The only point of medical interest in the case was the question as to whether her failure of memory, etc., had not resulted rather from her advancing years than from the accident.

A case in the Court of Queen's Bench, on Saturday, was one in which points of much surgical interest had occurred. As the plaintiff, however, had a verdict against him, on the ground of the defendant's non-liability, there was no assessment of damages. The facts were, briefly, the following. Two drivers of hansom cabs took each his fare, a member of the gun-club, to Wormwood Scrubbs, to a pigeon match, and, whilst waiting, went into the enclosure to see the sport. As it rained hard, they took shelter in a hut on the grounds which stood in a line with the tent occupied by the shooters. A pigeon, which chanced to fly in their direction, was shot at, and the two men were each hit in the face. In each, in addition to skin-injuries, the right eye was found to be almost blind from the moment of the accident, although in neither was there any evidence of wound of it. They were taken to St. Mary's Hospital, and there admitted under the care of Mr. Haynes Walton. A narrative of their cases appeared in last week's *Medical Times and Gazette*. At the present time, both men are blind in the injured eye, and with remarkably similar conditions. In neither has there been any material irritation. In neither is the lens opaque; and in neither, without the aid of the ophthalmoscope, can any trace of disease or injury be detected. Had the case, therefore, been one for damages, the ophthalmoscopic evidence would have become very important. In each of the two eyes the vitreous body contains large films, and a portion of the retina is detached. Mr. Hutchinson, who gave evidence as to the state of the eye in one of the injured men, deposed to its entire loss, and to the probability that a shot was still lodged in it, and to the possibility that it might hereafter become a cause of irritation. The second case was not tried, the jury having returned a verdict for the defendant on the ground that he did not know that the plaintiffs were in the hut, and that they were trespassing in being there.

In a fourth case, a gentleman brought an action against a builder for an injury to his head, received from a piece of wood which had been thrown from a house. The injury consisted in a laceration of the scalp, and the consequences alleged were giddiness, headache, and defective vision. The case well illustrated some of the dangers encountered in London streets. It occurred on Ludgate Hill; and one of the defendant's witnesses, an Irish labourer, coolly admitted that he had intentionally pitched four wooden bricks down into the street below. One of these had struck the plaintiff. The medical testimony was guarded, the plaintiff's own witnesses refusing to support him in the belief that he had received serious injuries. The result was that very moderate damages were awarded. The charges by the gentleman who dressed the wound contrasted with those of Dr. Budgett mentioned above. They were one penny for lint and another for plaster. He was a qualified druggist's assistant.

In the Court of Common Pleas, on Tuesday, a man of the name of Bowman obtained £350 damages for injuries received on August 22nd, 1868. On that day, while he was on the Irongate Wharf, he was struck on the leg by a bale of wool, which was being unloaded from a waggon. His leg was very much injured, and he was taken to the London Hospital. He was found to have sustained a compound fracture of both bones of the leg, and a portion of the tibia was removed by Mr. Couper. He was in the hospital for eight months, and attended four months longer as an out-patient. Mr. Couper considered that the limb was still more or less disabled in consequence of the accident, but he did not see why ultimately one leg should not be quite useful.

A photographic artist has recovered the sum of £400 from the London and North Western Railway Company. He was travelling to Rugby when the train overshot the platform, and his carriage stopped

opposite a hollow place. When he stepped out, he fell and broke his ankle.

A widow lady named Cocker, aged 50, travelled as a third-class passenger on the South Eastern Railway from Spa Road to Deptford, and got out at the latter place. The carriage stopped opposite a part of the platform where there was a space four feet wide, and no light. She fell and hurt her shoulder, knee, arm, and side. Her knee would not allow her to stand, and she had pains in the head. The plaintiff obtained a verdict for £150.

THE Rinderpest has made its appearance in the town of Soran, in Silesia.

THE New North Staffordshire Infirmary at Hartshill is to be formally opened on Thursday, the 16th instant.

THE third annual dinner in aid of the funds of the French Hospital and Dispensary, will take place at Willis's Rooms on Wednesday next—Lord Napier of Magdala in the Chair.

THE discussion on vaccination in the Imperial Academy of Medicine in Paris, which commenced more than two years ago, has just terminated in the adoption of the report of the Commissioners.

ANOTHER lodging-house-keeper has been fined for not giving notice that a lodger was suffering from typhoid fever. A severe reprimand was administered; and a fine of twenty shillings imposed, with costs.

L'Imparziale states that, at the opening of the session of one of the Italian Universities in November, the conduct of the students was so disorderly that the Minister of Public Instruction deferred the commencement of lectures to the beginning of this month.

THE young man William B. Carr, lately an assistant to Mr. Bland, surgeon, of Sandiacre, near Derby, has again been brought before the county magistrates, Dr. Heygate, F.R.S., and W. T. Cox, Esq., and has been fully committed to take his trial on the serious charge of embezzlement, bail being refused.

A NEW quarterly journal of public hygiene is published at Brunswick, in Germany. It is edited by Professor Reclam of Leipzig, assisted by a committee of coadjutors. The first number contains an appreciative article on English institutions for hygiene; another on English factories; and various papers on drainage, barracks, army hygiene, etc.

A COMMITTEE of the physicians of Kieff, in Russia, which was appointed by the Government to inquire into the outbreak of cholera there, reports that, in the majority of the cases, the patients presented all the symptoms of Asiatic cholera, and were carried off in a few hours. One of the victims was the daughter of the governor-general of the city.

THE rate of mortality in London last week was 28 per 1,000, while in thirteen other large towns it was 29. The deaths exceeded the estimated number by 78. The mortality from scarlet fever (245) was the highest recorded during the present year. Three deaths from relapsing fever were reported. The mean temperature throughout the week was 34.2 deg.

Nature states that Dr. John Davy, brother of Sir Humphry Davy, has bequeathed to the Royal Society, in fulfilment of an expressed wish of his illustrious brother, a service of plate, presented to Sir Humphry Davy for the invention of the safety-lamp, to be employed in founding a medal to be given annually for the most important discovery in chemistry made in Europe or Anglo-America.

DEATH FROM HÆMORRHAGE.

A CASE is reported from Glasgow in which a labourer was stabbed in the thigh by a soldier. The injury was inflicted with a dirk, and in the open street. The man ran about ten yards, bleeding profusely, and then fell. He died on his way to the police-station, the femoral artery having been wounded. It is a pity that the bystanders, including a policeman and others, had not sufficient common sense to put a compress on the wound and fetch a doctor to the spot.

DEATH OF MR. ROBERT BOWIE.

MR. ROBERT BOWIE, many years Surgeon Superintendent of the Lunatic Asylum at Yarra Bend, Australia, died on September 27th, at Melbourne, of apoplexy, at the age of 82. He was one of the oldest practitioners in the colony of Victoria.

PREVENTION OF RELAPSING FEVER.

AT a public meeting held on the 2nd instant, Mr. J. G. Hubbard being in the chair, it was determined to provide daily dinners for the very poor children and the sick and afflicted in the ward of Bishopsgate, in the hope of preventing the spread of relapsing fever.

THE OUTBREAK OF TYPHOID FEVER AT SPINKHILL.

TYPHOID FEVER in a very virulent form having been for some time prevalent at Spinkhill, near Eckington, several of the inhabitants sent a memorial to the Privy Council on the subject, upon which Dr. Thorne Thorne was sent down to report. The soil was found to be saturated with animal and human filth, and all the wells polluted with drainings from ashpits, urinals, pigstyes, etc.

THE NEW LOCK HOSPITAL AT CHATHAM.

THE new Government Lock Hospital at Chatham for the treatment of patients under the Contagious Diseases Act, is now finished, and will be shortly opened for the reception of patients who have hitherto been treated at St. Bartholomew's Hospital, Rochester. Surgeon-Major F. H. Baxter has been appointed Principal Surgeon, and has already entered upon his duties.

DEATH OF A CHILD FROM OPIUM.

A YOUNG WOMAN named Woodford was tried on Saturday last at the Leicestershire Assizes for administering opium to her illegitimate child with intent to murder it. She had been an inmate of the Barrow Workhouse; and the evidence showed that a parcel containing opium had been introduced into the workhouse for her. Mr. S. Wright, surgeon, of Mountsorrel, had occasion to attend the child in March and April last: he had noticed that it appeared always to be under the influence of opium, and had warned the mother of the results. The evidence of some of the inmates of the workhouse showed ill-feeling on the part of the woman towards the child. The surgeon who made the *post mortem* examination was of opinion that death had arisen from the administration of opium, and the want of proper food. The judge, Mr. Justice Blackburn, said that, if the jury believed that the prisoner knew that administering opium would endanger life, and still went on giving it, they might find her guilty of wilful and malicious administration; but that, if she gave opium without knowing or believing that she was doing the child any harm, she was entitled to an acquittal. The jury acquitted the prisoner.

DECLINE OF THE FOOT-AND-MOUTH EXANTHEM.

ACCORDING to the *Mark Lane Express*, the foot-and-mouth disease would appear to have begun its decline. Sixty-six counties were the seat of the malady down to the middle of November, in the place of sixty-eight in the month preceding. The number of the "centres of the disease" has diminished from 3,000 to 2,600, and the places affected for the first time from 800 to 740. In Ireland, however, the malady is said to be on the increase. On the Continent, it would also seem to be extending.

FEMALE MEDICAL STUDENTS IN SWEDEN,

LADIES (says the *Athenæum*) are about to be admitted to medical lectures at the Carolinska Institute in Stockholm, provided they have acquired the same amount of preparatory knowledge as is required of male students, in order to obtain an university certificate of having passed a successful examination in medico-philosophy. Instruction in anatomy, and clinical lectures, are to be given to the ladies separately. The University of Stockholm has, it is said, decided to admit female students.

DEATH FROM APOPLEXY IN A BATH.

AN inquest has been held on the body of a man aged 32, who was found dead in a bath at the Marylebone Baths. Evidence was given to show that the water was not hotter than usual. Death was said to have been due to the "effusion of blood on the brain".

IMPACTION OF POTATO IN THE WINDPIPE.

A MAN, aged 41, who was under confinement as a lunatic, died suddenly last week from suffocation. He had been dancing in the evening, and was all at once seized with difficulty of breathing. Death occurred in a few minutes. An examination showed that the cause of the suffocation was a piece of undigested potato, which he had partly swallowed at dinner-time a few hours before.

DEATH FROM A FIST-BLOW ON THE HEAD.

AN inquest has been held on the body of a man who died in consequence of concussion of the brain, following a blow from a man's fist. The evidence went to show that the deceased was struck a violent blow on the side of the head while in a state of intoxication. The blow knocked him down. He was then assisted home by friends, and was sensible enough to open the door of his house with a latch-key. He is reported to have said that he could find his bed by himself, and his friends left him. The next morning, however, he was found inside the fender, with his waistcoat on outside his coat. He was not quite insensible, but remained more or less so till his death, not quite three days later. He never spoke after his friends left him. The surgeon who saw him—Dr. A. J. G. Cross, of Spring Gardens—said that the man was insensible when he saw him, the day after the accident; and that he remained so till his death. A *post mortem* examination was made, and revealed a fracture of the skull and a clot of blood, causing compression of the brain.

MANSLAUGHTER FROM A BLOW ON THE HEAD.

A HUSBAND has been tried at Leeds for the manslaughter of his wife. He struck her a blow on the temple without the slightest provocation, and caused her to fall against a stone sink. Thirteen days later, she died; and Mr. Scattergood, at the *post mortem* examination, found that her death was due to meningitis set up by the blow. The husband was sentenced to penal servitude for life.

RELAPSING FEVER AND THE JEWS.

IT may interest some of our readers to know what steps the Jews (proverbially solicitous for the welfare of their poor) have taken with reference to the epidemic of relapsing and scarlet fevers, prevalent at present in the East of London, where many of them reside. A special meeting of the Medical Committee of the Jewish Board of Guardians was convened, and the medical officer (Mr. D. H. Dyte) being consulted, it was arranged that a sanitary inspector should be appointed, who should visit at frequent intervals the dwellings of the Jewish poor, and see that the water-closets are in proper order, the dust-bins emptied, an abundant supply of water provided, the cisterns cleaned and supplied with covers, and other sanitary defects removed—putting in force, through the medical officer of health for the district, when necessary, the provisions of the law applicable in each case. The sanitary inspector (who acts under the general direction of the medical officer of the Board) will likewise disinfect by fumigation or otherwise, or cause to be limewashed, the apartments in which there have been cases of fever, and practically instruct the attendants of the sick, many of whom are foreigners, in the use of disinfectants, and see that they are properly applied. General instructions for the prevention of contagion have been printed in the English, German, and Dutch languages, and widely distributed among the poor, who have been abundantly supplied with Condy's fluid (for use in the apartments), solution of sulphate of iron (for the disinfection of the *excreta*), and carbolic acid (for the water-closets). Lastly, it was resolved that the amount of relief weekly distributed by the Board should be increased, and blankets, flannel underclothing, and coal-tickets, supplied

on a liberal scale during the ensuing winter. Arrangements similar to all these were carried out during the cholera epidemic of 1866, which perhaps accounts for the small number of the Jewish poor who fell victims to that disease.

DEATH OF MR. JAMES HAVILAND.

THE death of Mr. James Haviland, one of the oldest members of the Royal College of Surgeons, at the age of eighty-one years, is announced. Mr. Haviland was admitted a member in 1808, and accepted service under the East India Company as surgeon to the ship *Sir William Pulteney*, when he was highly complimented for saving the crew from scurvy by keeping up a constant supply of mustard and cress, grown in tubs and vats, on moist flannel. In conjunction with his cousin, Dr. Haviland, he founded the Bridgwater Infirmary.

DEATH SEVEN MONTHS AFTER CONCUSSION.

AN inquest has been held at Paddington respecting the death of Mr. Samuel Gerard, a fishmonger, who fell out of a train at Bishop's Road, on account of the door of the carriage being unfastened. He was for some time in St. Mary's Hospital, and for seven months has been under the care of Dr. Lyle, who stated that the cause of death was effusion of serum on the brain, in consequence of concussion.

FEVER IN THE MERTHYR TYDFIL DISTRICT.

AN outbreak of enteric fever has appeared at Merthyr Tydfil and Dowlais; and the energetic health-officer, Mr. Dyke, has lost no time in pressing the Local Board of Health to put in force whatever legal powers they have for the treatment of the sick, the limitation of the spread of the disease, and its quick removal. The Board have at once decided to have the necessary alterations made in a House of Refuge which has been placed at their disposal by the guardians, and to apply to the workhouse authorities for a supply of bedding and nurses. The clerk of the Board has also been instructed to apply to the Privy Council for power to appoint a medical officer, and to provide food and medicine for the sick removed. The Board of Guardians of the Merthyr Union are, it appears, disposed to cooperate with the Board of Health; and have only waited for the latter to take the initiative.

DINNERS FOR WORKING MEN.

A MEETING was held last week, at the City Terminus Hotel, Sir William Tite, M.P., in the chair, for the purpose of considering the means of providing, during the winter, good and cheap dinners for working men at the charge of a penny and twopence. The localities in which it was specially proposed to establish dining rooms were Poplar, the London Docks, Farringdon Market, Westminster, Lambeth, and Bermondsey—places in which much poverty prevails. In an establishment of the kind at Norton Folgate, about a thousand men are daily provided with dinners prepared from Australian meat. The supply of good and cheap food to the poor is a matter in which the medical profession is deeply interested; and the project to which we have alluded is one which they must desire to see successful, knowing, as they do, that the want of proper food is one of the most efficient agencies in the development of disease.

FEIGNED SEX.

A CASE of feigned sex is reported from the collieries. The deception was not discovered until after the death of the individual, when it was found that a person who for fifty years had passed herself off as a man, and who had actually been twice married, was in reality of the female sex. During her illness, she had been particular in refusing all access to her person. A case the converse of this came under our notice at Moorfields Hospital a few years ago. An elderly "woman" was admitted with senile cataract. She came up from the country, where she was gate-keeper at a gentleman's lodge, where she had lived for many years. In the hospital, her manner of walking, her frame, her voice, and the condition of her beard, repeatedly attracted attention. A year after her return home with recovered sight, she was charged with being

the father of a bastard child, and her imposture was established. A deception on the part of the male sex is even more disgusting and unreasonable than when it occurs in a woman.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

THE next meeting of the Association of Medical Officers of Health will be held at the Scottish Corporation Hall, Crane Court, Fleet Street, on Saturday, December 18th, at 7.30 P.M., when a paper will be read by Mr. W. Acton, entitled, "Supposing the Legislature should determine to recommend the introduction of the Contagious Diseases Act among the Civil Population, would it be possible and feasible to carry out its enactments in the Metropolis?"

LEAP FROM A RAILWAY-TRAIN WITHOUT INJURY.

AN intoxicated soldier, journeying from Edinburgh to Manchester, accomplished the feat of jumping out of a railway-carriage while the train was going at full speed, with but slight injury to himself. The doors of the carriage were locked, and he must have got through the window. The guard had noticed that the soldier was drunk, and looked for him at the next station; but, not finding him, sent people along the line to look for him. He could not be found. He turned up, however, about six the next morning, having slept all night by a haystack. Dr. McLeod found that he had received a wound of the scalp about three inches long, but not of a dangerous character. There were no other injuries, and he continued his journey to Manchester. The ground where he fell bore traces of his having been dragged along for about eight yards, and then tossed over an embankment. One stone was covered with blood, and it is supposed that his head struck against it. His exposure for twelve hours, during a night when the thermometer registered 20 degrees, is almost as remarkable as his jump.

CURIOUS MEDICAL EVIDENCE.

AN inquest was held on Tuesday at York on the body of a girl aged 17, whose death was said to have been caused by "blood-poisoning", from sleeping in an ill-ventilated bedroom. She had been chambermaid at the North-Eastern Hotel for about six weeks, and had died after a short illness. She had slept downstairs in a room which had been used as a bedroom for many years; and it was not known that any ill effects had arisen from the servants sleeping there. Fires had been lighted in the room two or three times a week, to keep it dry. Mr. Cameron, surgeon, having made a *post mortem* examination, arrived at the conclusion that the deceased died of blood-poisoning, which might be the result of inhaling infected air. Dr. Procter, who had examined the room, deposed that he did not find the slightest objection to it as a sleeping-room, and could not conceive that the occupation of it by the girl could have had anything to do with her death. A verdict of "death from blood-poisoning" was returned; but the jury thought there was not sufficient evidence as to the cause of the blood-poisoning.

THE WELSH FASTING GIRL.

A MEETING was held last week at Llanfihangel-ar-arth to make arrangements prior to the arrival of the nurses from Guy's Hospital, to watch the girl Sarah Jacob. A letter from Dr. Phillips, of Guy's Hospital, was read, containing the following suggestions.

"1. It would be advisable, before taking any steps in the matter, to obtain a written legal guarantee from the father of Sarah Jacob, sanctioning the necessary proceedings. 2. That the duty of the nurses shall be to watch Sarah Jacob, with a view to ascertain whether she partakes of any kind of food, and, at the end of a fortnight, to report upon the case before the local committee in Carmarthenshire, and, if required, at Guy's Hospital. 3. That two nurses shall be constantly awake and on the watch in the girl's room night and day. 4. It would be advisable for the nearest medical practitioner to watch the progress of the case, and it will be absolutely necessary for him to be prepared against any serious symptoms of exhaustion supervening on the strict enforcement of the watching, and to act according to his judgment. 5. That the room in which the girl sleeps shall be bared of all unnecessary furniture, and all possible places in the room for the concealment of food shall be

closed and kept under the continued scrutiny of the watchers. 6. That, if considered desirable by the local medical practitioner or by the nurses, the bedstead on which the girl now lies shall be replaced by a simple iron one. 7. That the bed on which the parents now sleep in Sarah Jacob's room shall be given up absolutely to the nurses. 8. That the parents be not allowed to sleep in the same room as the girl; that if they cannot at all times be prevented from approaching her, they should be previously searched (their pockets and other recesses of clothing, and also the interior of their mouths), and that no wetted towels or any such articles be allowed to be used about the girl by the parents or any other person save the nurses; that the children of the family, and in fact every other person whatever (except the nurses), have similar restraints put upon them. 9. That the nurses have the sole management of preparing the room, bed, and patient, prior to the commencement of the watching. 10. That, as it is asserted that the action of the bowels and the bladder is entirely suspended, special attention must be directed to these organs."

The suggestions were unanimously adopted, and a committee was appointed to receive the nurses and their report. The following gentlemen were appointed a medical committee to watch over the proceedings, and for consultation, if the nurses should require their assistance: Dr. Lewis, Mr. J. Rowlands, and Mr. J. Hughes, of Carmarthen; Dr. Correllis, Mr. J. Jones, and Mr. H. S. Davies, of Llandyssil. Three ladies were also appointed to assist the nurses. It was expected that the nurses would commence their duties on Monday last. The parents of the girl have signed an agreement in which they engage to give the entire control of the room to the nurses.

SCOTLAND.

DR. JAMES PETTIGREW has been elected Conservator of the Museum of the Royal College of Surgeons, Edinburgh.

DR. JOHN LINTON has been appointed Physician to the Royal Hospital for Children, Edinburgh; Dr. T. Kay Gray, an Assistant Extra-Physician.

DR. JOHN MACFARLANE, late Professor of the Practice of Medicine in the University of Glasgow, died on Tuesday at his residence in Helensburgh, near Glasgow, at an advanced age.

MEDICAL STUDENTS AT THE UNIVERSITY OF GLASGOW.

THE entry of first year's students numbers 79, making the total attendance at the medical classes this year 309, as compared with 302 last winter session.

ANDERSON'S UNIVERSITY, GLASGOW.

IT has been decided that Dr. Clark (the late Dr. Penny's assistant) shall finish the winter course of lectures which he has conducted from the commencement, and that the appointment of a Professor of Chemistry shall be postponed till the spring.

THE LORD RECTORSHIP OF THE ABERDEEN UNIVERSITY.

IT appears that after all Mr. Grant Duff, M.P., rather than allow Sir William Stirling-Maxwell to walk over the course and take possession of the rectoral chair as the representative of those who are opposed to reform, has again allowed his name to be proposed as a candidate. We are mistaken if the 24th—the day of election—will not show that the students of the northern University are shrewd enough to see the advantages of Mr. Duff's suggestions.

THE ROYAL SOCIETY, EDINBURGH.

THE first ordinary meeting of this Society took place on Monday evening last. Lord Neaves, one of the Vice-Presidents, delivered an inaugural address, and suggested what would, if carried out, be a most important step, that the Council should obtain from individual members specially competent for the task a retrospective view of the whole progress of every science during the past year, and that this should be incorporated into the inaugural address of the President. If this were done, and done well, it would prove a most valuable contribution to science. His lordship gave short biographical sketches of members

of the Society who had died during the year; viz., Dr. Begbie; Dr. Penny; Mr. William Brand, Secretary to the Union Bank; Dr. Allan Dalziel; Dr. Robert Dyce, Professor of Midwifery, Aberdeen; M. Flourens; Dr. Graham, Master of the Mint; Principal Forbes; Chas. P. Martius; Dr. Muir of St. Stephen's; Dr. Seller, Edinburgh; and Mr. Wardrop, London. Professor Balfour reported that the Keith Medal for the biennial period 1868-9 had been awarded to Professor Tait for his paper on "The Rotation of a Rigid Body about a Fixed Point", read at the Society 21st December, 1868. The Secretary also reported that the membership of the Society at present stood as follows; namely, honorary Fellows, 53; resident members, 303, of whom 26 were admitted during last session.

THE SANITARY STATE OF GLASGOW.

It is to be hoped that the feeling which prompted the Glasgow Police Board to send a deputation to Bristol to inquire into the means which had been adopted in that town with so much success, will lead to an increased attention to and respect for the recommendations of their medical officer. Had this been the case, Glasgow would have been able to point to a marked and favourable difference in its painfully high mortality.

ABERDEEN AND GLASGOW UNIVERSITIES ELECTION.

The following analysis of the voting at the recent election will be found of interest to many of our readers.

	Aberdeen.	Glasgow.	Total.
Registered voters	2003	2361	4364
Voting at the election, 1869.....	1710	2026	3736
Voting for Mr. Gordon.....	1075	1045	2120
Voting for Mr. Smith	635	981	1616
Medical men voting for Mr. Gordon...	318	335	653
" " Mr. Smith ...	148	180	328

Last year, 1896 members of Council voted at Aberdeen, 529 being medical men, of whom 306 voted for Mr. Gordon, and 223 for Mr. Moncrieff, the Liberal candidate. At Glasgow, on the other hand, 2191 voted last year, 552 being medical men, of whom 250 voted for Mr. Gordon, whereas as many as 302 voted for Mr. Moncrieff. It will thus be seen that Mr. Gordon increases his medical majority of 31 last year to 325 this year—a fact which affords evidence that the medical members of Council have at this election considered more the claims of the two candidates from their promise of support to measures of medical reform than from their opinions on general politics.

IRELAND.

DR. SAMUEL BROWNE, R.N., has been elected Mayor of Belfast.

THE Queen has appointed Dr. George H. Porter, surgeon to the Meath Hospital, and lately President of the Royal College of Surgeons in Dublin, to be one of Her Majesty's Surgeons in Ordinary for Ireland.

PRESENTATION.—A number of the friends of Dr. Christie, of Fintray, Aberdeenshire, anxious to show their appreciation of his services amongst them, presented him at his house Redburn, Fintray, on Monday, the 29th, with a valuable horse for his gig, along with a purse of sovereigns. Wm. Harvey, Esq., Moneykebbock, made the presentation in the name of the contributors, and Dr. Christie feelingly replied.

PREHISTORIC MAN.—A discovery of human and animal remains has been communicated by Professor Capellini, of Bologna, to the *Gazetta dell' Emilia*. They consisted of numerous flint and stone implements, the workmanship of which showed they belonged to the earliest period of the stone age. Besides these wrought implements and various other objects brought into the cavern by its human occupants, he found a considerable quantity of bones of animals mingled with bones of human beings. The condition of these latter bones, he says, "would justify the inference that the grotto had been inhabited by anthropophagi, and that the Italians of that epoch were cannibals, like their contemporaries in Belgium, France, and Denmark. Among the human bones found were those of women, and part of the jawbone of a child some seven or eight years of age. Some of these bones were entire, others were partially calcined. In the centre of the cave it was possible to discern traces of a fireplace.

AMENDMENT OF THE MEDICAL ACT.

A MEETING of the members of the medical profession of Birmingham and the district, to consider the above subject, was held in the Council Room of the Midland Institute, on Saturday last, under the presidency of Dr. Bell Fletcher. Mr. S. Gamgee stated that a committee appointed at a meeting held on November 20th, had resolved: 'That it is desirable to form a Medical Reform Union on the basis of the principles embodied in the Birmingham memorial, with a view to procure their Parliamentary sanction in an amended Medical Act; and that all legally qualified members of the medical profession who assent to the Birmingham memorial shall be eligible as members of the Medical Reform Union.' Mr. John Manley, of West Bromwich, and other gentlemen, appeared to have inferred that Mr. Gamgee had, at the recent meeting, proposed the formation of an executive for the Medical Reform Union, whereas the constitution of the Union itself was the object which he had in view. From the latter it did not seem practicable, even if it were expedient, to exclude any legally qualified member of the profession, who joined the memorialists in petitioning Parliament for reforms, now deemed urgently necessary by the great majority of the profession. Ethical rules could not furnish a basis for Parliamentary action, however desirable it may be that a high ethical standard be maintained in the relations of members of the profession amongst themselves. Whenever the time should have arrived for organising an executive for the Medical Reform Union, it would scarcely be possible to be too careful in selecting members, and they must be elected on true representative principles. The difficulty which unexpectedly sprang up at the meeting of November 20th, suggested as it was by a surgeon of the Black Country, was a fresh proof of the anxiety evinced by the vast majority of the medical men in that district for the better government and elevation of their common profession. Since the Birmingham men had had some public credit awarded to them for their efforts in the cause of medical reform, Mr. Gamgee thought that they would gladly concur in an avowal that the work would have been comparatively ineffectual but for the hearty and unfaltering support of the leading practitioners in the district. Overtures for cooperation had been officially made on the part of the Direct Representation Committee of the British Medical Association. The movement was inaugurated in the sole interest of the profession, with no feeling of opposition to any one of the colleges, corporations, or medical societies, and, in this spirit, the movement would be most easily, most honourably, and most effectually carried out. A confident belief had been expressed in the memorial 'that the influence and power for good of the General Medical Council would be greatly extended, with the profession and the public, if provision were made in a new Act of Parliament for the representation in the Council of the general body of practitioners of medicine and surgery, who are now for the most part deprived of any professional franchise.' In principle, this was the prayer of the British Medical Association; but at present the special committee of that body was committed by its instructions to a particular method and proportion of representation in the Council. In framing the memorial, Mr. Gamgee had been particularly careful to avoid embarrassing questions of detail and to adhere to the principles; and the many thousands of assents received seemed to confirm the view that, in this as in many other reforms, it was desirable to discuss principles of legislation before entering upon details of administration. The best practicable arrangements would be made for a representative deputation to accompany the President, and present the memorial to the Government. Several of the Colleges and Corporations had lately given official expression to opinions which proved that the memorial had already produced an impression where most desired. It was too much to suppose that all the medical corporations would fall in with the views of the memorialists at once. Old charters, historical privileges, and substantial honoraria always had influence in retarding progressive measures, and it would be well for the profession not to be too sanguine of early victory. When the memorial should have been presented, and the intentions of Government ascertained, it was proposed to proceed with the organisation of the Medical Reform Union; but, before taking any further step in that direction, a meeting of the profession would be convened with sufficient notice, and under such circumstances as would render possible the attendance of all legally qualified practitioners, and such a free expression of opinions as should constitute the bond of union created by the memorial. Mr. Gamgee added that, in consequence of information which he had received from high official quarters, and also from the British Medical Association, it had been thought advisable not to take any further proceedings for the moment.

This suggestion was agreed to, after some remarks from Dr. Johnson, Mr. Yates, Mr. Manley, and Dr. Hinds, and the meeting was ad-

journed to a day to be fixed by the President. Attention was called to the subject of raising a fund to reimburse those gentlemen who had defrayed the preliminary expenses; and it was stated by Mr. Manley that, out of 6000 stamped envelopes, sent out in as many circulars, on the subject of finance, as many as 4000 had not been returned.

THE "SHARPEY MEMORIAL."

It is always a source of pleasure to a man who has worked, that his merit should be acknowledged by some visible token; but the highest reward of living worth is that a man shall be assured of the continuance in after generations of the work to which he has given his thought and energy for the best years of his life. It would have been only an ordinary mark of respect that the past and present students of University College should make some acknowledgment to Professor Sharpey for his many years of earnest and successful physiological teaching. We feel sure, therefore, that we shall carry with us the sympathy of many, when we wish all possible success to the scheme, far higher in idea than an ordinary testimonial, which has been set on foot for perpetuating Dr. Sharpey's name and example, by establishing at University College, a "Sharpey Physiological Scholarship"; the holder of which shall be a student of the College, and shall devote his time to original work in physiology and to physiological teaching, under the immediate superintendence of Dr. Sharpey and his successors. Dr. Sharpey has given his approval to this plan, in preference to receiving the interest of the Testimonial Fund for his own benefit during his lifetime, as it was at first intended that he should; and he has shown how truly he has the future success of physiology at heart, by bequeathing his own scientific library for the use of the students, on the condition that it shall be kept up in connexion with a physiological laboratory, in which the scholar shall work, and help in teaching the junior students.

Up to July last, nearly £1400 had been subscribed to the "Sharpey Memorial", and we do not doubt that this sum will be very much increased, when the plan has become generally known among the profession. The Scholarship, to be of real value, should give considerable help to a man, who might otherwise be unable to afford a prolonged stay in London. A small scholarship might, we fancy, be rather a burden than a reward, to a poor man; he would be bound to keep it, and yet might be injuring his father and himself by accepting what was insufficient to support him. We hope, therefore, that subscriptions will continue to be forwarded liberally for this most meritorious object. It is intended to place a portrait or bust of Professor Sharpey in the Physiological Laboratory, and to strike off a number of bronze medals, to be sold to those who wish for tangible memorials of their teacher.

It is requested that subscriptions, specified as for the "Sharpey Memorial Fund", be paid, either to the London and Westminster Bank, 4, Stratford Place, W., or to the Treasurer, the Honorary Secretaries, or any member of the Subcommittee.

Treasurer—Sir William Jenner, Bart., M.D., F.R.S., D.C.L., 63, Brook Street, W.

Honorary Secretaries—Professor Marshall, F.R.S., 10, Savile Row, W.; and Professor J. R. Reynolds, 38, Grosvenor Street, W.

ASSOCIATION INTELLIGENCE.

SOUTH-EASTERN BRANCH: EAST SURREY DISTRICT MEETINGS.

THE next meeting of the above Branch will be held at the Greyhound Hotel, Croydon, on Thursday, December 16th. The Chair will be taken punctually at 4 P.M., by P. HUBBERT, Esq., of Croydon.

Dinner at 6 P.M.

Papers, etc., are promised by Mr. J. S. Johnson, Dr. J. M. Bright, Mr. F. Howard Marsh, Dr. T. R. Adams, Dr. Jeaffreson, and the Honorary Secretary.

HENRY T. LANCHESTER, M.D., *Hon. Secretary*.
Croydon, December 4th, 1869.

BATH AND BRISTOL BRANCH.

THE second ordinary meeting of the Session of this Branch will be held at the Royal Hotel, College Green, Bristol, on Thursday, December 16th, at seven o'clock in the evening; C. H. COLLINS, Esq., President.

R. S. FOWLER, } *Honorary Secretaries*.
CHARLES STEELE, }

12, Meridian Place, Clifton, December 1869.

SOUTH-EASTERN BRANCH: WEST KENT DISTRICT MEETINGS.

THE second meeting for the session 1869-70, was held at Maidstone on November 16th—S. MONCKTON, M.D., in the Chair.

Meetings in 1870.—It was resolved to omit the meeting at Gravesend in March 1870, because of the Branch meeting to be held in June at that place. The meeting at Dartford will be held as usual.

Papers, etc.—1. Mr. MATTHEW ADAMS exhibited a case of Congenital Absence of Both Eyes (Anophthalmos).

2. Mr. ADAMS also exhibited a case of successful Removal of Disease connected with the Lacrymal Gland, which, from its great size, had caused extensive absorption of the frontal bone, and great exophthalmos. The position of the globe, and sight, were perfectly restored.

3. Mr. ADAMS also brought forward for demonstration and comment numerous cases of Hereditary Syphilis and Internal Strabismus. His remarks on the latter subject were to establish and explain the connection between internal squint and hypermetropia, and to testify to the certain curability of such cases.

4. Mr. HOAR detailed a case of Ovariectomy successfully performed at the West Kent General Hospital, marking especially the following points. *a.* The comparative simplicity and safety of the operation when the tumour is fluid and without solid matter, and no complication is met with. *b.* The amount of irritative fever which occasionally follows a first tapping, exceeding, as in this case, that induced by the major operation. *c.* The absence of adhesion at the seat of original puncture. *d.* The care required in selecting a well-constructed clamp, so as to prevent the chance of its becoming buried (as in this case) by retraction between the lips of the wound, thereby delaying its closure; as also the importance of carrying the sutures deeply through the abdominal walls, so that the cicatrix may not yield, and a ventral hernia be threatened or produced. *e.* The occurrence of menstruation from the end of the pedicle at the cicatrix. This patient had menstruated four times in six months since the operation, and on each occasion a portion of the discharge had been emitted from the cicatrix, the flow beginning and ending with that from the vagina.

5. An address was given by Dr. MONCKTON on a case which had proved fatal at the West Kent General Hospital while under Chloroform. The patient was an anæmic woman, aged 39, from whose gums and lower jaw malignant fungous growths were being removed by the galvanic cautery; nitric acid, perchloride of iron, and the *écraseur*, having previously failed. After being very moderately under the influence of the anæsthetic, administered by Dr. Skinner's flannel mask, for about thirteen minutes, on the third introduction of the heated wire she instantaneously expired. The powerful battery actually at work by her side was applied to the chest without loss of time; mouth-to-mouth insufflation was practised, and Silvester's method also; but the patient was clearly dead from the first moment. The *post mortem* examination revealed a large goitre outside the neck, bloody mucus occupying the larynx and summit of the trachea, the heart cavities all empty, and the lungs pallid and emphysematous. The heart and goitrous tumour were submitted to the meeting. Syncopal asphyxia, to which chloroform had been contributory, was concluded to have been the cause of death. Dr. Monckton suggested the following points among others. 1. Any hindrances to free expiration deserved more consideration even than the organic condition of the heart. Chloroform might be administered more confidently in valvular disease, he considered, than in extensive emphysema, or obstructed air-passages. Dilated lungs especially were capable of receiving and detaining an immense dose of vapour, and incapable of expelling it. 2. He inferred from experiments on rabbits, which were detailed, that galvanism was of little use in case of accidents really due to chloroform, except, perhaps, by exciting the action of the diaphragm. 3. The same experiments had compelled him to believe that direct paralysis of the heart, as usually understood, did not result from chloroform. The left cavities received the vapour-charged blood directly from the lungs, and these were always contracted, while the right heart was greatly engorged, and the lungs very empty and retracted. The appearances in the chest of a rabbit, rapidly killed by chloroform, were similar to those described by Dr. George Johnson as characterising choleraic collapse, and suggested the opinion that, either by direct irritation of the vapour, or by induced blood-change, the pulmonary capillaries were contracted, shutting the blood back upon the heart, as by a sudden ligature of the pulmonary artery.

Dinner.—The members and visitors (twenty in all) dined at the Star Hotel.

UNWHOLESOME FISH, weighing altogether 10 tons 5 cwt., was seized at or near Billingsgate Market during last month by the officers appointed by the Fishmongers' Company.

BIRMINGHAM AND MIDLAND COUNTIES BRANCH:
PATHOLOGICAL AND CLINICAL SECTION.

THE first meeting of the Section for the session was held on October 29th. Present, T. P. HESLOP, M.D., in the Chair, and thirty-nine members and visitors.

Annual Meeting, etc.—In opening the meeting, the Chairman made some remarks on the mode of conducting the work of the Section, and called the attention of the members to the desirability of fixing a time for the annual meeting.

After some discussion, it was resolved, "That the annual meeting of the Section be held in October, and that Dr. Heslop be elected Chairman; Mr. F. Jordan, Treasurer; and Dr. Foster and Mr. Vincent Jackson, Secretaries for the ensuing year."

Dr. SAWYER presented two patients affected with Leucoderma—a man and a woman. In both cases there was a preternatural whitening of the skin in patches, which were coalescing and spreading, the surrounding skin being somewhat darkened.

Dr. WADE presented a man aged 47, suffering from the ordinary symptoms of Splenic Leucocythæmia. Special points of interest were the following. 1. The patient first found the tumour himself last February, it being then of the size of his hand. In May, when first seen by Dr. Wade, the tumour was as large as it is now; *i.e.*, extending down to near the pubes, and across to the umbilicus. 2. The liver, which in May was little if any enlarged, is now considerably so. 3. The hæmorrhagic tendency of leucocythæmia was manifested by the fact, that a deep cut on the finger bled for several days in spite of treatment. A slight abrasion on the thumb from a hammer bled for several hours. 4. The treatment has comprised iron, manganese, strychnia, and liquor potassæ, all without effect. The only case which Dr. Wade has seen recover was that of a hospital out-patient, aged 15 months, in whom the tumour had been observed seven months previously. This infant had also bronchitis, which was treated with a mixture containing liquor potassæ, ipecacuanha wine, and tincture of squills. The bronchitis was cured; and subsequently, the treatment being continued, the spleen and blood became normal, and the child quite well. Dr. Wade demonstrated microscopically the excessive number of white corpuscles. He also demonstrated the blood absorption-bands in the spectroscope; and showed, by a comparison with healthy blood, that spectrum-analysis failed to distinguish between normal and leucocythæmic blood. He also stated that the ordinary tests failed to show anything like an amyloid degeneration of the white corpuscles in this case. This experiment he had made from suspecting that the excess of white corpuscles might be due to arrested development consequent upon amyloid degeneration; and, as we are still ignorant of the cause of this excess, it is important to exhaust all possible explanations.

Mr. T. UNDERHILL exhibited an Ovarian Cyst, removed from a woman aged 50. She first noticed an enlargement on the right side in December 1868; and, at the date of the operation (August 10th, 1869), measured forty-five inches and a half in circumference. The cyst contained twenty pounds of fluid. For the last four months before the operation, the patient had a sanguineous discharge from the uterus, which resisted treatment. She had also a troublesome spasmodic cough. Mr. Underhill considered both these symptoms to be dependent upon pressure from the constricted cyst. They ceased immediately after the operation, and recovery was uninterrupted and complete. In the course of his remarks, Mr. Underhill drew particular attention to the importance of making the incision as short and as low down as possible, in order to avoid the dragging sensation, which is so frequently complained of after recovery, when the pedicle is attached higher up.

Mr. GOODALL exhibited the larynx of a child on whom Laryngotomy had been performed for the removal of Warty Growths.

Mr. ADDENBROOKE presented a specimen of Dislocation forward of the Fourth Cervical Vertebra, taken from a boy aged 7 years, who had been run over. The cart-wheel had passed over the upper part of the back and the side of the face, producing a compound fracture of the lower jaw, for which the boy was received into the General Hospital on May 29th. He went on well until June 3rd, when he was suddenly seized with convulsions and died. The *post mortem* examination revealed the dislocation.

Mr. FURNEAUX JORDAN showed two specimens of Encephaloid Cancer of the Head of the Tibia removed by amputation of the thigh.

Mr. FURNEAUX JORDAN also showed an Intrauterine Fibromuscular Polypus removed from the fundus.

"THINGS NOT GENERALLY KNOWN."—The *Athenæum* states that the peculiar swelling of the knee which used to be called the "housemaid's knee", is now known among surgeons as the "ritualistic knee".

CORRESPONDENCE.

ARREST OF UTERINE HÆMORRHAGE.

SIR,—The arrest of uterine hæmorrhage after labour is a subject fraught with interest to the medical practitioner; and Dr. Barnes's paper on this question, read at the meeting of the Obstetrical Society on November 3rd, has suggested to me the necessity of sending the following details of a case which occurred in my practice.

Mrs. Q., a strong, healthy lady, was delivered of her fourth child on June 20th, in this year. The presentation being a footling, I delivered quickly, after the full dilation of the os. Most alarming hæmorrhage followed the expulsion of the placenta. Hand-pressure, or rather grasping the uterus with the hand, cold douches, ergot, etc., were of no avail. With the left hand still in command of the uterus externally, I introduced the right into its interior, and, not finding any clots in the cavity, I endeavoured to stimulate the flaccid uterine walls to contract. All my efforts were unavailing. I thought of galvanism and of the perchloride of iron, but such was the rush of vital fluid, that, long ere styptics or appliances could be procured, my patient must have succumbed. While noticing with alarm the blanched face, the dull, leaden, upturned eye, and the jactitations of the sufferer, it occurred to me to make pressure on the abdominal aorta, and at the same time I felt its pulsations from within the cavity of the uterus. I immediately applied the index finger on the artery above its bifurcation, and maintained steady pressure for about twenty minutes. The hæmorrhage ceased almost immediately, and, at the expiration of the compression, the uterine walls attempted to contract. A tumblerful of cold water, followed by a good dose of ergot, was administered; a firm binder and pad applied, and in about an hour afterwards, I was enabled to leave. Mrs. Q. made a good recovery afterwards, and is now (November 22nd) in excellent health.

The value of the above record I believe to be great, as, with the hand within the uterus, compression of the aorta is easy, and, while supplying a ready method of at least temporarily arresting uterine hæmorrhage, it allows us time to procure the perchloride or any other remedy we may wish to employ. I say temporarily arresting uterine hæmorrhage; because I dare not suppose that, in every case, it alone will succeed, and I have not since had a case which did not yield to the ordinary manual treatment. I am, etc.,

DANIEL W. PARSONS, L.R.C.P. Lond., etc.

31, Everton Crescent, Liverpool, November 22nd, 1869.

SIR,—After Dr. Barnes's valuable paper, lately read before the Obstetrical Society, there will doubtless be an increased use of injections of the solution of perchloride of iron into the uterine cavity for the purpose of arresting hæmorrhage. It is important that every precaution should be taken to guard against the admission of air into the uterine sinuses. It is also desirable, in a case of flooding, when the practitioner is single-handed, that the injection should be prepared in the most ready manner, and the apparatus for using it should be of a character the least liable to get out of order.

Dr. Barnes recommends that a Higginson's syringe should be employed for the operation in question; but I submit that in the sometimes urgent use of this instrument there will be a risk of omitting to fill the delivery portion of the tube with water, as suggested by him, for the purpose of expelling air, as well as a chance of the feed portion getting displaced in the vessel containing the injection, and thus admitting air. Now I venture to propose that a native India-rubber bottle, holding about six ounces, with a large gum-elastic tube, ten inches long, well fitted and properly perforated at the extremity, should be substituted for the syringe; also that a stoppered glass bottle, in a box-wood case, holding rather more than the requisite quantity of the fluid intended for use, say seven ounces, should be at hand, and should contain the proper proportion of the liquor ferri perchloridi fortior, about an ounce and a half, undiluted.

When the injection is required, it would be only necessary to fill the glass bottle with water, squeeze as much air as possible out of the injecting bottle, and introduce its tube into the former. When it has filled itself, there will be in the bottle that portion of air that was contained in the tube; but this can be almost absolutely expelled, by gently but firmly compressing the bottle a second time while the tube is kept in the residual fluid in the glass bottle. By continuous pressure, a gentle stream may be directed all over the uterine surface, without the risk of any appreciable amount of air finding entrance.

I am, etc., W. F. CLEVELAND, M.D.

SIR,—I observe from your report of the proceedings of the Obstetrical Society, of November 3rd, that in the paper, and discussion which ensued, on Uterine Hæmorrhage after Labour, the only remedies suggested were the injection of styptics, such as perchloride of iron, the administration of ergot, compression of the uterus, cold, and galvanism.

There is one other remedy to which I am anxious to call attention, because I have seen it prove useful on many occasions, and I believe it to be very rarely had recourse to. It is the application of the ether-spray to the surface of the abdomen. I have constantly employed it, and with the best results; not long since in a case where the placenta was retained from the atonic condition of the uterus, immediately upon the application of the spray it was discharged abruptly, and all hæmorrhage ceased. Independent of its being the most rapid and efficacious means of applying cold, it avoids all the disturbance produced by the wet, consequent on the application of water. In illustration of the remarkable power which it exerts in causing contraction of the uterus, I may quote a passage from Dr. Greenhalgh's pamphlet on "Cæsarean Section," case 9, page 8.

"Dr. B. W. Richardson, with the assistance of Dr. Sedgwick, having rendered the parts about to be incised insensible, by the ether-spray, the operation was performed in the usual way.....It is worthy of remark that, under the influence of the ether-spray, the uterus contracted so firmly as for a short time to impede the introduction of the hand into its cavity. Although the placenta was beneath the incision, scarcely three ounces of blood were lost."

So important an agent is it deemed, that the apparatus is included among the components of "the Obstetric bag", manufactured by Messrs. Arnold. I am, etc., CLEMENT GODSON.

Late Resident Accoucheur, St. Bartholomew's Hospital.
74, Park Street, Grosvenor Square.

VACCINIO-SYPHILIS.

SIR,—In the discussion which recently took place at the Birmingham and Midland Branch on this subject, I stated that in my experience two cases only had come under my observation in which there were grounds for a suspicion that syphilis had been conveyed by vaccination. In each, the sex was female; and the ages at which the vaccination was performed were 16 and 18 years respectively. In one, the scalp, face, and body, were stated to have been the seat of an eruption, which, from the description given, and the cicatrices observable, I conclude to have been rupia. In this girl, a well-marked syphilitic tubercle followed the excision of a bit of iris. In the other patient, the hair fell off in the course of twelve months after the vaccination; and in eighteen months subsequent to it, "boils", which commenced on the labia pudendi, affected the body for two years; "they discharged like ordinary boils." The sight failed two years and a half after the vaccine punctures were made. The use of atropia proved that the irides had been inflamed; and an ophthalmoscopic examination revealed choroidal changes in the neighbourhood of the yellow spot of each eye.

Inasmuch as both these patients were of sufficient age, at the time of their vaccination, to contract syphilis through an impure sexual intercourse, I am unable to look upon them as satisfactory examples of vaccinio-syphilis. I am, etc., JAS. VOSE SOLOMON.

Birmingham, December 1869.

UNIVERSITY INTELLIGENCE.

UNIVERSITY OF CAMBRIDGE.

SCHOLARSHIPS AND EXHIBITIONS IN NATURAL SCIENCE.

THE following is a list of the Scholarships and Exhibitions for proficiency in Natural Science which are likely to be offered at Cambridge during the ensuing year. This list is eminently valuable to intending members of the University, as presenting at once a comprehensive and concise account of the whole, free from the more precise and distributive detail necessarily entered into by the serial notices issued from time to time as vacancies occur.

TRINITY COLLEGE.—One of the value of about £80 *per annum*. The Examination (in Chemistry, Physics, and Physical Geology, including Meteorology and the elements of Mineralogy) will be in Easter week, and will be open to all Undergraduates of Cambridge and Oxford. Further information may be obtained from the Rev. E. Blore, Tutor of Trinity.

ST. JOHN'S COLLEGE.—One of the value of about £50 *per annum*.

The Examination (in Chemistry, Physics, and Physiology, with Geology, Anatomy, and Botany) will take place on the 29th and 30th of April, and will be open to all persons who are not entered at the University, as well as to all who have entered and not completed one term of residence. In this College, moreover, Natural Science now is made one of the subjects of the regular College Examination of its students at the end of the academical year in May; and Exhibitions and Foundation Scholarships will, in consequence, be awarded to students who show an amount of knowledge equivalent to that which, in classics or mathematics, usually gains an Exhibition or Scholarship in the College. In short, Natural Science is on the same footing as Classics or Mathematics, both as regards teaching and rewards.

CHRIST'S COLLEGE.—One to four, in value from £30 to £70, according to the number and merits of the candidates, tenable for three and a half years, and three years longer by those who reside during that period at the College. The Examination will be in 1870; and will be open to the undergraduates of Christ's College; to non-collegiate undergraduates of Cambridge; to all undergraduates of Oxford; and any students who are not members of either University. The candidates may select their own subjects for examination. Besides these, there are three other Exhibitions perfectly open, which are distributed annually among the most deserving students of the College.

CLARE COLLEGE.—One of the value of £50 *per annum*. The Examination (in Chemistry, Chemical Physics, Comparative Anatomy and Physiology, and Geology) will be on March 30th, and will be open to students intending to begin residence in October. The candidates must show such acquaintance with Classics and Mathematics as will qualify them to pass the Previous Examination.

ST. PETER'S COLLEGE.—One of the value of £60 *per annum*. The Examination (in Chemistry, Botany, and Comparative Anatomy and Physiology) will be in June, and will be open to all students who are not members of the University, or who have not commenced residence in the University.

DOWNING COLLEGE.—One or more, according to the merits of the candidates, of the value of £40 *per annum*. The Examination (in Chemistry and Comparative Anatomy and Physiology) will be in March, and will be open to all students not members of the University, as well as to all undergraduates in their first term.

SIDNEY COLLEGE.—Two of the value of £40 *per annum*. The Examination (in Heat, Electricity, Chemistry, Geology, Physiology, and Botany) will be in October, and be open to all students who may enter on the College boards before October 1st.

Although several subjects for examination are in each instance given, this is rather to afford the option of one or more to the candidates than to induce them to present a superficial notice of several; indeed, it is expressly stated by the authorities of some of the Colleges, that a good clear knowledge of one or two subjects will be more esteemed than a general knowledge of several.

Candidates, especially those who are not members of the University, will, in most instances, be required to show a fair knowledge of Classics and Mathematics, such, for example, as would enable them to pass their Previous Examination.

There is no restriction of the ground of religious denomination in the case of these or any of the Scholarships or Exhibitions in the Colleges or the University.

Further necessary information may be obtained on application to the tutors of the respective Colleges.

It may be added that Trinity College will give a Fellowship for Natural Science once, at least, in three years, and that the authorities of most of the Colleges are understood to be willing to award Fellowships for merit in Natural Science equivalent to that for which they are in the habit of giving them for Classics and Mathematics.

THE LATE DR. PENNY.—The managers of the Andersonian University, Glasgow, have recorded in their Minutes their sense of the loss sustained by the death of Dr. Penny, who had so ably filled the Chair of Chemistry for upwards of thirty years, and their sincere sympathy with his widow and daughter under their bereavement; and the secretary was instructed to send a copy of the Minute to Mrs. Penny.

TESTIMONIAL TO MR. G. MOWAT.—On the 3rd instant, a testimonial, subscribed for by the working men of Swansea, was presented to Mr. George Mowat on the occasion of his retiring from the office of house-surgeon. The testimonial consisted of a purse of forty guineas, and a silver salver bearing the following inscription: "Presented, with a purse of forty guineas contributed by 3,000 of the working men of Swansea, to George Mowat, Esq., M.R.C.S., in grateful recognition of the skill, assiduity, and unwearied kindness shown by him during the five years he has held the office of house-surgeon of the Infirmary."

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following members of the College, having completed their examination for the Fellowship on the 26th ultimo, were reported to have acquitted themselves to the satisfaction of the Court of Examiners; and, at a meeting of the Council on the 9th instant, were admitted Fellows of the College.

Messrs. John Robinson, Midhurst, Sussex (diploma of membership dated Nov. 9, 1849), Henry Carter Wigg, Seymour Street, Hampstead Road (Jan. 19, 1869), and Ethelrid Dessé, Kensington Gardens Square (April 21, 1869), Students of University College; James Hurd Keeling, Sheffield (August 6, 1852), George Welland Mackenzie, William Street, Lowndes Square (April 28, 1864), and James Edward Adams, Finsbury Circus (Nov. 14, 1865), of the London Hospital; Charles Henry Leet, Royal Engineers (Dec. 4, 1857), William John Pilcher, Boston, Lincolnshire (April 13, 1860), and Jesse Griggs Pilcher, Her Majesty's Indian Army (April 13, 1860), of the Dublin School; John Rand, Blackheath (March 12, 1858), and John de Liefde, Tavistock Row, Covent Garden (April 24, 1867), of Guy's Hospital; James Watson, Army (May 28, 1858), and John Horsfall, Leeds (May 22, 1866), of St. Bartholomew's Hospital; Alfred Pern, Botley, Hants (April 25, 1867), and William Anderson, Derby (April 25, 1867), of St. Thomas's Hospital; Charles Steele, Clifton (Nov. 14, 1860), of the Bristol School; and William Thomas, Birmingham (Nov. 14, 1865), of the Birmingham School.

The following gentleman, not a member of the College, also passed the examination.

William Mitchell Banks, Liverpool (of the Edinburgh, Glasgow, and Liverpool Schools).

It is deserving of honourable mention, that all the candidates passed the examination.

At the same meeting of the Council—

Mr. Henry James Shirley, of Finchingfield, Braintree, Essex, having been elected to the Fellowship at a previous meeting of the Council, was admitted as such, his diploma of Membership bearing date June 11th, 1841.

The following members of the College, having undergone the necessary examinations, were admitted Licentiates in Midwifery at a meeting of the Board, on the 7th instant.

Messrs. Robinson Boustead, Her Majesty's Indian Army (diploma of membership dated July 2, 1858), Richard Lawton Roberts, Ruabon, North Wales (Nov. 17, 1869), of University College; and Humphry John Donovan, M.D. Queen's University, Ireland (June 27, 1868), Writtle, Chelmsford, of the Dublin and Cork Schools, not a member of the College.

It is stated that two candidates failed to acquit themselves to the satisfaction of the Board, and were consequently referred to their obstetrical studies for the usual period.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 2nd, 1869.

Chambers, John Louis, Hackney Road
Kavanaugh, Michael Thomas, Bermondsey
Magee, John James, Park Street, Grosvenor Square
Owen, Simeon Holgate, Manchester
Ravenhill, Thomas Holmes, Birmingham
Thomas, Llewelyn Morgan, Camberwell Grove

The following gentlemen also on the same day passed their first professional examination.

Gibson, John Charles, King's College
Hassard, John, Guy's Hospital
Sutcliffe, John, St. Thomas's Hospital

MEDICAL VACANCIES.

THE following vacancies are declared:—

ANDERSON'S UNIVERSITY, Glasgow—Professor of Chemistry.
BALLINASLOE DISTRICT LUNATIC ASYLUM—Apothecary: applications, 11th Dec.; election, 13th Dec.
BALLYMONEY UNION, co. Antrim—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Dirraw Dispensary District: 28th.
BOURN UNION, Lincolnshire—Medical Officer for the Billingborough District.
BRITISH LYING-IN HOSPITAL, Endell Street—Physician.
CHOLSEY (Berkshire) NEW LUNATIC ASYLUM—Resident Medical Superintendent: applications, 16th Dec.
EAST SUFFOLK AND IPSWICH HOSPITAL—Two Surgeons: 22nd.
GRANARD UNION, co. Longford—Medical Officer for the Workhouse: 13th.
HIGHWORTH AND SWINDON UNION, Wilts—Medical Officer for District No. 2 and the Workhouse.
HOLBEACH UNION, Lincolnshire—Medical Officer for the Sutton Bridge District: applications, 24th; election, 27th.
HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton—Assistant-Physician: applications, 15th.
IPSWICH, Borough of, LUNATIC ASYLUM—Resident Medical Superintendent: applications, 15th Jan.; duties, April.
KINGSBRIDGE UNION, Devon—Medical Officer for District No. 13.
LINCOLN UNION—Medical Officer for District No. 3.
LIVERPOOL DENTAL HOSPITAL—Dental Officer: applications, 21st.
LIVERPOOL DISPENSARIES—Medical Officer at the South Dispensary: applications, 22nd Dec.; election, 6th January.
MOUNTBELLEW UNION, co. Galway—Medical Officer and Public Vaccinator for the Clonbrock Dispensary District: 20th.
RADCLIFFE INFIRMARY, Oxford—House-Surgeon: applications, Dec. 15th; election, Dec. 30th; duties, Jan. 1st.

ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Resident Medical and Surgical Officer: applications, 31st.
SOUTHAMPTON DISPENSARY AND HUMANE SOCIETY—Two Acting Medical Officers.
STOURBRIDGE DISPENSARY—House-Surgeon and Secretary: applications, Dec. 14th.
VICTORIA HOSPITAL FOR SICK CHILDREN, Chelsea—Assistant-Physician: applications, 15th.
WEST HAM UNION, Essex—Medical Officer for St. Mark's Ecclesiastical Parish District: applications, 15th; election, 16th.

BIRTHS.

BATES.—On December 4th, at Manchester, the wife of Wm. Bates, M.D., of a son.
CRIBB.—On December 4th, at Compton Terrace, Highbury, the wife of Arthur J. Cribb, M.D., of a son.
IBSON.—On December 3rd, at Campbelltown, Argyleshire, the wife of *William Gibson, M.D., of a son.
MACKINNON.—On October 11th, at Campbellpore, Punjab, the wife of Assistant-Surgeon Charles Mackinnon, 20th Hussars, of a son.
MARSHALL.—On December 6th, at Mitcham, the wife of *Edward Marshall, Esq., Surgeon, of a daughter, stillborn.
METCALFE.—On December 4th, at Clifton Gardens, the wife of E. Metcalfe, Esq., Surgeon, of a son.
SEALY.—Lately, at Princes Street, Hanover Square, the wife of George J. Sealy, M.D., of Weybridge, Surrey, of a daughter.
SPENDER.—On November 28th, at Bath, the wife of *John K. Spender, M.D., of a son.
TANNER.—On November 26th, at Newington Causeway, the wife of John Tanner, M.D., of a son.
WALLICH.—On November 28th, at Kennington, the wife of G. C. Wallich, M.D., of a son.
WILKS.—On November 29th, at Swansea, the wife of *A. Platt Wilks, M.B., of a daughter.

MARRIAGES.

CUNYNGHAME, Robert J. B., M.D., of Cronan, to Joanna, daughter of John Crabbie, Esq., at Edinburgh, on December 2nd.
FELL, Thomas, Esq., Surgeon, at Sunderland, to Susan, eldest daughter of the late James Smith, Esq., of Palmer's Green, London, at Brighton, on Dec. 2nd.
GIBBS, John G., Esq., Madras Medical Service, to Jane, eldest daughter of the late Charles Blackburn, Esq., B.A., at St. Margaret's, Westminster, on Dec. 2nd.
RICHARDSON, the Rev. John, vicar of St. Mary's, Ilford, Essex, to Sarah Isabella, eldest daughter of T. W. W. SMART, M.D., of Cranborne, Dorset, on Nov. 30th.
SMITH, Henry, M.D., of St. Mary's Terrace, Paddington, to Catherine, only child of the late John THOMPSON, Esq., Holm Island, Lancaster, at St. Saviour's, Chelsea, on December 1st.

DEATHS.

BOWRA, Henry Goodeve, Esq., Surgeon, late of Charterhouse Square, at Havre-des-Pas, Jersey, aged 55, on November 25th.
EVANS.—On December 1st, at Acacia House, Finchley Road, aged 6, Eva Eunice Mary, daughter of Evan Evans, M.D., R.N.
EVANS, George W., Esq., Surgeon, at Herne Bay, aged 67, lately.
FALLA, James, Esq., Surgeon, at Jedburgh, Scotland, on Dec. 5th.
FULCHER, Frederick B., Esq., Surgeon, at Orpington, Kent, aged 46, on Nov. 24th.
HALL, W., M.D., at Exeter, aged 69, on December 3rd.
HAVILAND, James, Esq., Surgeon, at Bridgwater, aged 81, on December 2nd.
*HEADLAND, E., Esq., Surgeon, at Upper Portland Place, aged 66, on Dec. 8th.
JAMIESON, Quintin, M.D., late Madras Horse Artillery, at Bath, aged 73, on November 28th.
SINCLAIR.—On November 26th, at Peckham, aged 8, John L. B. D., fifth son of Donald Sinclair, M.D.
SPENCER.—On December 4th, at Preston, Lancashire, aged 58, Sarah, wife of *Lawrence Spencer, M.D., J.P.
SPENCER.—On December 1st, at St. John's Park, Upper Holloway, aged 14 months, Walter Elwin, son of G. Owthwaite Spencer, Esq., Surgeon.
*STONE, Daniel, Esq., Surgeon, at Abingdon, aged 51, on November 28th.
WILLIAMS, David W., Esq., Army Medical Staff, at Wellington House, St. John's Wood, on November 27th.

THE CHESHAM INFIRMARY, recently opened, consists of two wards, male and female, of three beds each, and a single room with a skylight for operations, or cases requiring quietness. The attendants are a trained nurse and a general servant.

ROYAL PRESENTS TO THE WINDSOR INFIRMARY.—Her Majesty the Queen has presented twenty brace of pheasants and a box of linen; and several presents of game have been received from her Royal Highness Princess Christian.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—At a meeting on Monday, December 6th, Mr Bennett in the chair, Mr. J. R. Mummery read the second and concluding portion of his paper "On the Relations which Dental Caries—as discovered amongst the Ancient Inhabitants of Britain and amongst Existing Aboriginal Races—may be supposed to hold to their Food and Social Condition."

THE first consignment of fresh meat from Australia arrived a few days ago at Bremen. The process by which beef or mutton is prepared for exportation to Europe is very simple. It is first separated from the bones and sinews, slightly salted, rolled up, and packed in casks, which are then filled up with purified melted fat, so that the meat is quite secure from contact with the air. It is sold in Bremen at about 1s. 0½d. per lb. without bone.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.
 TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.
 WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.
 THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.
 FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.
 SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 1.30 P.M.—East London Hospital for Children, 2 P.M.

EXPECTED OPERATIONS AT THE HOSPITALS.

LONDON HOSPITAL, Wednesday, December 15th, 2 P.M. Amputation of Penis for Epithelioma, Amputation of Leg for Tumour, by Mr. Jonathan Hutchinson.
 MIDDLESEX HOSPITAL, Wednesday, December 15th. Lithotomy, Operation for Fistula *in Ano* and Necrosis of the Ischium, by Mr. De Morgan; Amputation of the Leg for Gangrene of the Foot, by Mr. Moore.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Mr. R. W. Dunn, "On a Case of Poisoning by Aconite"; Mr. Thomas Bryant, "On Disease of the Knee-joint."
 TUESDAY.—Royal Medical and Chirurgical Society, 8.30 P.M. Mr. George Pollock, "On Amputation at the Knee-joint."—Anthropological Society of London, 8 P.M.
 THURSDAY.—Harveian Society of London, 8 P.M. Mr. J. B. Curgenven, "On Quinsy."—Royal Society.—Linnæan Society.—Chemical Society.
 SATURDAY.—Association of Medical Officers of Health.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

AN ETHICAL CASE.—We have received from Dr. Cantrell, of Wirksworth, a copy of correspondence between his partner, Mr. Harvey, and Dr. William Webb, regarding a case in which Dr. Webb is alleged to have pronounced a dislocation of the shoulder to be present after Dr. Cantrell, Mr. Harvey, and another surgeon, had failed to detect it. Dr. Webb denies imputing blame to any person; but appears unwilling to allow Dr. Cantrell and Mr. Harvey to examine the case. Before we give any advice or opinion, we should like to have Dr. Webb's version. It is, at least, excessively difficult to believe that an old and experienced practitioner like Dr. Cantrell should be at fault in the diagnosis of a dislocated shoulder.

OBSTETRICIAN.—You will find the desired information in the advertising columns of the BRITISH MEDICAL JOURNAL.

A QUESTION REGARDING INQUESTS.

SIR,—I shall feel obliged for your opinion on the following case, which much concerns all medical men in practice. All last week, I was in daily attendance on Mrs. —, residing next house but one to my premises. She was of unsound mind, and had threatened self-destruction. A man and woman lived with her; and to them I gave instructions never to leave her, but to watch constantly, and remove all destructive instruments. On Saturday last, I called at 7.10 P.M., and knocked loudly; again in five minutes; and again in twenty minutes. No answer came; but a light appeared at the woman's bed-room window. I then left, and went home. In the meantime, between 8 and 9 P.M., my groom, at the coach-house door, observed her open her window; she spoke to him, being about six or seven yards off, and he answered her. About 9.10 P.M., I was hastily summoned; she having cut her throat. I immediately went, and found her dead. To my surprise, I was not summoned, nor required to attend the inquest to give evidence. I shall be glad to know your opinion, if I ought or ought not to have been summoned. The attendants had left her and gone to market, it being market-day; and she had come down stairs, rummaged an escritoire, and found a razor, with which, it is supposed, she cut her throat.

I have consulted two solicitors here, who both think most decidedly I ought to have been summoned to the inquest. Both the coroner and deputy coroner are young men; and the latter officiated in this case.

November 23rd, 1869.

I am, etc.,
F.R.C.S.

. You certainly ought to have been summoned.

NEW MEMBERS.

GENTLEMEN desirous of proposing candidates for admission into the Association, should send in the names to the General Secretary or the Secretaries of the respective Branches, in order that the JOURNAL may be supplied to the new members from the commencement of the year. Forms of application and nomination may be had at the office of the BRITISH MEDICAL JOURNAL, 37, Great Queen Street, W.C.

PREVENTIVE MEDICINE.—Mr. J. B. Hutchins, of the Medical Department of the Privy Council, has published in pamphlet form the memoranda recently issued by Mr. Simon on Relapsing Fever and Scarlatina, and has added the Sections of the Sanitary Act having a bearing on the subject. The pamphlets, which will be found most serviceable, are published at sixpence each, and may be had of Knight & Co., Fleet Street.

THE INDUCTION OF ANÆSTHESIA.

SIR,—Fully acknowledging the good service you have done by directing attention to the means of averting the difficulties and dangers which occasionally occur during the administration of anæsthetics, I cannot entirely agree with some of your statements and directions.

In your article of November 27th, 1869, you state that "those accustomed to the free use of stimulants take chloroform slowly, succumb to it with difficulty," (with this portion of the sentence I thoroughly agree, but not with the following) "rally early, and very seldom pass into a state of danger." I have never had any reason to alter the opinion expressed in my book on chloroform (page 73), that, in cases of habitual alcoholism, the administration of chloroform is fraught with more than usual danger, and that, after a prolonged first stage, there is often "a sudden change to deep insensibility."

The assertion that "there is no special risk in cases in which the heart is known to be diseased," should, I think, be made with some reservation. As regards valvular disease, I consider it to be quite warranted. I have myself frequently administered chloroform to the subjects of imperfection of the heart-valves—once, in a case of ovariectomy which was entirely successful, in which there were loud double (systolic and diastolic) murmurs over both the mitral and aortic valves. On the other hand, where we have distinct evidence of fatty degeneration of the heart, I still hold that we are not justified in administering chloroform.

In your practical rules for the administration of chloroform, you advise that a dose of brandy should be given ten minutes before the inhalation. At one time I adopted this plan, but subsequent experience taught me that it sometimes predisposed to vomiting, and I found those patients do best who had, so far as practicable, the stomach perfectly empty.

December 6th, 1869.

I am, etc.,

A. ERNEST SANSON, M.D.

. The important point, as to preventing sickness, is to give the brandy some little time before beginning the chloroform, so as to allow of absorption.

WE are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Dec. 1st; The New York Medical Gazette, Nov. 20th; The Parochial Critic, Dec. 1st; The New York Medical Record, Nov. 22nd; The Boston Medical and Surgical Journal, Nov. 18th; The Madras Mail, Sept. 29th; The Indian Medical Gazette, Nov. 2nd; The Cheltenham Examiner, Nov. 24th; The Clerkenwell News, Nov. 29th; The New York Citizen and Round Table, Nov. 17th; The Lincoln Journal, Nov. 30th; The Merthyr Express, Dec. 4th.

COMMUNICATIONS, LETTERS, etc., have been received from:—

Dr. J. Heygate, Derby; Mr. W. Sellers, Radcliffe Bridge; Mr. W. Gibson, Campbelltown; Dr. R. S. Turner, Keith; Mr. Reginald Harrison, Liverpool; Dr. S. L. Haynes, Salisbury; Mr. T. H. Bartleet, Birmingham; Dr. B. W. Foster, Birmingham; Dr. E. Clapham, Devizes; The House-Surgeon to University College Hospital; Mr. R. Walker, St. Andrew's; Mr. C. Godson, London; Justitia; Dr. Felce, London; Dr. J. Neale, Birmingham; Mr. J. Smith, Jersey; Dr. Sansom, London; Mr. F. Ernst, London; Dr. Tilbury Fox, London; Mr. Macpherson, Birmingham; Dr. Stephenson, Nottingham; S. L. H.; Dr. E. Smith, London; Dr. J. H. Vinen, London; Mr. T. L. Walford, Reading; Dr. C. J. Fox, London; Dr. J. Mitchell, High Heskett; etc.

LETTERS, etc. (with enclosures) from:—

Dr. James Russell, Birmingham; Dr. Letheby, London; The House-Physician of the South Staffordshire Hospital, Birmingham; Mr. T. P. Teale, Leeds; Dr. J. Lockhart Clarke, London; Dr. J. Thompson Dickson, London; Dr. White, Chepstow; Dr. W. Paley, Peterborough; M.D.; Mr. C. J. Symons, London; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Treutler, Kew; The Registrar of the Medical Society of London; Dr. Humphry, Cambridge; The Secretaries of the Royal Medical and Chirurgical Society; Mr. A. Andrews, London; Prevention; Dr. W. Leonard, Sheffield; Dr. Gull, London; Dr. Gairdner, Glasgow; Mr. T. Moir, Glasgow; Dr. B. W. Richardson, London; Mr. S. Wood, Shrewsbury; Dr. Cantrell, Wirksworth; Mr. G. C. Coles, London; Mr. J. Vose Solomon, Birmingham; Dr. Weaver, Frodsham; Mr. F. T. Roberts, London; Dr. Fox, Scarborough; Dr. Brown-Séquard, Paris; Dr. Matthews Duncan, Edinburgh; etc.

BOOKS, ETC., RECEIVED.

Cases in Surgery, illustrative of a New Method of Applying the Ligature in Compound Fractures of the Jaw. By H. Owen Thomas, M.R.C.S.L. London: 1869.
 Direct Legislation by the People. By Eugene Oswald. London: 1869.
 Injuries and Diseases of the Knee-joint and their Treatment by Amputation and Excision contrasted. By W. P. Swain, F.R.C.S. London: 1869.
 Saggi di Terapeutica Sperimentale. Del Dott. Ranieri Bellini.
 The History of Four Cases of Chronic Inversion of the Uterus. By T. Gaillard Thomas, M.D. New York: 1869.

Results of Meteorological Observations, for the week ending Saturday, December 4th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.								WIND.										RAIN.			
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.	Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell.	Amount in inches.
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm, etc.				
BATH..... Dr. Barter, F.M.S.	29.933	0.730	34.9	33.6	31.5	87	52.0	22.0	30.0	39.3	31.9	95.0	..	4.7	2.0	0.3	2.7	..	..	0.4	..	0.3	1.3	2	4.5*	3	0.64
BOURNEMOUTH..... Dr. Compton, F.M.S.	29.949	0.620	36.1	34.4	31.9	85	50.5	24.9	25.6	40.4	33.3	76.0	24.3	4.0	4.0	3.7	1.3	..	..	..	0.7	0.3	1	..	3.3	3	0.50
DOVER..... Dr. Parsons.	29.818	0.787	36.8	35.3	33.2	87	54.2	21.8	32.4	42.1	25.1	..	..	6.1	..	1.7	1.3	0.3	0.7	..	0.3	1	1.7	..	4.3	4	1.74
DUBLIN..... Dr. J. W. Moore.	30.015	0.812	37.3	35.7	33.5	86	43.8	28.3	15.5	40.5	33.9	..	24.0	5.1	..	1	0.3	0.6	1.4	0.2	0.2	1.1	1.6	0.6	2.6	5	0.68	
Kew..... Dr. Treutler, F.L.S., etc.	29.918	0.747	35.3	34.3	32.7	90	47.7	26.1	21.6	38.7	33.2	74.1	20.7	5.6	2.3	3	1.7	0.3	..	..	0.3	0.3	1	0.3	3.2	4	0.76
LLANDUDNO..... Drs. Nicol and Dalton.	29.962	0.780	37.5	34.5	30.3	76	47.3	26.3	21.0	41.1	34.1	..	..	5.2	..	0.7	3.3	..	0.7	..	0.7	0.7	1	..	2.6	2	0.34
MALVERN..... Messrs. W. and J. Burrow.	29.954	0.750	34.5	32.8	30.0	83	47.0	26.0	21.0	37.4	30.8	88.0	21.2	5.0	4.6	1.3	0.7	0.3	..	..	0.7	..	3.3	0.7	4.0*	3	0.48
NORWICH (BETHEL STREET) C. M. Gibson, Esq.	29.860	0.600	35.5	34.7	33.5	91	45.0	26.0	19.0	39.6	31.2	..	28.0	..	0	..	..	1	..	..	1.5	0.5	4	..	12*	3	1.16
SCARBOROUGH..... Dr. Fox, M.R.C.P.	29.912	0.440	36.5	35.0	32.9	87	42.5	29.9	12.6	39.7	32.9	..	..	6.3	2.3	1.3	1	1	..	0.3	0.3	1.3	1	0.3	3.8	4	1.37
SIDMOUTH..... Dr. Mackenzie, F.M.S.	29.940	0.638	37.3	35.5	33.0	84	55.0	24.5	31.5	42.8	32.3	..	..	4.4	3	4	1	2	..	..	..	..	..	..	1.4	4	1.05
VENTNOR, I. OF WIGHT..... J. B. Martin, Esq., M.R.C.S.E.	29.855	0.516	39.0	37.2	34.8	86	51.8	27.0	24.8	42.1	35.2	..	..	5	5.6	1	3.7	..	..	0.3	0.3	..	1.7	..	4.7	3	0.30
WORTHING..... W. I. Harris, Esq., M.R.C.S.E.	29.88	0.593	36.2	34.5	32.0	85	52.0	27.3	24.7	41.9	32.7	76.7	22.4	4.4	1.9	3	0.7	0.3	..	0.3	..	0.7	1.3	0.7	2.3	3	0.31	

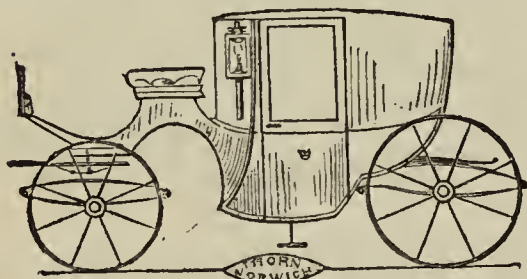
* Mean hourly velocity in miles.

REMARKS.—The mean pressure of the atmosphere during the week has been higher than during the week before—owing chiefly to the very considerable height the barometer attained towards the end of the week. Its range, however, has been more limited, and has extended over the whole week, the lowest reading occurring at most stations on the first day of the week, and the highest on the last. Temperature has undergone a very considerable reduction, all the minima having been below 30 degs., and the mean nowhere attaining to 40 degs. Fahr. The range has been very variable.—considerable at some stations: Sidmouth and Bath, and comparatively low at others: Scarborough and Dublin. The degree of humidity, though still high, has been lower than during the preceding week. Winds have been very variable in their direction at some stations, as Dublin and Scarborough, and more steady at others, as Sidmouth and Norwich; N. and N.W. appear to have been the most frequent directions: while their mean force has on the whole been moderate. The amount of clouds has been somewhat less, and ozone has also slightly diminished. Rain has fallen at all stations, and in variable quantities; the greatest fall occurred at Dover. The week commenced with fair and comparatively mild weather; but with the setting in of a Polar wind of some force temperature declined rapidly and considerably, and frosts of considerable severity occurred throughout the country. At the same time snow and hail showers have been frequent at all stations, especially on the 3rd and 4th, though in no case of any magnitude. Fogs occurred at Scarborough on the 28th November, and at Norwich on the 30th. An aurora borealis was observed on the 30th at Dublin. At Worthing no fresh cases of scarlatina have occurred during the week, and the general state of the public health is stated to be much improved;—the mean amount of ozone at this station for last week, which was omitted, was 1.3. In Dublin Scarlatina caused 18 deaths during the week ending November 27th, being an increase of 6 deaths on the previous week, and bronchitis caused 34 deaths. In Kew and the neighbourhood pulmonary disorders, especially in young children, are frequent. Otherwise, the general health continues good.

Kew, December 8th, 1869.

W. J. TREUTLER.

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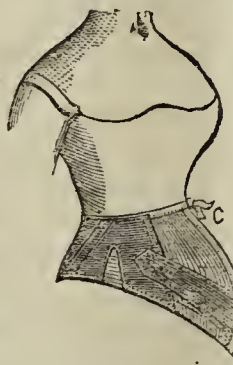
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REMARKS

ON

THE TREATMENT OF ACUTE RHEUMATISM BY
THE TINCTURE OF THE PERCHLORIDE
OF IRON.*

By J. RUSSELL REYNOLDS, M.D., F.R.S.,

Professor of Medicine in University College; Physician to University College
Hospital; etc.

THE marked effects produced by the tincture of the perchloride of iron on the course of such "spreading" inflammatory affections as erysipelas and diphtheroid sore-throat induced me, some months ago, to administer this medicine to cases of another "spreading" inflammatory disease—viz., acute rheumatism. I have treated eight cases by this drug—cases all of them severe, and, with one exception, occurring during the unfavourable weather of the spring of this year. The number of cases is too small for a general conclusion to be drawn from them as to the treatment of rheumatic fever; but the character of the facts is such that they may be used to point out the direction in which such conclusion may eventually be found; while the success which attended this mode of treatment was so great as to justify its employment upon an extended scale.

I will enumerate, as briefly as possible, the essential points of each case.

CASE I.—Male, aged 26; first attack. He had been eight days ill with fever and joint-affection. He was seen on the eighth day, with inflamed joints of all four extremities, and endocarditis. Pulse 112. The urine was alkaline. His face was anæmic. Temperature 101.4 deg. He was ordered thirty minims of tincture of perchloride of iron every six hours. The patient improved at once; and on the tenth day of illness—*i. e.*, on the second day from the commencement of treatment—he felt well, slept soundly, and took food. On the thirteenth day, the patient still feeling well, the temperature rose to 102 deg., and, a few hours later, to 104 deg. Violent delirium set in suddenly on the fifteenth day. The temperature rose to 109 deg. The patient became comatose, and died on the sixteenth day; the temperature having reached 110.2 deg. shortly before death.

CASE II.—Male, aged 22; second attack. He was seen on the fourth day of illness. The knees and ankles were principally affected. He had much sweating and exhaustion, and endo-pericarditis. The urine was alkaline, with some discharge left from gonorrhœa of two months' duration. Pulse 100; temperature 102.2 deg. The medicine was ordered on the fourth day of illness. The pain was relieved on the next day, and was absent on the third day. The temperature was normal on the fifth day of treatment—*i. e.*, the ninth day since the attack. While this patient was taking iron, the pulse became as low on one day as 60 per minute.

CASE III.—Male, aged 20; third attack. He was seen on the sixth day of illness—*i. e.*, on the sixth day from the occurrence of the joint-affection, and the fourth day from the onset of fever. The joints were universally affected, and severely. A murmur was present both at the base of the heart and at the mitral apex—probably old. Pulse 96; temperature 102 deg. The tincture of perchloride of iron was given in forty-minims doses; it was ordered on the sixth day of illness. The patient was much relieved, and the pain was almost gone, next day. The temperature was normal on the second day of treatment, or eighth day of disease. The temperature was below the normal on the thirteenth and fourteenth days.

CASE IV.—Female, aged 18; second attack. She was seen first on the seventh day of illness, suffering in the joints of both upper and lower extremities, with much perspiration. Pulse 104; temperature 101.4 deg. The heart was dilated with aortic regurgitation. The pain was greatly relieved on the fifth day of treatment. The temperature became normal on the seventh day of treatment—*i. e.*, on the fourteenth day from the onset of symptoms.

CASE V.—Female, aged 18; first attack. She was admitted on the third day of illness, with typhoid aspect, much prostration, and pain and swelling of the joints, confined to the lower extremities. There was a systolic murmur at the base of the heart, probably hæmic. Pulse 120; temperature 104 deg. Tincture of perchloride of iron, in forty-minim doses every six hours, was ordered on the third day of illness. The pain was relieved and the patient much improved on the fifth day

of illness—*i. e.*, two days after the treatment was commenced. The temperature was normal on the fourth day of treatment, the seventh from the commencement of symptoms. In this case, after the iron had been discontinued, the pulse became irregular, weak, as low as 56 in the minute, and occasionally intermittent for two days. There was at the same time much pallor; but the patient made a good recovery.

CASE VI.—Female, aged 30, seen on the eleventh day of her first attack. There had been illness, with cough and fever, for eleven days; inflammation of the joints for eight days; and sweating for one day, before admission. Both upper and lower extremities were involved. The heart was weak and irregular in its action, and there was no friction-sound at the base. Pulse 124; temperature 102.4 deg. Tincture of iron was prescribed on the eighth day of the joint-affection; and the pain disappeared almost entirely within twenty-four hours. The temperature fell at once, and became normal on the fifth day of treatment, or the thirteenth day from the occurrence of articular inflammation.

CASE VII.—Female, aged 24; first attack, commencing seven days before admission. On admission, the patient was pale and sweating, with much effusion in the joints of the lower extremities, and mitral regurgitation. Pulse 120; temperature 103.4 deg. The pain was diminished immediately, and almost removed at the end of the next day. The temperature became gradually reduced, and was normal on the seventh day of treatment; and remained so until the eleventh day, when the iron was discontinued. On the eighteenth day there was a relapse, and the temperature rose again, until, on the twenty-third day, it reached 104 deg. Iron was administered on the second day of relapse, and relief followed on the third day of its administration; while the temperature became normal on the seventh day of treatment, or eighth day of relapse.

CASE VIII.—Female, aged 16, seen on the ninth day of her first attack. The joints of both upper and lower extremities were involved. There was pericarditis, with effusion. Pulse 100; temperature 102.4 deg. The pain was relieved almost immediately; and the joint-affection disappeared in the course of forty-eight hours; but pneumonia occurred, and for many days the temperature remained high—finally, however, becoming normal on the twenty-seventh day, and the patient making a good recovery.

The points to which I wish to direct attention are the following.

1. *The relief of the joint-affection.* This appears to me to have been so definite, uniform, and speedy, that it would be difficult to account for it upon any other supposition than that it was the result of the treatment. In four cases, it was relieved in one day; in three cases, it ceased in two days; in one case—viz., that of the relapse mentioned in No. VII—it was removed in three days; and the longest period of suffering noted after the commencement of treatment was five days. If we take the mean duration of the joint-affection after the exhibition of the iron, we find it to be two days.

2. *The duration of pyrexia after the administration of iron.* In one case—viz., that which ended fatally with cerebral symptoms—the temperature never fell below 101.4 deg.; and it is important to observe this fact, notwithstanding the disappearance of the articular affection. In one case, the temperature was normal on the second day; in one, on the fourth; in two cases, on the fifth day; in three, on the seventh, one of these being an example of relapse; in one, on the eighteenth day, this being in the girl who suffered from pneumonia. If we exclude from analysis the first case—viz., that with cerebral symptoms and a high temperature; and also the last—that in which pneumonia was intercurrent—we find that the temperature became normal between the second and the seventh days; the mean duration of pyrexia after the iron treatment was commenced being a little less than five days and a half.

3. *The total duration of pyrexia; viz., that which existed from the onset of symptoms to the permanent fall of temperature.* Here, again, it is necessary to exclude the first case and the last; for in the one the pyrexia never ceased, and in the other it was maintained by an intercurrent affection. In one patient, the total duration of rheumatic fever was seven days; in two, it was eight; in one, it was nine; in one, thirteen; in one, fourteen; and in another, fifteen. Hence it would appear that the mean duration of rheumatic fever in these seven cases was a little in excess of ten and a half days.

4. *The influence on the duration of the disease exerted by the time at which the treatment was commenced.* In three cases, the iron was given on or before the fourth day of the disease, and the mean duration of the malady from first to last was eight days; in four cases, the medicine was administered for the first time on the sixth, seventh, and eighth days; and in three the mean of the total duration was rather above twelve days.

5. *The entire absence of any symptom of discomfort induced by the iron.* There was no headache in any case; the tongue cleaned; and the general

* Read in the Medical Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

feelings of the patients speedily improved. As I have already said, the number of cases here examined is too small to allow of any general deduction with regard to so variable a malady as rheumatic fever; but, while the number of cases is small, the facts are, in my opinion, so definite, and so constant in the direction to which they point, that I trust they will lead others to employ, and on a large scale, a medicine which has certainly done no harm, and has appeared to relieve very materially the pain, and shorten the duration of one of the most distressing and most tedious of acute diseases.

REMARKS ON EAR-COUGH AND ITS MODE OF PRODUCTION.*

By CORNELIUS B. FOX, M.D., M.R.C.P.

A COUGH has been defined to be "a violent and sonorous expulsion of air from the lungs, preceded, rapidly followed by, or alternating with, quick inspiration." We are all very well acquainted with the various parts concerned in the production of this "sudden, convulsive, expiratory effort," and also with the mechanism of the act. Let us look with gratitude on those who have been immortalized by the discovery of the great laws of reflex action. May the names of Prochaska and Marshall Hall stimulate us to make fresh efforts towards a more complete knowledge of that great enigma—the nervous system! The act of coughing has been said, by a great modern authority, to be due to any source of irritation affecting the posterior part of the mouth, the trachea, or bronchial tubes. We shall presently see, however, that it is a symptom of a great variety of affections; so many, in truth, that time will only permit me to name them.

Coughing, although generally an involuntary act, may be produced voluntarily; and this kind of cough is generally observed in impostors. A cough can now and then be, to some extent, suppressed by an effort of the will.

We can readily understand its object in cases of pulmonary disease, where the expulsion of secretions is requisite. In cases where it is produced by worms in the intestines, or teething, etc., its beneficent action is not so apparent, unless it be considered to give warning of, or draw attention to, an irritating cause somewhere in operation.

Cough is usually regarded as a symptom; but Drs. Young, Copland, Good, and others, have considered that it occasionally occurs as an idiopathic affection. It cannot be doubted that it is, in some rare cases, impossible, in the present state of our knowledge, to ascertain the cause of a cough, and to these cases the term *idiopathic* has, I apprehend, been applied. We are told that "*felix qui potuit rerum cognoscere causas*", and we must, if we would make any true progress in the healing art, perfect its very alphabet and provide the foundation-stones on which the superstructures of treatment and prognosis, etc., should be raised.

Let us, then, endeavour to assist in the determination of every "*fons et origo mali*", so that we may, as soon as possible, expunge the word *idiopathic* from our vocabulary. Before, however, commencing my remarks on the particular kind of cough which forms the subject of this paper, allow me to bring back to your recollection some of the many causes of this symptom.

Cough is, of course, most commonly symptomatic of diseases of the lungs and their coverings, of the trachea, bronchi, larynx, and fauces. Books tell us that it is occasioned by affections of the tonsils, uvula, pharynx, and neck. Organic diseases of the thoracic viscera; diseases of the œsophagus, spine, and spinal cord; affections of the heart, liver and stomach; all have occasionally a cough as one of their symptoms. The irritation produced by teething, by enlargement of the bronchial glands, by worms in the intestines, by tumours, aneurisms, tubercles in the lungs, will produce cough. The inhalation of the dust of ipecacuanha, and of certain animal and vegetable emanations, will sometimes induce cough. Then there are whooping cough, asthma, nervous or hysterical cough, and the cough occasioned by the presence of foreign substances, either solid, liquid, or gaseous in the air-passages. Uterine derangements, irregular gout, and an accumulation of bile in the hepatic ducts or gall-bladder, are all included amongst the causes of cough.†

Lastly, there is a cough caused by irritation of the auditory canal, and that only in some people, to which I have given the name of ear-cough. I should not have presumed to name it, were I not pretty sure

that this kind of cough had hitherto escaped description, and even recognition in our text-books. And this fact is the more singular, inasmuch as the sympathy between the auditory canal and the larynx was well known to the older writers, although apparently lost sight of by modern authors. This kind of cough has, doubtless, been confounded, up to a very recent period, with nervous cough, which occurs in persons of highly nervous temperament, and is due to a convulsive action of the throat-muscles; or else it has been included in that *terra incognita* of idiopathic coughs.

One of the problems of Cassius Medicus was the following:—"Why does irritating the ears, as, for example, with a speculum, cause sometimes a cough, just as if the trachea were irritated?" Whytt, in his work on the *Sympathy of the Nerves*, published in 1767, refers to it, and states that, when the trachea has been rendered more sensitive than usual by a catarrh, cough is more readily produced by irritation of the auditory canal. Pechlin (*Observationes Medicæ*, Lib. ii, No. 45) affirms that "an irritation of the meatus auditorius will often excite coughing, and sometimes vomiting". Coming down to more recent times, we find that Kramer, in his treatise on the *Diseases of the Ear*, published in 1837, makes the following solitary observation relative to this subject: "Tickling and scratching the meatus excite in the larynx a troublesome irritation to cough". Romberg states, that "Pruritus of the external meatus auditorius, from hyperæsthesia of the auricular branch of the vagus, is sometimes observed, and is accompanied with cough and vomiting".* The only references to this sympathy, with which I am acquainted, in the principal recent works on medicine, are the following. Dr. C. J. B. Williams, in his *Principles of Medicine*, whilst enumerating the reflected and sympathetic sensations, writes: "Touching the external auditory meatus causes a tickling sensation of the epiglottis." Toynbee, in his work on *Diseases of the Ear*, says: "In certain cases the presence of a foreign body in the meatus gives rise to coughing, and even to vomiting; symptoms which seem traceable to irritation of the auricular branch of the vagus nerve." Yearsley refers in general terms to the alterations of the voice, as regards its pitch and quality, which occur in cases of deafness dependent on diseases of the ear, but does not otherwise allude to this connection.

In my graduation thesis "*Concerning the Laryngoscope and some Laryngeal Diseases*" (June 1864), presented to the University of Edinburgh, reference was made to the sympathy subsisting between the external ear and the larynx, and an explanation of the same was advanced. In a paper written by me in 1868, entitled "*The Sympathy between the Auditory Canal and the Larynx*," the occasional occurrence of ear-cough was adverted to. The advisability of a careful examination of the auditory canal was also urged in all cases where no affection of the respiratory tract can be discovered, and in which an obstinate cough, whether laryngeal in character or otherwise, obtrudes itself as a prominent symptom. Further observation in this country and on the continent has convinced me that a state of hyperæsthesia of the nerve supplying the external auditory meatus is not of unfrequent occurrence, and that a cough, solely dependent on the existence of some irritation in that canal, is by no means rare.

With the object of ascertaining the percentage of those subject to this sympathetic peculiarity, 108 persons have been examined by myself, and others under my direction, with the following results:—Males examined, 37; females examined, 45; sex not noted, 26; total, 108. Cases in which a sensation of tickling in the throat, and cough, were occasioned by a titillation of the auditory canal, 22; cases in which nausea was alone produced, 3. In one of the cases of irritation of the throat with cough, nausea was also complained of; and in another of that number, vomiting was said to be sometimes produced. It is my impression that both ears display this extreme susceptibility to impressions more frequently than one ear only. In twelve cases, the ear was noted, by the titillation of which these symptoms could be excited. Of these, in seven cases, the left ear alone, and in the remaining five, both ears exhibited this peculiarity. I have hitherto only seen one case where the right ear was solely affected with this hyperæsthetic condition.

Dr. Denton, who has kindly assisted me by the examination of many dispensary patients, was somewhat astonished to find that, in one woman whom he examined, about twenty-four years of age, vertigo was alone complained of.† In another woman, about thirty years of age, a sensation of tickling in the throat, cough, as well as nausea, were produced by him on irritating the left ear; whilst vertigo was only experienced when the right ear was experimented on. He informs me that in neither of these cases was there any hysteria or fanciful nervous condi-

* Read in the Physiological Section at the Annual Meeting of the British Medical Association at Leeds, July 1869.

† *Apropos* of idiopathic coughs, allow me to commend to your notice a paper on "Nervous or Convulsive Coughs", by M. Sandras, in the 36th volume of the *Bulletin de Thérapeutique*.

* See a review of his *Lehrbuch der Nervenkrankheiten des Menschen*, in *British and Foreign Medical Review*, April 1844.

† Dr. Brown-Séquard, in his *Physiology of the Nervous System*, refers briefly to the production of vertigo by an irritation of the neighbouring auditory nerve.

tion. He believes, moreover, that the statements of these women are thoroughly reliable.

The curious hyperæsthetic condition which we have been considering would seem, then, to be present in about twenty per cent. of those examined. I have not yet sufficient data on which to form an opinion as to its relative frequency in the sexes.

The response to the inquiry, as to the duration of the peculiarity, was generally to the effect that they had been aware of a feeling of irritation in the throat, usually followed by a cough, on employing the ear-pick, so long as they could remember.

It is possible that this state of hyperæsthesia may be present more frequently than the foregoing percentage indicates, because those submitted to examination were nearly all workhouse and dispensary patients. In these people, the nervous organisation is not, of course, so sensitive as in the higher and better bred classes of society, and their powers of observation are more limited. I speak of those whose attention is rarely directed to a sensation short of pain, or of that which prevents the employment of the limbs and the ability to work.

Here are some short notes of a case of this hyperæsthetic condition of the nerve supplying the auditory canal, which differs from the majority of these cases, in possessing the peculiarity on one side only.

CASE I.—A. B., a professional man, of middle age, nervous temperament, healthy, but somewhat overworked mentally, has been annoyed, so long as he can remember, with a feeling of irritation in the larynx whenever he has introduced an ear-pick for a short distance within his left auditory canal. This sensation frequently excites a violent cough, of a suffocating or convulsive character. The organs of hearing appear, on examination, to be perfectly healthy, the sense being somewhat more acute on the affected side than on the other. A careful examination of his larynx by means of the laryngoscope, has assured me of the absence of any abnormality whatever. He often finds that the excessive use of his voice, as in long continued singing, produces a pain in the ear, which extends into the zygomatic fossa and along the lower jaw towards the chin.

Irritation of the auditory canal in those who are the subjects of this hyperæsthetic peculiarity, does not always produce a cough. The situation of the irritation and its intensity have much to do in the production of this symptom. I know a medical man who is now troubled with a chronic inflammation of the dermis lining the meatus, accompanied by desquamation of the epidermis. This affection being limited to the outer part of the auditory canal, being mild in character, and free from symptoms of any severity, produces simply a sensation of tickling in the throat.

I will now give you brief abstracts of two or three cases of ear-cough which have come under my notice, premising that the recital of full details would be irksome to you.

CASE II.—M. H., a healthy-looking married woman, aged 50, of sanguineous temperament, applied on account of a cough, in the endeavour to remove which she had spent much and profited nothing. She had suffered from it for eighteen months, during which period it had varied in force and frequency. At the time of her application, the cough seemed to be becoming worse. Her voice was unaltered. The cough was laryngeal in character and most distressing. Failing to discover any cause for it, on carefully examining the lungs and other viscera, I illuminated her larynx by means of a Tobold's condenser, and obtained a good view of the vocal organ by the aid of the laryngeal mirror. Nothing abnormal could be detected, if a slight exaggeration of the usual rose tint of the parts be excepted. Observing that she was somewhat deaf, I made some inquiries respecting her ears. She informed me that her right ear had given her some annoyance for nearly two years. The symptoms of which she complained were those of an accumulation of cerumen. She had, from childhood, noticed that, on cleansing her ears, a feeling of irritation in the throat and a cough were often excited. On making an examination of the auditory canal, a large plug of hardened wax was found, and removed by means of injections. The appearance of a small quantity of purulent discharge led to the discovery of a small oval ulcer on the floor of the canal, about one-eighth of an inch from the tympanic membrane. The almost immediate relief of the cough was remarkable. After two or three applications of a solution of nitrate of silver to the spot of ulceration, cicatrisation was complete, and, in a few days, she was not only entirely free of the aural affection, but of the troublesome cough it occasioned.

CASE III.—N. W., a young lady of nervous temperament, aged about 22, of somewhat anæmic aspect, consulted me respecting her ears, as she suffered from deafness. Without entering into the history of the affection, which came on as a sequel to scarlet fever, it will be sufficient for me to state that the Eustachian tubes were the seat of chronic inflammatory action, leading to obstruction. She had been deaf for two or three years, and had apparently exhausted the resources of orthodox

medicine in the part of the country where she resided. Under these circumstances, her parents, with some considerable hesitation, allowed her to consult an advertising quack. This man ordered her to employ some drops, which appeared to be composed of spirit of cajuput oil, or some other spirituous irritant. The result of this application to the auditory canal was the production of a great amount of irritation, closely resembling an eczema. This irritation, which seemed most intense along the floor of the canal, was accompanied by a cough. I need hardly say that, as soon as the young lady came under my care, these pernicious drops were immediately thrown away, and my sole endeavour consisted in repairing the mischief occasioned by them. The cough could not be accounted for by any visceral affection, and was ascribed by me to the irritation of the nerve supplying the auditory canal, in one who was the subject of the peculiarity already adverted to. In about a fortnight or three weeks, the eczematous condition of the external auditory meatus had disappeared, and the accuracy of my diagnosis was established by the subsidence, *pari passu*, of the cough.

CASE IV.—Toynbee, in his *Diseases of the Ear*, refers to a patient under his care who suffered from a most intractable cough. He had a portion of dead bone in his auditory canal, which was removed. The withdrawal of this source of irritation was attended with an immediate disappearance of the cough, which no remedies had been enabled to subdue.

But I will not weary you with a narration of any more cases of ear-cough, because you can easily *ab uno disce omnes*. The number of cases of ear-cough which I have had under my care since I have been in practice, a period of three and a half years, is seven. This may seem to you a very small handful; but is, perhaps, not so when it is remembered that, since my attention has been especially directed to this subject, I have not placed myself in the way of cases, by attendance on the practice of Hospitals or Dispensaries for Diseases of the Chest and of the Ear.

Before entering on the consideration of the mode in which ear-cough is produced, it will be necessary to make a few remarks with reference to the nervous supply of the auditory canal. Strange as it may appear, it would seem that there have been erroneous ideas prevalent as to the source whence its nerves are derived. Romberg, whose opinion is endorsed by the late Mr. Toynbee, states, that the auricular branch of the vagus nerve is distributed to the external auditory meatus, and that this nerve is concerned in the production of a cough when that tube is irritated.

Now, the best anatomists inform us, and their views have been confirmed by my own dissections:

1. That the auditory canal is supplied with nerves from the auriculotemporal branch of the inferior maxillary division of the fifth cranial nerve. They are two in number, and enter the interior of the meatus between the osseous and cartilaginous parts.

2. That the auricular branch of the vagus is one of the several nerves which find their way to the external ear, this particular nerve being distributed to the posterior part of the pinna.

The other cranial nerve which takes part in the production of the sympathetic phenomenon, that we are considering, is of course the vagus, which alone supplies the larynx, by means of its superior and inferior laryngeal branches. It is well known that an impression at the peripheral extremity of a sensitive nerve may produce such a change in that part of the nervous centre from which it arises, as to excite a motor or sensitive nerve implanted near to it; and, that, if a sensitive nerve be stimulated at its origin, a sensation is produced which is referred to its peripheral extremity. As examples of reflected sensations, may be instanced: *a*. The otalgia which often accompanies a toothache, and which is relieved by the introduction into the auditory canal of a little laudanum or chloroform; *b*. The pain over the brow sometimes induced by the swallowing of ice or cold water, or others by a derangement of stomach digestion.

If the sensation which is reflected be powerful, a reflex action is sometimes excited, in consequence of the irritation induced. The feeling of irritation in the larynx, as a result of the titillation of the nerve distributed to the auditory canal, which feeling of tickling often provokes a cough, supplies us with an example. The impression produced in the ear in those amongst whom this sympathy between the ear and the larynx is exhibited, is probably conveyed by the auriculotemporal branch of the inferior maxillary division of the fifth cranial nerve to the deep origin of its sensitive root, which is in close proximity to the deep origin of the vagus in the floor of the fourth ventricle. Here, a change is in all probability effected, which results in the stimulation of certain of the sensitive fibres of the vagus nerve. A sensation is produced by this stimulation, which is referred to the peripheral extremity of the superior laryngeal or sensitive nerve of the larynx. If an oft-repeated or powerful sensation is reflected, the irritation induced

excites the reflex action of coughing, to free the larynx of the *supposed* irritation.

The cough arising from an irritation of the dental branches of the fifth nerve, which may occur at any age, but is generally seen in children who are teething, is occasioned in a precisely similar manner.

The reason that the superior laryngeal nerve should be generally involved in the sympathetic sensation, rather than any other branch of that widely distributed nerve—the vagus, is not very apparent. We may suppose the cough evoked to be a sort of signal pointing to a cause which requires removal. An analogous supposition may be advanced relative to the occasional production of brow-ache, on the reception of cold water into the stomach. Here, a reflected sensation of pain at the distribution of a particular set of branches belonging to the fifth nerve, draws attention to an irritation of the gastric branches of the vagus. With reference to the implantation of the roots of the fifth cranial nerve and the vagus, it may be observed, that Stilling, in his work on the *Medulla Oblongata and Pons Varolii*, describes certain special deposits of grey matter or nuclei in the floor of the fourth ventricle, and states, that they are the deep origins of the spinal accessory, vagus, glossopharyngeal and hypoglossal nerves.

The following question may here arise in our minds:—"How is it that, amongst these several nerves implanted so near to each other in the floor of the fourth ventricle, the vagus should be, so to speak, selected?"

Stilling, in laying down the relative positions of the roots of the above mentioned nerves, places the nuclei of the vagus and glossopharyngeal in juxtaposition, and gives drawings to illustrate their connection. Langenbeck and Förg hold, however, that the accumulation of grey matter, considered by Stilling to be the deep origin of the glossopharyngeal, is not so, but that it is, in truth, the nucleus of origin of the greater or sensitive root of the fifth nerve. Although unanimity of opinion does not yet prevail as to the exact origin of the greater root of the fifth nerve, it would seem to have been traced, beyond a doubt, into the floor of the fourth ventricle, from the lower part of which the vagus arises.

The superior laryngeal nerve is not the only branch of the vagus to which an impression is propagated by an irritation of the auditory canal; for, as we have seen by the quotations from the works of Pechlin, Romberg, and Toynbee, sickness is occasionally produced.

Vomiting is an act which is not only occasioned by an irritation of the gastric branches of the vagus, as when induced by emetics, but by an excitation of the cranial origin of this nerve, as is seen in cases of cerebral injury or disease, etc.

Although I have not yet seen ear-cough accompanied by vomiting, it seems probable that this action may now and then be thus excited in these cases.

The majority of aurists omit in their works any mention of the intimate sympathy between the ear and the stomach. Cases continually arise, however, where a derangement of the digestive organs is the sole cause of deafness. Yearsley, in his "Deafness practically illustrated", treats of "stomach deafness", and justly wonders at the omission, especially when the sympathy between the eye and the stomach has been so long recognised, in the occasional production of amaurosis in connection with dyspeptic disorders.

Arnold furnishes us with an interesting example of this sympathy between the ear and the stomach, in the case of a child who suffered from chronic vomiting which defied for a long time all curative measures, but was immediately removed on the extraction from each ear of a bean, which had been introduced in play.

In conclusion, the observations which I have had the honour of presenting to this meeting, may be thus summed up.

1. From amongst the unknown group of idiopathic coughs, may happily be rescued from obscurity a cough which is excited by an irritation of the meatus auditorius externus in certain individuals.

2. The persons referred to are those who possess a hyperæsthetic condition of the nerve supplying that canal, and in whom any slight titillation of this nerve induces a feeling of tickling in the throat.

3. This hyperæsthetic state generally exists in both ears, sometimes, however, only in one, and occurs in about twenty per cent. of those examined.

4. Its existence can usually be traced back to childhood, and is probably a congenital peculiarity.

5. That the nerve of the ear concerned in the production of ear-cough is not a branch of the vagus, as Romberg and Toynbee have affirmed, but is a branch of the auriculo-temporal branch of the fifth cranial nerve.

6. This sympathy between the ear and the larynx is an example of a reflected sensation in which the connection between the nerves involved takes place in the floor of the fourth ventricle.

7. Vomiting is occasionally, but rarely, the result of the application of an irritant to the nerve distributed to the auditory canal.

The diagnosis of disease and the therapeutical effects of drugs would seem in these days to eclipse in importance all other departments of medical science. Without a diagnosis, all treatment is uncertain; and without a knowledge of the actions of drugs on the body, in health as well as in disease, together with the changes they undergo during their passage through the system, the administration of these drugs is simply empiricism. Diagnosis and therapeutics are two of the foundation stones of our art, which open up to our view unexplored mines, whose contents are of inestimable value to human life. Strive as we may, however, to bring to light these hidden treasures, we shall find, as Sir Isaac Newton and others long ago discovered, that, the more we learn, the more vast appears the unknown world of knowledge.

OBSTETRIC MEMORANDA.

[UNDER this head, we shall, from time to time, as materials come to hand from correspondents, publish records of cases remarkable in themselves, or illustrating points of interest in obstetric practice, therapeutic or manipulative. We shall probably in this way preserve from oblivion the notes of very many useful and instructive occurrences in private practice; for the great obstetric experience is that—for the most part hitherto unwritten—of the great body of general practitioners throughout Great Britain. We will only ask those who may forward cases for record, to relate them with the utmost brevity, and equally to condense any appended remarks.]

CASE OF TWINS, ONE CHILD WHITE, THE OTHER BLACK.

By WASDALE WATSON, Newport, Monmouthshire.

ON November 24th, 1868, at 7 P.M., I was hastily summoned to Mrs. S., in her fifth labour at term, who was stated to be flooding profusely. I found her blanched, almost pulseless, lying on her back, and in a state of great nervous excitement. On examination, I found the vertex presenting, the os dilated to the size of a half-crown, soft, and a piece of the placenta pushed down by the side of the head; this slipped back easily, on a little pressure. The hæmorrhage having ceased, and there being no pain, I administered a dose of powdered ergot in hot water and brandy, waited an hour, and then left, with directions to be sent for on the recurrence of pain, which occurred at about 11 P.M. On my arrival I found the pains coming regularly every few minutes, and the head descending gradually. In about an hour the child (white) was expelled; and I immediately ascertained that there was a second presenting by the breech. The pains being strongly propellent, I ruptured the membranes, and in about half-an-hour the second child (black) was born. The placenta, a single large one, was thrown off quickly. The mother, and children, (both females) did well. I may mention that the husband was a mulatto.

SUCCESSFUL REDUCTION OF PROLAPSED FUNIS BY THE POSTURAL METHOD.

By JOHN BRUNTON, M.A., M.D., Surgeon to the Royal Maternity Charity.

IN THE JOURNAL, last year, I narrated a case of successful reduction of prolapsed funis, by the postural method, in which the child was delivered alive, I now record another case, in which the reduction was successful at once, though the child was born dead; the death of the child obviously resulting from other causes.

On October 26th, 1869, I was called to attend Mrs. H., aged 27, in labour with her first child. She had been ill for ten hours, and her pains were active, occurring every few minutes. On examination, I found the os uteri dilated to the size of a crown-piece, the head presenting, a bag of membranes protruding, and in this bag was a loop of funis. This I deemed it proper at once to reduce, in case pulsation still existed, though I had not detected it through the membranes. Placing the patient on her knees in bed, with her head as low as she could put it, I partly introduced my hand into the vagina, ruptured the membranes, and just as pain came on I pushed up the loop (now about six inches long) alongside the head; and, as the head was pushed down by the pain, the cord was reduced. No prolapse afterwards occurred. Some hours afterwards, I delivered the child by forceps, on account of a very narrow pelvic outlet. The child was dead. The mother had not felt any foetal movements for several days. The placenta was calcareous, and in some parts fibrous; during labour, as the liquor amnii escaped, it was thick with meconium. The mother made a good recovery. By withholding fluid, and allowing a liberal supply of ice to allay her thirst, little or no milk formed in her breasts.

LARGE FEMORAL HERNIA IN A MALE.*

By JOHN M. BRYAN, M.D., F.R.C.S.Eng., Northampton.

THE following case of femoral hernia having several points, perhaps somewhat uncommon, I have thought the same might be of interest. As is well known to us all, femoral hernia is of much more frequent occurrence in women than in men; and in my own practice of thirty-four years, I recollect two cases only occurring in men.

Mr. J. W., aged 34, had had femoral hernia for about twelve or fourteen years. About that time since, I first saw him with it in a strangulated state. I succeeded in reducing by the taxis and ordinary means, it then being only about the size of a pigeon's or hen's egg. I fitted a truss, with full directions to him never to be without it. Since that time, I had not examined nor attended him until the 31st July last, when I was suddenly fetched at 11 P.M., and found him with a tumour quite of the size of a man's fist, and strangulated. I tried the taxis for some time, and placed him on his back, with the shoulders and knees elevated, and the thigh of the affected side flexed upon the abdomen, so that the crural arch should be rendered as free as possible from all tension. I used chloroform freely; but, there being difficulty without an assistant, I sent for a medical friend in the town, one of our hospital surgeons. On his arrival, we placed our patient thoroughly under chloroform for about two hours, with the tongue guarded and held out of the mouth by a spring-forceps. We placed him in a completely sloping position, with the head downwards on an inclined plane, and persisted in the taxis without avail. We then replaced him in bed with a bag of ice well applied over the part, gave him a strong opiate, also an injection of gruel, and left him at 3 a.m., apparently not much the worse for our manipulations. He had no sickness. At 10 a.m., we again saw him. The tumour was perhaps slightly relaxed from its previously tense state. The taxis was again used a little without avail. I then gave him a hypodermic injection of morphia, bandaged the swelling somewhat tightly with a flannel roller, and placed him on an inclined plane, with the heels much upwards, and the head and shoulders downwards. At 4 p.m. we again saw him. The pulse was not much accelerated. He had no sickness. There was tenderness in the part, but he did not complain of much pain. The hernia was somewhat reduced in size; and we agreed, if alteration had not taken place at our next visit, to operate. At 9 p.m. we again saw him. The symptoms were no worse; the tumour was somewhat shrunken, although still of immense size. We used a little manipulation without apparent effect, but I detected slight gurgling, giving me the idea that there was a little yielding. I asked the patient to try his own manner of manipulating (as he had frequently done so within the last few years, not having appeared to have worn a truss, so that the rupture had been down frequently); when the hernia vanished and passed up through the crural ring. The next day he was comfortable, and had not much tenderness. I had a truss nicely fitted; and he got about in two days apparently quite comfortable, until the 16th August, when I was again sent for, the hernia having slipped down and again become strangulated. This, nearly of the same size as before, I managed with himself to reduce by manipulating with the taxis; although, this time, he had constant vomiting of coffee-coloured fluid, and had much more tenderness.

The most peculiar feature in this case was, that the testicle on the side of the femoral hernia was protruded through the crural canal or ring into the groin; I passed it up, and found that it eventually came through the external inguinal ring into the scrotum. The patient told me that it had often been so since birth, sometimes in the scrotum, and sometimes lost to feeling; and no doubt there was some congenital difference in his case. I perceived an incipient inguinal hernia on the other (the left) side, necessitating a double truss.

REMARKS.—This was evidently a complete femoral hernia of large and unusual size, as it protruded entirely through the crural canal, and extended itself in every direction, forming a great and obvious tumour in the fold of the groin, half the size of a penny roll or large expanded fist. It ascended so as to rest not only over Poupart's ligament, but also upon the falciform process of the fascia lata. The sac had a doughy multilocular feeling, as though divided into several compartments. Femoral herniæ seldom exceed a pigeon's egg in size, although instances have been seen and recorded of their having attained a much greater magnitude, descending upon the front and inner side of the thigh towards the knee, instead of being tilted upwards as usual in ordinary cases. The largest herniæ seen by Sir Astley Cooper were of the size of the fist, and occupied the entire hollow, from the anterior superior spinous process of the ilium to the tuberosity of the os pubis; and so it

appeared in this my case. I have no doubt that the long administration of chloroform, together with the application of ice, had facilitated the reduction; and it shows also that, by constant manœuvring, the patient himself had a certain tact in reducing the hernia when down. A warm bath had not been used, there being no convenience for one in the house, and the symptoms not being so very urgent. I have seen the patient within the last few days. He was quite well, and has had no protrusion since I last saw him. The hernia most likely contained only intestine the first time, and the last, probably omentum as well, to account for so much and constant vomiting.

P.S.—Dec. 1st. He has again had strangulation. The hernia was returned by the taxis used in a warm hip-bath. The testicle remains in the groin just at the exit of the crural ring.

CLINICAL MEMORANDA.

UMBRELLA-FERULE IMPACTED IN THE LEFT BRONCHUS FOR TWO MONTHS.

By T. EYTON JONES, Esq., Wrexham.

IN January 1863, I was called to see, at the village of Rhosllanerchrugog, in this neighbourhood, a boy aged 5 years, very thin, emaciated, perspiring profusely, and coughing up large quantities of mucopurulent matter. His countenance was anxious, and breathing hurried. On examination of the chest, in the right lung the breathing was hurried, but clear and free; percussion free; the vocal sounds natural. On the left side, there were great dulness on percussion beneath the clavicle, tubular breathing, loud bronchophony, and splashing crepitation on coughing. Regarding it as a case of phthisis affecting the left lung, I gave an opinion accordingly, and soon expected a call for the certificate of death; but, on my meeting the boy's grandfather one day, he stated that, "soon after I left, the boy was seized with a severe fit of coughing; and, while being knocked on the back to help him to get the phlegm up, the lad nearly choked; aye, and he might well do so, as he coughed up the ferule of an umbrella that had been in his inside (evidently the left bronchus) for more than two months." The boy at once began to recover, and in the year 1867 was a patient of mine in the Wrexham Infirmary for some slight ailment.

IMPACTION OF A PIECE OF NUT-SHELL IN THE LARYNX OF A CHILD.

By ANDREW MARSHALL, M.D., Preston.

A CASE of suffocation from impaction of a plum-stone in the larynx of a child, recorded in a recent number of the BRITISH MEDICAL JOURNAL, has recalled to my mind a case very similar in its nature, which occurred in my practice a few months ago.

A. B., a girl aged 7, May 23rd, complained of stiffness and soreness in her neck. In every other respect she appeared to be in her usual health, and went to school at 9.15 a.m. While she was seated in her class, eating nuts, her brother struck her on the back, and very shortly afterwards the soreness in the throat became greatly aggravated. She went home, and between eleven and twelve o'clock I was called to see her. She did not then exhibit any symptoms of distress, but coughed frequently—not, however, in paroxysms of any length; her breathing was croupy, and she could not speak above a whisper. There were a few sibilant râles in her chest, but no other indication of disease. There was no lividity of the countenance, and no fever. That some obstruction existed in the air-passages, was quite certain; but whether it was due to the inadvertent introduction of some foreign substance from without, I could not, from the history of the case and the patient's sensations, decide; nor did a physical examination throw much light on the subject. On inspection, nothing abnormal appeared, except slight preternatural redness of the fauces; nor could I discover anything unusual by external manipulation, except a little tenderness over the larynx.

I inverted the patient's body, and very smartly slapped her back, in the hope that, if any foreign substance were present, it might be ejected, or at least that the alteration in her position might make it change its place, and thereby produce symptoms that would unequivocally proclaim its presence; but no such result was obtained. Quite conscious of the propriety of performing tracheotomy as soon as possible after a foreign body has been introduced into the air-passages, even in the absence of urgent symptoms, I nevertheless hesitated to operate in the absence of urgent symptoms, and in the absence, at the same time, of any certain evidence that a foreign body was there. I did not hesitate long. In a few hours her breathing became more stridulous, her voice

* Read before the South Midland Branch.

almost inaudible, and her skin moist and clammy. There could then be no doubt as to the propriety of operating; but, unfortunately, the parents would not allow me to perform the operation, and, consequently, the child died next day about twelve o'clock.

A *post mortem* examination, made next day, revealed the cause of death to be the presence of a piece of nut-shell in the larynx, just within the cricoid cartilage, firmly impacted, with its convexity downwards.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

REPORT ON THE USE OF SETONS AND OTHER COUNTER-IRRITANTS IN DISEASES OF THE EYE.

WE shall not this week publish any original facts, but briefly state the opinions of those who have written on the subject. The diversity of opinion to which we have already alluded will be sufficiently apparent. We have placed the extracts almost in chronological order.

Opinions of Authors.

Mr. Morgan writes: "Counter-irritation is useful in chronic ulcer of the cornea."

Mackenzie, under the head of "treatment of strumous ophthalmia", speaks strongly of the value of blistering in intolerance of light. The most "painful, but not the least effectual position", is the nape of the neck. In general, the discharge should be kept up. He says that the use of tartar emetic ointment is much more painful, and causes more disturbance than blistering. He quotes Dr. Salomon's statement, that the tartar emetic eruption is the only sure remedy for intolerance of light.

"Issues in the neck or in the arm were, at one time, much employed, and certainly proved beneficial in relieving symptoms of phlyctenular ophthalmia, and in preventing relapses. They were in many respects, however, objectionable. I have known an issue in the arm to cause atrophy of the extremity, which continued for life. The improvements which have taken place of late years in ophthalmic medicine have rendered such means less necessary."

In the French edition, painting the eyelids with tincture of iodine is strongly recommended. The application should be made once or twice a day, according to the irritability of the patient and the effect produced. "It is rare for the intolerance of light not to have entirely disappeared in two or three days." The first use of this remedy is attributed to Furnival. M. Hays recommends, with the same end in view, the application of a stick of nitrate of silver to the eyelids.

Tyrell (vol. i, p. 53), under the head of counter-irritation, recommends a liniment of ammonia to be rubbed in above the eye; but this is open to the objection that some of the liniment may run into the eye. He recommends also mustard-plasters; also tartar-emetic plaster. The mode of applying this he describes in detail, and says that this plan "affords the means of keeping up almost any degree of irritation without much suffering to the patient." Blisters, he considers, should be frequently repeated; and in children, muslin should be placed next the skin. With reference to issues or setons, he says: "I have for many years abandoned the employment of these means. I am satisfied that they accelerate recovery, in some cases, when placed near the affected organ; but I am also satisfied that disease cured by such means is very prone to reappear when the remedy is withdrawn; whilst the more tedious cure without such assistance is more permanent and complete." In some scrofulous children he was in the habit of employing an issue in the arm, near the insertion of deltoid. "The counter-irritation in such cases should be continued till the age of puberty becomes manifest."

Dr. Copland quotes Mackenzie's recommendation in chronic cases, of "scarifications of the eyes and lids." "In older children, blisters behind the ears or on the nucha are serviceable; but they ought to be removed in five or six hours."

Mr. Dixon recommends strongly the use of blisters in strumous ophthalmia to relieve the intolerance. "They should be about the size of a shilling, and should be removed at the end of five or six hours." He states that sometimes tincture of iodine, painted on the eyelids twice a week, will be even more efficacious than the blisters.

Bader, under the head of "strumous ophthalmia", says "the insertion of a seton into the skin of the corresponding temple hardly ever fails to remove the intolerance of light. The application of the tincture of iodine to the skin of the eyelids twice a week should be used if the seton be objected to." "The fact that the insertion

of a seton alone removes, within the shortest time, the troublesome symptoms of most cases of vascular corneitis, provided the cause be not seated in the conjunctiva of the lids, must not be lost sight of, when considering the effects of internal remedies." At page 165, are given detailed directions as to the mode of inserting a seton in the temple. It should lie in front of, and somewhat parallel with, the artery. The hair will fall down over it and hide it. "The seton should be moved to and fro once daily." "The seton is of the greatest use in opacities, pustules, and ulcers, of the cornea, when accompanied by spasmodic closure of the lids, increased vascularity, lacrymation, and intolerance of light, where granulations of the conjunctiva are not present simultaneously." "It may be inserted at any age, and is, in hospital practice, almost the sole remedy adopted for the rapid removal of the disturbances accompanying the above-mentioned corneal changes."

Macnamara recommends counter-irritation in syphilitic keratitis.

In a communication to the Clinical Society, Mr. Spencer Watson advocated strongly the use of the seton in ulcers of the cornea, and adduced four cases. He also alludes to notes of thirteen cases, in which he considered benefit to have resulted.

Mr. Hulke, in the course of the discussion afterwards, deprecated the use of setons as too severe, and recommended atropine and tonics.

Mr. Wordsworth, who has, we believe, not published on the subject, but whose opinion will be much valued, has stated to us that he does not use setons very extensively, but that, "in certain selected cases of obstinate corneal ulceration, they produce wonderfully good results."

Under the head of "chronic vascular ulcer of the cornea", Mr. Lawson advises that all applications to the eye should be discontinued for a time, and a double silk thread seton be inserted into the temple. He directs it to be put high up amongst the hair out of sight, and out of the way of the branch of the temporal artery. "The seton should be worn for three or four weeks, and may be continued longer if beneficial, and if it does not excite too great irritation."

Mr. Soelberg Wells says: "In the treatment of fascicular corneitis" (a peculiar and very rare disease), "a seton in the temple sometimes proves of much benefit." He also quotes Mr. Critchett's plan of treating vascular ulcers of the cornea by seton. About an inch of skin is to be taken up. The silk is to be moved daily. "The seton continues to discharge for two or three months—sometimes for twelve months."

Scepticism as to the advantages of counter-irritation is, we believe, at present a characteristic of the German school, and has, possibly, to some extent spread amongst ourselves from that source. The following quotation from Stellwag von Carion will, we believe, fairly indicate the general creed of his countrymen.

"The aim of counter-irritation is to withdraw blood from the original seat of inflammation, and to lessen lateral pressure. This can, however, last only a short time. The effect is evanescent."

"The advocates of this method of treatment may, perhaps, have observed this, and support their views on the possibility of a resolution in an antagonistic way. Unprejudiced observers have not been able to discover any such effect in eye-diseases; but the profession has been compelled to call these remedies instruments of martyrdom, which do no good in any case, but often do more harm than the original disease. All this is true of moxas, setons, and issues. Exhaustive suppuration, and even erysipelas, terminating fatally, are the possible consequences of the use of these agents. The pustules, from the use of tartar emetic ointment, cannot be much better spoken of. Even euphorbia plaster is dangerous, especially in persons with a soft skin, and in children. Extensive impetigo and eczema not unfrequently arise in consequence of counter-irritation applied behind the ear, or in the temporal region. We also very often see the cervical glands swollen, and even suppurating, as a result of the same treatment. The ulcerated part may also be scratched by the patient, and the matter brought into contact with the eye."

In the fourth volume of the *London Hospital Reports*, Mr. Hutchinson expresses the following opinion. "I have of late years formed a still higher opinion of the efficacy of setons in the treatment of certain chronic inflammations of the cornea..... Chronic ulcerations of the cornea, attended by much intolerance of light, are the cases which require them. I think the degree of intolerance and irritability measures the necessity for their use. In the early stages of corneal ulcers, they are less decidedly useful than in the later ones; but my impression is, that in these they often prevent a case from advancing to a worse stage. They never do harm, and they cause very little pain. I have used them frequently for infants, and for cachectic 'strumous' children. The result usually is, that within a week the local irritability ceases, the feverishness abates, the appetite returns, and the strength begins to improve. The seton should consist of two threads of thick silk, and should be put into the temple amongst the hair, so as to leave no

exposed scar. They are more decidedly useful where only one eye is involved than when both suffer. They do no good in syphilitic keratitis, nor in cases which are accompanied by granular lids."

ST. BARTHOLOMEW'S HOSPITAL.

(Cases under the care of Mr. PAGET and Mr. HOLDEN.)

Compound Fracture of the Skull.—In Renton ward, there is an interesting case of injury to the head in a boy. He was admitted for compound fracture of the skull, with slight depression, the result of a fall of a chimney-pot on his head. There were no symptoms beyond slight concussion; and as the depression probably involved only the outer table, trephining was not at all thought necessary. When we saw him, symptoms or inflammation at the base of the brain had followed.

Recovery from Pyæmia.—In the same ward is a case which Mr. Paget pointed out as one of recovery from pyæmia. Most of the ordinary symptoms had been present—profuse sweating, increase of temperature, etc.; but no abscesses had formed. The man is now sitting up. He was admitted September 30th for lacerated foot. A fortnight later, amputation through the leg was performed. His age was 45.

In Sitwell ward are two cases to which Mr. Paget called attention, as instances showing the thorough healthiness of the ward. At the end of a fortnight, the large wound produced by the removal of a breast in the one case, had almost healed; and in the other, that of a considerable fibro-cellular tumour of the thigh. In each, only simple dressing had been used.

We also saw a woman, aged 42, who had a carcinomatous tumour of the right side of the tongue, so far advanced that it was not thought wise to remove it; but we believe that, on account of the intense pain which she suffers, it is proposed to remove a portion of her gustatory nerve.

Paresis of Sixth Nerves after Injury to Head.—In a visit to Mr. Holden's wards, we had our attention called to an interesting case of partial paralysis of both sixth nerves after an injury to the head. Mr. Bloxam kindly furnished us with particulars, which we give briefly. The patient was a man aged 22, and was admitted September 16th. He was then quite unconscious, and remained so for eight days, not knowing his friends in the least. He was very restless, constantly trying to get out of bed. Morphia was given him at night. On the ninth day, he first recognised his brother. On October 4th, he complained of double vision; and it was then noticed that both eyes converged. This power of looking outwards was not quite lost, but neither cornea came well outwards to the canthus. A month later, he could see well with either eye, had lost his double vision, could look outwards, and appeared to have quite recovered.

OPERATION DAY, DEC. 11.

Recurrent Tumour of Foot.—We saw Mr. Holden operate on an interesting case of recurrent tumour of the heel and sole of the foot. The patient was a woman aged 38, who first noticed a growth in the sole of the foot ten years ago. She came under Mr. Holden's care about three and a half years ago, and he then excised the tumour. It was examined and found to be of the kind known as recurrent fibroid. The growth soon reappeared, and was removed by Mr. Holden four times altogether, we believe. He was quite sure that each time the whole was cleanly excised. This time he determined on amputation through the lower third of the leg. A section of the tumour was not made, as it was to be exhibited in the Museum.

Nævus of Tongue.—Mr. Paget afterwards operated on a very unusual case of nævus of the tongue. The patient was a young woman aged 19. From childhood, a "small lump" had been noticed about the middle of the right side. It had gradually increased in size; so much so as to cause impairment of speech, and some difficulty in swallowing. On examination, an oval flattened tumour could be felt, and on its surface, at one part, there was a distinct appearance like that of capillary nævus. There was also in its neighbourhood a slight warty or ichthyoid condition of the epithelium. The whole was not much larger than a hazel-nut. It was removed by a couple of snips with a strong pair of scissors. Two or three vessels required ligature. Mr. Paget made a section of the growth, and remarked that, as he had expected, there was very little to be seen. There appeared to be a vessel running through some fibroid thickening, and that was about all. The specimen is preserved.

Malignant Pustule.—In the "Casualty" Ward is a woman, under the care of Mr. Holden, suffering from a large malignant pustule of the right side of the face. It is said to have commenced five days ago. We believe no direct source of poisoning has been ascertained. She is too ill to give any account herself.

Syphilis, Lupus, or Carcinoma (?).—We are indebted to Mr. Langton for showing us a very rare and dubious case of ulceration of the lip

now under his care in Stanley Ward. The patient is a girl aged 19, with fair complexion, slender nose, delicately formed features, and an aspect more phthisical than either syphilitic or strumous. The ulceration occupies the right side of the lower lip, and is covered with scab. There is a warty appearance in parts not unlike a carcinomatous condition. The first appearance, two years ago, was so much like that of carcinoma, that a portion of the lip was removed in the country fifteen months ago. The wound never closed up. There is now an enlarged gland under the right jaw, and several very small ones on the left side, and the glands behind the sterno-mastoid are also enlarged.

Setting aside the question of carcinoma, it must be due either to congenital syphilis or to struma. There are none of the usual signs of syphilis; and, beyond slight enlargement of glands, there are none of struma. She has not the "lupid complexion."

BATH UNITED HOSPITAL.

[FROM OUR SPECIAL CORRESPONDENT.]

WE visited this hospital on the 12th, and were indebted to the courtesy of Dr. Carter, the resident medical officer, and Mr. Hopkins, the house-surgeon, for much valuable information and great kindness in showing us what we wished to see.

The hospital was built in 1826. It contains one hundred and twenty beds, about equally divided among medical and surgical cases; and has recently been enlarged by the addition of a new wing, in memory of Prince Albert. The main building is in one block; but there are outbuildings for the *post mortem* room and depository quite unconnected with the hospital. The resident officers live in a detached house, connected by a covered way with the hospital. There is a well-lighted and convenient operating-room on the third storey. The deficiency of a garden is to some extent remedied by a large flat part of the roof, which can be used by patients in fine weather. (Might not our London hospitals adopt this plan with benefit to the patients?) The wards are all well lighted and high; in all of them there was an air of cheerfulness and brightness which must add notably to the comfort of the patients. There are sixteen beds in the large wards, and no ward communicates directly with any other. The water-closets are placed in an area outside one end of the wards, and were quite free from any smell. There are two separate wards for children; but at the present time they are empty for a while, owing to the recent occurrence of scarlatina among the little patients. There is no maternity ward. We saw one case of typhoid, and several cases of phthisis, of renal and heart-disease, etc. There is a small ward (at present empty) for the reception of the servants of private families; these patients are admitted by payment. The accident ward has its floor waxed; and we learnt that, since the adoption of this plan (six months), there have been no cases of erysipelas or pyæmia in this ward, though such cases have occurred in other wards not waxed.

Under the care of Mr. Stockwell, there is a well marked case of interstitial keratitis in a girl aged 19. She is in excellent health; and her physiognomy, though suspicious, is not typical. She is the eldest of three. Her teeth are of the screw-driver type. Her left eye is getting well, and the right is now becoming affected; they have been bad, on and off, for a year. She has taken iodide of potassium, in combination with bichloride of mercury, for a considerable time; but is now getting some colchicum and ipecacuanha, and taking calomel vapour-baths.

Another girl, aged 20, on the opposite side of the same ward, shows a well marked example of relapsing rupial ulceration on the legs, of four years' duration. There is no history of acquired syphilis, nor any appearances to justify the suspicion of inherited taint. She has suffered with circular and serpiginous ulcerations for four years, more or less; and at present has an ulcer as large as one's palm on the right thigh, covered with a very thick horny-looking black crust, more than an eighth of an inch thick, and like an immense rupia-scab. She, too, has taken the iodide in combination with bichloride of mercury; but Mr. Stockwell tells us he has found that making incisions round the ulcers while they are yet very small is the surest way of arresting their spread. There are numerous examples on her legs of ulcers which have been thus arrested; and others in which no such treatment was pursued, and the ulceration has spread, and left large and deep scars.

Pustular Eruption while taking Iodide of Potassium.—A man, aged 47, under Mr. Stockwell, came in a month ago for a severe contusion. He afterwards got some pain and swelling of one knee; and on the 5th inst. he was put on five-grain doses of iodide of potassium three times a day. On the 10th inst., the present eruption began to show itself on his face. We saw him first on the 12th. The eruption consisted of round semipurulent vesicles, rising very abruptly from the almost level surface, and covered by a thin cuticular layer. Some of them had broken; and the sero-purulent contents, drying, formed a heaped-up

irregular honey-like crust. The spots varied in size from a pin's head to a threepenny-piece; they were not preceded by any papular stage; and they did not seem connected with sebaceous follicles. There was only a small areola of slight redness round them, and scarcely any effusion at their bases. One or two were slightly umbilicated; but in the great majority there was no central depression, although in some of the recent ones, which had been abraded and emptied of their fluid, the central part of the vesicles seemed to have fallen in, leaving the margins somewhat prominent. The largest were flatter and less circular than the smaller ones. These spots were numerous on all parts of his face (which was swollen) and ears; and there were some on the scalp. They were scattered less thickly on his shoulders, lower part of back, arms, thighs, and legs. On the 13th, there were two on his penis; one small, prominent, and full of pus, on one side of the frænum; the other, at the base of the glans, had ruptured, and its centre fallen in, so that, at first sight, it looked like a circular chancre with raised edges. There was, however, no induration, and only the slightest possible inflammatory deposit at its base. The man had had no rigor, and felt only slightly unwell. He had a good vaccination-cicatrix on his arm, but stated that he had had small-pox in childhood, after he was vaccinated, and a few pits were to be seen on his face and legs.

Treatment of Fracture of Patella.—We saw one case treated by elevation and bandaging. We were told that, in one case, the use of Malgaigne's hooks was followed by erysipelas and death.

Scabies seems to be at least as common among the rural inhabitants about Bath as among our London in-patients. We saw several partly cured cases in the wards; the patients, of course, having been admitted for other complaints. They are treated by the sulphur vapour-bath.

We learned that cases of primary syphilis are not admitted; but there are several well marked and instructive cases of the tertiary and hereditary forms of this disease in the Hospital.

For the following particulars of a case under Dr. Goodridge, we are indebted to Dr. Carter. The patient is a woman extremely emaciated and sallow, aged 25, suffering from an abscess which had opened in the right iliac region, and is now discharging brownish coloured pus. For more than a year she had a hard brawny swelling, which gave her much pain. This swelling was preceded by severe cramps in her legs, which gave her a good deal of trouble for six months. Coincidentally (or thereabout) with the appearance of the swelling, her urine became thick. She has been an in-patient for three months, during the whole of which time her urine has contained pus in variable quantity; and on several days there has been fecal matter also. Fæcal matter has not, however, been detected in the pus discharged by the skin-opening. Two months ago, she had symptoms indicative of acute peritonitis. The history seems to point to abscess communicating with the cæcum or vermiform appendix, which has subsequently communicated with either the ureter or bladder. There are no evidences of renal disease, or disease of the spinal column.

Mr. Stockwell showed us a woman on whom he had operated three years ago for malignant (?) disease of the tongue and lower jaw. The bone containing the lower incisors and canines was taken away, together with a part of the front of the tongue. She had then, and still has, a mass of enlarged but moveable glands on the right side of the neck. She is in good health, and has only once had a slight return of ulceration, which was perhaps due to a sharp tooth.

BATH MINERAL WATER HOSPITAL.

THE resident medical officer, Dr. Clothier, was kind enough to take us over this fine hospital on the 13th inst. The building contains 145 beds, the majority being allotted to male patients. The sleeping-wards are all in the old building (a hundred and thirty years old); while the new part contains spacious and well fitted day-wards, in which the greater number of the patients spend their time, for but few of them are so ill as to require to remain in bed. The cases admitted include gout, rheumatism, rheumatoid arthritis (which is, Dr. Clothier tells us, looked upon as quite a disease *sui generis*), lead-paralysis, relapsing skin-diseases, locomotor ataxy, etc. These would probably furnish interesting and instructive materials for study to students living on the spot and able to watch the cases. Dr. Clothier had not seen any cases of blindness in connexion with lead-poisoning. The patients who require it are generally bathed about three times a week in the mineral water; and we saw the several varieties of baths which are used for different cases. The water is also drunk to the extent of about half a pint daily by many of the patients. The bathing and water-drinking are combined with other forms of medication when necessary. For instance, we saw a boy with psoriasis, who had been taking arsenic, and is at present using tar-ointment; and iodide of potassium and galvanism are used in cases of lead-paralysis.

There is no museum at this hospital. From the nature of the cases, there is but little material for a pathological collection. Patients are admitted for four months, but often stay longer.

COMPARATIVE PATHOLOGY.

HAIR-BALLS AND CALCULI IN THE STOMACH.

THE following notes may be of especial interest in connection with the very remarkable case recorded in our pages last week by Mr. Best of Louth.

Various substances, other than food, are found with greater or less frequency in the stomachs of some domesticated animals. Sometimes an animal evinces a morbid appetite, and will eat up almost everything that he can get at. This taste is not uncommon in young dogs, who, from the ease with which they vomit, are probably less troubled by the accumulation of large masses of foreign matter than they otherwise would be. Other animals, however, occasionally suffer severely from the same cause. In the *Veterinarian* for 1838, the case is recorded by Mr. Gregory of a cow on which rumenotomy was performed, and large quantities of all sorts of rubbish were removed. This cow had calved a few days before. It is very common to find a few solitary foreign bodies, such as pins, nails, stones, etc., in the reticulum of cows and oxen, where they seldom do any harm; but cases have happened where sharp substances, like pieces of wire, lying in this division of the stomach, have penetrated the diaphragm and pericardium, and set up pericarditis.

In certain cases, however, calculi of definite shape and composition are formed within the stomachs of various animals. Calculi are comparatively rare in the stomach of the horse (if we may judge by the scarcity of reported cases), and are said generally to occur in millers' horses, which get large quantities of mill refuse for food; and it is probably partly from mineral particles in the food, but to a great extent from the large quantities of phosphates contained in the cereal grains, that the greater part of such calculi as were found in Mr. Stanley's case (*Veterinarian*, 1841) are derived. In this remarkable instance, one of the calculi was found impacted in the pyloric opening of the stomach, and had caused death.

In the rumen of calves, concretions are often found: they are always (we believe) composed of hair, which has been licked from the coat of the calf or its neighbour. These hair-calculi look almost like felt, so closely and uniformly are the hairs matted together. Mr. Morton (in his work on *Calculi*) tells us that, as the calf's digestion gets more perfect, these calculi "disappear from the rumen, and are then met with in other parts of the stomach, and occasionally in the intestines, when they soon become coated with phosphate of lime and mucus." They are frequently multiple, and in such cases they may show facets. These hair-balls seldom have nuclei; but a hard nucleus is generally found in the gastric calculi of the horse. They rarely do harm to the calf, unless, as sometimes happens, they are partly regurgitated, when they cause choking.

Lambs, after they are weaned, are liable to the formation of a special kind of concretion, if they are fed much on clover, especially on the variety known as *broad-leaved* clover. This plant has hairy stems and leaves, and the hairs often collect, become felted together, and form concretions of considerable size in the rumen. These are of the same form as the hair-calculi of the calf, but, being composed of very much shorter and finer hairs, they are not so firm, and easily break down under the finger. They do not seem to be injurious so long as they remain in the rumen; but if they pass into the abomasum and intestines, considerable irritation is sometimes set up, and an exhausting diarrhoea is sometimes ascribable to their presence in the small intestines. Lambs sometimes swallow wool; and we have found considerable collections of it in the abomasum mixed up with curdled milk. We do not know how much mischief is attributable to its presence, but the length of the hairs of wool would seem to make it probable that considerable obstruction might be caused by this substance.

PERFORATION OF THE INTESTINE BY A PIECE OF BONE.

[FOR the two following cases, we are indebted to Mr. McBride of the Cirencester Veterinary College.]

Having seen several cases reported in your JOURNAL of sudden death in the human subject, due to perforation of the intestine, I thought you might like to insert in your Comparative Pathology column the particulars of a similar case in the dog, which recently came under my own notice. The subject of it was a very large dog in gross condition. He had a sharp run one evening behind the family carriage, and when

he reached home was seen to be unwell. I saw him next morning (Thursday), and found that he was suffering from congestion of the lungs—a result to be expected from the over-exertion of the previous evening. I prescribed for him the usual remedies in such cases, and saw him again in the evening, when he appeared much better. Friday morning, the feverish symptoms had disappeared, and his breathing was nearly normal; on the same afternoon he was moving about, and had taken some beef-tea. The coachman saw him late that night, when he appeared greatly prostrated, showing symptoms of great suffering, and having vomited much. On Saturday morning he was found dead.

Post Mortem Appearances.—On opening the abdomen, the intestines appeared healthy; but, on passing my hand amongst them, my fingers were pricked by some sharp body. On removing the intestine, I found three spicula of bone protruding through the coats of the duodenum. Over the seat of these perforations, a jelly-like substance was adhering; no doubt effused lymph. About three inches behind the perforations, the intestine was invaginated: this had been recent, as there were no adhesions, and the circulation of the blood had not been much retarded. On opening other portions of the small and large intestine, I found numerous large irregular fragments of bone, with sharp edges, which appeared to be portions of the rib of a sheep. I failed to discover any trace of the contents of the intestine having passed into the abdominal cavity, but found effused blood to the extent of about two ounces. The lungs were congested, the heart enlarged, the tricuspid valve much thickened, and two small clots of lymph adherent to it. I may mention, that disease of the valves of the heart is a very common occurrence in dogs.

TRANSITORY PARAPLEGIA IN DOGS.

A BULL-TERRIER was brought to me by one of my students on Saturday, 27th November. The animal had been seen to suffer for several days from a want of power in the hind limbs. In attempting to walk, it dragged them along the ground; and when it tried to stand, its legs slipped out from its body, so that its abdomen rested upon the ground. After making a minute examination of the animal, I found it was suffering from constipation of the bowels, and prescribed for it a full dose of purgative medicine. I have seen the animal to-day (29th November), and find that he walks as well as ever he did, showing no symptoms of paralysis.

The only explanation I can give of the above symptoms is, that the over-distended gut pressed either upon the sacro-lumbar plexus, or the nerves passing from it to the posterior extremities, and thus caused paralysis of the hind limbs. I may state that constipation of the bowels is, in my experience, not an infrequent cause of paralysis of the posterior extremities; but I have only seen it in bull-terriers and bull-dogs; and strange to say, only in males.

*** Without insisting too strongly on the curative influence of the purgative, it appears to us that the above may be of interest in comparison with certain forms of paraplegia in men. Dr. McBride's statement, that he has met with three cases only in males, is suggestive of inquiry as to whether the sexual function may have anything to do with the symptoms.

HISTORICAL NOTES.

PRACTICE OF PHYSIC—ANCIENT AND MODERN.

ON CHANGE OF TYPE.

[We are indebted for the following interesting notes to a well-known member of the profession, who prefers the *incognito* of "A North Country Surgeon."]

The reader who has studied the medical literature of the last quarter of the last century must have often noticed how nearly the pioneers of that day agreed in theory and practice with many advanced men of our own times. A change of type—change from one indicating reduction and depletion to one demanding support—was recognised by many observant practitioners. Dr. R. Hamilton (*Memoirs of the Medical Society of London*, 1789) thus writes:

"I am apt to think our constitution considerably changed in Great Britain within this last century. Luxury and its enervating influences render the diseases of the island less inflammatory than perhaps they formerly were. Diseases that in their nature were always, and now are allowed to be phlogistic, have appeared within the space of the last thirty years, accompanied with a considerable degree of putridity, as the measles." After adverting to our change of diet and habits, he concludes: "All these concur to strengthen an opinion I have for some time entertained, that our diseases partake much more of debility than

of genuine inflammation, and that the system cannot bear the same evacuations as were formerly in use, even in diseases universally allowed to be of the phlogistic type."

Dr. Sims, writing of the scarlatina anginosa (*Memoirs of the Medical Society of London*, 1786), says: "Of bleeding, much need not be said. That many cases would have borne it, I have not a doubt, from the whole complexion of the fever attending on them, and therefore I know it was many times practised without doing mischief; but it does not follow from thence that it was requisite, or did good. In my own practice I began early, almost totally, to neglect it, from an observation that the cases where the pulse was the strongest, and heat and fever highest, were not those attended with most danger; and never afterwards had recourse to it except in violent peripneumonia cases, which were very rarely blended with the disease. I am also certain that I have seen many cases become fatal by abuse of bleeding, so that I think it much safer to prohibit it universally than to be at all free in prescribing it."

Mr. Joshua Walker of Leeds, in a very interesting paper on the "Atrophia Lactantium", notices this increased tendency to debility, and attributes it to the tea-drinking propensities of the times (*Memoirs of the Medical Society of London*, 1789).

Dr. Martin Wall, (Lord Litchfield Professor at Oxford) in a letter on an epidemic at Oxford, 1789, thus writes: "Considerable evacuations, either by the lancet or by purgations, were almost always prejudicial, sometimes fatal. Some slight symptoms of inflammatory diathesis, which accompanied the first accession of this fever in some instances, induced practitioners of the best judgment to use the lancet; and I have seen the blood much inflamed. I do not recollect that in any instance any advantage resulted from this practice; and in many a fatal debility almost always supervened, which no cordials or restoratives could overcome."

Dr. Withering, in a paper on Scarlatina (*Medical Tracts*, vol. viii, 1769), thus writes of bleeding: "Such was the state of the pulse with us during the summer months, that I have never seen a case in which blood was taken away, nor would it be easy to conceive with what view the boldest or the most ignorant practitioner would attempt it."

Dr. Samuel Farr, in a paper in the same volume, says: "If we were to examine into the history of medical cases from the beginning of the world to the present time, we should find, perhaps, that more injury than advantage had been sustained by bleeding. For in those cases where evident marks present themselves to indicate its use, other circumstances of great consequence to the constitution will prohibit it. I believe it often happens that to cure disease we destroy the patient."

I could multiply instances of this kind; but sufficient has been adduced to prove that an almost identity of thought and practice was then exhibited by the leaders of the profession with modern views. When we bear in mind the recurrent development of Broussaism, starvation diet, exhaustion, leechings, and bleedings, heroic doses of calomel and of antimony, which intervened between their day and ours, we must either deny the modern doctrine of change of type, or allow that since the present century commenced there must have been two changes of type—one from asthenic to a sthenic diathesis, and a second from a sthenic to an asthenic.

MUSEUM NOTES.

If a patient have his vertebræ displaced in any part of his cervical region, with crushing of the cord, it is clear that the function of respiration will be greatly interfered with. The interference will be greater in proportion as the crushing is higher up. In any part of the dorsal region, there will also ensue more or less of respiratory inconvenience. If, however, the accident happen in the lower dorsal or in any part of the lumbar region, the vital functions will wholly escape; and there does not, at first sight, seem any reason why the patient's life should be endangered. He may be permanently paraplegic, but why should he die? The fact is that many patients, after such injuries, do recover, in some cases regaining the use of the lower extremities, but in others not so. If the paraplegia be irrecoverable, death in not a few cases ensues from secondary disease of the bladder and kidneys. This point has, we think, not been insisted on with sufficient clearness; and, in order to illustrate it, we extract the following interesting record from the note-books preserved in the Museum of the London Hospital. It is obvious that there is great risk of the same mode of death in cases of fracture higher up, if the patients survive the respiratory dangers. That it is a constant and very important source of risk to life in all cases that survive the first few weeks is certain. We may add that pyæmia sometimes supervenes also.

Death from Cystitis and Pyelitis Five Months after Fracture of Spine.
(London Hospital Museum, Mr. Luke.)

In the Museum Records are the notes of a case, under Mr. Luke's care, in 1835, in which a man lived from June 19th to November 4th after fracture of the twelfth dorsal vertebra and crushing of the spinal cord. At the *post mortem* examination, the union was found to be firm. The bone was still somewhat displaced forwards, and the medulla was in a "state of ramollissement." The patient, at the time of death, was extremely emaciated, and had long suffered from cystitis, etc. His lungs were found studded with miliary tubercles; some of them in a state of suppuration (? pyæmic). His bladder was contracted and thickened, and its mucous membrane covered with lymph. The ureters and the pelves of the kidneys were also inflamed and furred with lymph. One kidney has been preserved in the Museum as an example of pyelitis with calcareous deposits.

SPECIAL CORRESPONDENCE.

THE FORTY-THIRD MEETING OF GERMAN NATURALISTS AND PHYSICIANS:

HELD AT INNSBRUCK.

[FROM OUR OWN CORRESPONDENT.]

II.—GLEANINGS FROM THE SECTIONS.

WE intend to give a report of some only of the more important communications made in those sections which are related to medical science. Among these the lead, both by the number of their members and the importance of the communications and discussions, was taken by the Sections for Anatomy and Physiology, and that for Surgery. The Section for Clinical Medicine, which had, no doubt, somewhat suffered also by the separation from it of the Diseases of Children, for which a separate section had been formed, was less prominent this year than might have been expected from the great activity which prevails in this department at all the German Universities at the present time; but from purely accidental causes only a few of the leading men were present.

Anatomy and Physiology.—Professor GOLTZ of Königsberg showed two pigeons, in which the *semicircular canals of the internal ear had been partially or entirely destroyed*. The animals could only with difficulty keep their balance; and especially they could not keep their heads steady and erect. The brain had not been touched in these operations; and the professor thought that a sensation of giddiness might possibly be the cause of this unsteadiness, although he would not deny that this is not a satisfactory explanation.—Dr. GRUBER remarked that similar symptoms with regard to the position of the head are also sometimes observed in patients with diseases of the ear.

Professor LUDIMAR HERMANN of Zürich related some experiments which he had made to determine the influence of *drinking cold water when the body was heated by exercise*. He had injected cold water into the stomachs of animals. Previously to the injection, he measured the arterial pressure in the carotid and crural arteries, and found that, almost immediately after the injection of cold water, it became increased. At the same time, he observed a change to take place in the respiration, the inspirations becoming deeper, which may have been either a direct effect of the injection, or a kind of compensation for the temporary derangement of the circulation. This latter view received some support from an experiment made on an animal which had been poisoned with curara. In that case, the increase of arterial pressure had been very sudden and considerable. With regard to the practical question, Professor Hermann thought that a sudden increase of arterial pressure through drinking cold water when the body is heated by exercise, might only become dangerous when there is a *locus minoris resistentie* in the vascular system through disease of the blood-vessels. The professor, also, communicated some experiments to prove that convulsions can be caused by the retention of venous blood in the brain.

Professor HELMHOLTZ described an apparatus which he had constructed for the purpose of *withdrawing the gases from the blood* for chemical examination; and he further demonstrated, on a large model, the movements of the auricular ossicles. This model, which is very instructive for lectures, may be obtained at the physiological laboratory at Heidelberg.

Some very interesting experiments, showing a *peculiar influence of the nervous system on the temperature of the blood*, which may eventually become very important for the theory of pyrexia, were related by Professor HEIDENHAIN of Breslau. He found that irritation of sensitive nerves produced in animals a rapid diminution of the blood-heat, amounting from 0.1 deg. to 0.5 deg. C. (0.18 deg. to 0.9 deg. F.), as

measured with a thermopile in different places of the body (common iliac vein, vena cava inferior, branches of the hepatic vein, right and left cavities of the heart, rectum, and abdominal cavity). After the irritation has been discontinued, the temperature rises again; but, as a rule, much more slowly than it sank. The same effect is produced by irritating the medulla oblongata, which must be considered as the centre through which this action of the sensitive nerves takes place, for the result is the same if the medulla oblongata be separated from the rest of the brain; whereas it cannot be produced any longer after the separation of the medulla oblongata from the spinal cord. That changes in the circulation which always follow the irritation of a sensitive nerve have nothing to do with this result, and that a more rapid cooling from the skin and lungs is also not its cause, was proved by various experiments, in the course of which the professor discovered also the interesting fact that, in animals which have pyrexia, irritation of sensitive nerves, although it produces the usual changes in the vascular system, is yet not followed by a diminution, as in healthy animals, but in most cases by an increase of the blood-heat. Neither can a temporary diminution in the generation of heat be the cause of this sinking of temperature; as, after death, when the generation of heat is suspended, the sinking of the temperature in the interior of the body is much slower than in these experiments. Professor Heidenhain could not explain these phenomena otherwise than by assuming that irritation of the medulla oblongata, either directly or indirectly, through a sensitive nerve, induces processes in the system by which heat disappears either through being transformed into another form of energy, or by chemical actions which bind heat. All the phenomena observed in these experiments tend to the conclusion that, under normal conditions, by some action of the medulla oblongata, heat constantly disappears in the body; and that in pyrexia, a paresis of that supposed function of the medulla oblongata is one of the causes of increased temperature. The experiments which the professor has made on animals in a state of pyrexia are also of therapeutical importance, and give, theoretically, great weight to those antipyretic measures which have lately been much employed, and the beneficial effects of which may now be said to be practically established. If an animal in a state of pyrexia be covered with ice-water compresses, a gradual diminution of temperature is observed in the vena cava. Irritation of a sensitive nerve within the first twenty to sixty minutes of the application of cold, retards the sinking of temperature, or suspends it altogether, or produces even a slight rise, as has already been stated. But after the cold has been applied for some time, irritation of sensitive nerves increases the sinking of temperature, as in animals which have no pyrexia, the temperature rising again after the irritation has been discontinued. Thus it seems that, by the application of cold, the medulla oblongata has recovered its excitability which it had lost through the pyrexia. Besides the application of cold, the injection of quinine into the blood has also the effect of restoring the influence of the irritation of sensitive nerves on the blood-heat.

Several communications were made on different questions in *embryology*, by Professors WALDEYER, DURSLEY, and DOHRN, and by Dr. CELLACHER; nor was the now much-ventilated question of *inflammation* passed over, Professor STRICKER of Vienna giving a splendid discourse of more than two hours' duration, in which he related his researches, carried on with a great number of most ingenious experiments. Without entering into any detail, we may say that Stricker's results are partly in opposition to what Cohnheim maintained with regard to the origin of the pus-corpuscles in an inflamed cornea, and that they go far to support the original views of Virchow, without denying that the white cells emigrating out of the blood-vessels also play an important part.

Clinical Medicine.—Dr. DRASCHE of Vienna read an elaborate paper on the results obtained in the Rudolf's Hospital at Vienna with the *cold-water treatment of fevers*. They quite agree with what has been observed elsewhere—as at Stettin, Kiel, and Bâle—namely, that comparatively more patients recover under this treatment than under any other. The number of cases treated by the author exclusively with water within this year was 40, of which 37 were cases of typhoid, and 3 of typhus, fever. Out of these, 4 patients died, which would give a mortality of 10 per cent.; whereas in 1868, when the water-treatment was not yet introduced, in the same hospital the mortality had been 16.5 per cent. The method used by the author consisted in half and full baths of from 9 to 30 deg. C. (48 to 86 deg. F.), given from one to eight times in the twenty-four hours, and in several cases combined with cold affusion. The baths were generally given whenever the thermometer showed 39.5 deg. C. (103.1 deg. F.) in the axilla.

Professor ZEISSL of Vienna spoke on that peculiar change of the epithelium which is sometimes observed in the form of opaque patches, from the size of a pin's head to that of a pea, in the mucous membrane of the mouth of syphilitic patients. Some French authors call these patches *plaques opalines*. Most syphilographers consider them as pro-

ducts of syphilis—in fact, as a kind of *plaques muqueuses*. The speaker pointed out that they differed from the latter in some material points, and stated that he had never met with them except where a mercurial treatment had been gone through. He thought that they are simply accumulations of epithelial cells enclosing minute particles of mercury, although he had not yet had an opportunity of verifying his hypothesis either microscopically or chemically.

Dr. KUCHENMEISTER of Dresden showed a map representing the *distribution of phthisis on the earth*, and spoke on elevated climatic stations for consumptive patients, with special reference to those which had been in use from the times of Galer down to Archibald Smith.

Professor LEYDEN of Königsberg related two observations of that peculiar form of paralysis which Duchenne first described as *progressive paralysis* of the tongue, the soft palate, and the lips, and for which Wachsmuth proposed the name of “Bulbärparalyse”, designating thereby a paralysis having its seat in the medulla oblongata. In the first case observed by the speaker, the diseased parts were the pons and medulla oblongata, which contained a clot, with softening in the neighbourhood and atrophy of the nerves in different places. The blood-vessels were found considerably diseased, and had probably been the starting point for the disease of the nervous tissue. In the second case, considerable fatty degeneration of the pneumogastric and hypoglossal nerves was found, and the spinal cord between the cervical swelling and the medulla oblongata showed numerous fatty granules. However, only the anterior and lateral columns were diseased, the posterior ones as well as the blood-vessels being healthy. Professor Leyden considered the disease as myelitis; a process, therefore, which, by the nature of the lesion, no less than by its seat, differs from the grey degeneration of the posterior columns.

Professor MUNK of Bern spoke on *diabetes mellitus*, especially with reference to simultaneous affections of the pancreas. He put the following questions. 1. Can such simultaneous affections of the pancreas be recognised during life? The professor thought that they can; *a*, by the gastric derangements which so frequently occur in the course of the illness; *b*, by the almost constant abdominal pains; *c*, by the dislike to meat which is always present; *d*, by the diarrhoea which so frequently occurs, especially after a meat-diet; *e*, by the condition of the motions, which is found in all cases of obstruction of the pancreas; *f*, by the jaundice which, in the majority of cases, had been at least temporarily present. 2. Is the affection of the pancreas the cause of the diabetes? This question was negatived by experiments which Professor Munk, in conjunction with Professor Klebs, had made on dogs. Having observed a case in which, besides atrophy of the pancreas, the solar ganglion was also found atrophied, they then experimented on this ganglion, and found that its partial extirpation in dogs produces diabetes, which either persisted until the death of the animal, or which was only temporary. They also found that neither by section of the hepatic nerves which run along the hepatic artery, nor by that of the splanchnic nerves, could diabetes be produced. 3. Do such cases require a different treatment from that of ordinary diabetes? According to Professor Munk's experience, an animal diet such as is usually prescribed in diabetes is, in such cases, very unsuitable, patients of that kind doing much better and keeping up longer with a vegetable diet.*

Dr. THOMAS of Leipsic discussed some symptoms of *scarlatina*, referring principally to the state of the skin at the commencement of the eruption, and to the state of the lymphatic glands, which he found swollen throughout the body. He also made some remarks on the temperature of the body, and the indications which might be derived therefrom for the eventuality of the kidneys becoming affected.—Professor VIRCHOW, who presided on that day, took this opportunity to make some remarks on the various forms of *kidney-affections* after scarlatina, and on “casts” generally. He distinguished two forms of nephritis scarlatina. The first is the catarrhal form, characterised by the proliferation of the epithelial cells in the tubes of the medullary substance, similar to what takes place in catarrhal pneumonia. The second form is the “nephritis parenchymatosa”, in which no proliferation of the cellular elements takes place, but in which change and degeneration of the cells is the rule. Contrary to the preceding form, these changes begin here in the cortical substance, near the Malpighian glomerules. A third form had been laid down by some authors, and formerly by himself, which was named “croupous nephritis.” But he said he could now no more recognise this form as existing, since he had convinced himself that there was no disease of the kidneys which was characterised by a peculiar kind of fibrinous casts. Even the supposition that these casts consisted of fibrin was not right. He had only once, in a case of cholera, been able distinctly to recognise fibrin in the tubuli uriniferi. By the mixture

of albuminous substances with caustic, soda, and the addition of neutral salts, substances can be artificially formed which, according to the quantities entering into their composition, vary in consistence from that of colloid to that of fibrin. Now, in the tubuli uriniferi, the possibility did exist for albuminates of soda to come into contact with a solution of salts; and if the former were present in small quantity, tubular casts; and if in larger quantity, solid cylindrical casts would be formed. The concentration of the urine was also of importance. The presence of such casts was only indicative of a change in the kidneys, but by no means of either its quality or its intensity.

Drs. SCHROETTER and STOERK of Vienna, and Dr. CUBE of Nice, showed several new *instruments for the local treatment of laryngeal diseases*, especially for the removal of growths.

Interesting discussions also took place in the Section for Diseases of Children, but there was nothing which, by its novelty or importance, would call for a special report.

Surgery.—Professor VOLTOLINI of Breslau spoke on the *galvano-caustic* method, and strongly recommended it for operations in the mouth, pharynx, larynx, nose, and ear.

Very interesting discussions took place on *carcinoma*, and its histology and clinical differences from other neoplasms, and on *pyæmia*; but, as they were more of an extempore character, it is not possible to give an adequate report of them.

Professor BRYK of Cracow gave an account of his experience of *acupressure*, which he had used in eighteen cases of amputation, of which short extracts were related. He had arrived at the following conclusions. Acupressure, in order to be easily and effectually applied, requires, in the great majority of cases, the operation by flaps. If many arteries have to be secured in this way, the accurate closure of the wound is rendered difficult. The progress and the duration of cases of amputation in which acupressure was used did not materially differ from those in which the blood-vessels had been tied in the usual way. Great rottenness, as well as callosity of the soft parts in the neighbourhood, contraindicate the application of acupressure. Secondary hæmorrhage is not of rare occurrence with this method, which may also sometimes cause severe neuralgia.

Dr. MAAS demonstrated specimens and photographs of cases of *hypertrophy of the tongue*. The chief alteration in these cases was great dilatation of the blood-vessels and lymphatics, and considerable hypertrophy of the papillæ and the epithelial layer. Of the different operations which had been proposed for such cases, the speaker had seen the best effects from the galvanocaustic method. In no case did any considerable hæmorrhage, nor subsequent inflammation, occur. The wire need not even be red-hot, but may look quite black. Of especial interest was one case of congenital hypertrophy, in which, after the tongue had been removed, the maxilla, which had been much deformed, assumed its natural form.

Midwifery and Diseases of Women.—Professor SPIEGELBERG of Breslau discussed the *value of inducing premature labour*, and arrived at the conclusion that this operation did not fulfil the expectations that had been raised about it. He thought that it must be absolutely rejected in cases where the conjugata exceeds three inches; in cases with smaller pelvis, it is only to be admitted in those rare instances in which, according to the experience of former confinements, a large and hard head of the foetus and malpresentation may be anticipated. The speaker rejected also the second indication which is generally given for the performance of this operation; namely, habitual death of the foetus in the last two months of pregnancy, as the cause of this accident is hereditary syphilis, which cannot be prevented by a premature confinement. As the only unobjectionable indication remain, therefore, diseases of the mother which are caused or increased by the pregnancy, as soon as they endanger life, or if by prematurely terminating the pregnancy, the saving of the mother's life can be expected. Professor Siegelberg's views will be more fully communicated in a paper which will be published in the *Monatsschrift für Geburtskunde*.

Professor SPIEGELBERG spoke also in another sitting on the *diagnostic value of the exploratory puncture of ovarian tumours* to distinguish them from cysts of other organs, such as cysts of the kidneys, hydronephrosis, or echinococcus. A case of that kind, where an echinococcus of the right kidney was only recognised at the operation of the supposed ovarian tumour, had occurred in the speaker's own practice. Exploratory puncture was further important to distinguish a cyst from fluid in the abdominal cavity—a distinction which, the speaker said, was not always so easy as was generally thought. In conjunction with Professor Waldeyer, he had discovered some new differences, which were of greater importance than those hitherto known. In peritoneal fluid, a coagulum is gradually formed spontaneously on standing, which never occurs with the contents of a cyst: in the former, moving amœboid cells are found; in the latter, they are always absent.

* According to the cases lately brought forward by Dr. Langdon Down, an animal diet might be given even to such patients, if at the same time pancreatine were administered.

Professor FREUND of Breslau gave an account of a chronic inflammation and induration of the cellular tissue at the base of the broad ligament which he called "*parametritis chronica atrophicans*." The locality in question contains the uterine nerves, a ganglion, two arteries, large veins, and the ureter. He said the first stage was anatomically not yet demonstrated, but had only been clinically recognised. The effects of the inflammation were thickening of the cellular tissue, varicose dilatation of the veins, and constriction of the ureter, which sometimes led to hydronephrosis. The clinical symptoms were local pain, especially on manual exploration and on coition, singultus, syncope, premature menostasis. All sorts of nervous symptoms in the sensitive and motor spheres, no less than on the part of the sympathetic, were also observed. The author seemed to be inclined to refer many symptoms, commonly included in the term hysteria, to this affection, which, although generally chronic, might also occur acutely, and which was sometimes confined to one, and then more frequently to the left, side.

The *galvanocaustic* method was also discussed in this section. The subject was introduced by Professor SPIEGELBERG, who recommended this method especially for amputation of the cervix uteri, and for intrauterine cauterisation in hæmorrhagic affections, and where hæmorrhage is caused by endometritis polyposa.

No less activity was displayed in the other medical sections, as in that for Mental Diseases, for Medical Statistics, for Military Hygiene, for Public Hygiene and Forensic Medicine, and for Medical Reform. Especially in the two last-named sections the discussions were both animated and interesting, the chief subjects discussed in the former of the two being "The Organisation of Public Hygiene", "Mortality of Infants", and "Hygiene of Schools", on which valuable memorials for discussion had been prepared beforehand by Drs. Wasserfuhr and Varrentrapp respectively. A report of these and all other proceedings is to be found in the *Tagblatt*,* a daily publication, which was issued during the time of the meeting, and which may now be obtained in a collected form from the publishers at Innsbruck.

NOTES ON BOOKS.

Vaccination. By J. THORBURN, M.D., Lecturer on Diseases of Women and Children at the Manchester Royal School of Medicine, etc. —A clearly written little book, dealing with the subject ably and systematically. Professor Newman receives a good deal of attention from the author in the last chapter: we hope that gentleman has seen a copy of Dr. Thorburn's little book. The diffusion of works like this among the non-medical public would do much good.

Strangeway's Veterinary Anatomy. By J. W. JOHNSTON, M.D., F.R.S.E.; and T. J. CALL, L.R.C.P.E. —This is probably the best book on veterinary anatomy in the English language, taking it as a whole. It is comprehensive and clear, and includes a description more or less minute of every organ and structure in the horse's body, with some of the chief differences observed in the other domesticated quadrupeds. Its size, however, prevents any attempt at minuteness of description, while in one or two places there are discrepancies which might confuse a student—e.g., the dentition table in the *Appendix* does not tally with the plates and descriptions given in the previous part of the volume. There are plenty of illustrations; many of them excellent.

INVENTIONS, &c., IN MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

COLMAN'S BRITISH CORN-FLOUR.

We have received a specimen of Colman's British corn-flour, prepared by the well-known house of J. and J. Colman. We do not recollect to have seen any specimen of this kind in which the grain is reduced to the same degree of fineness; and this care in its preparation renders the flour so readily and evenly miscible with water, milk, etc., that the most unskilled can hardly fail to bring it into the condition of pleasant food. The flour is pure in quality, nutritious, delicate as a food, and, although not exclusively intended for the sick, is a very great convenience in the sick room.

* *Tagblatt der 43. Versammlung deutscher Naturforscher und Aerzte in Innsbruck.* Wagner'sche Universitätsbuchhandlung.

WE shall feel indebted to correspondents who will forward us local papers containing reports of proceedings of Boards of Guardians and Boards of Health, Medical Appointments and Trials, Hospital and Society Meetings, important Inquests, or other matters of medical interest.

BRITISH MEDICAL JOURNAL.

SATURDAY, DECEMBER 18TH, 1869.

THE MEDICAL COUNCIL.

THE Executive Committee of our Medical Council had an interview with Earl De Grey and Ripon on Tuesday, for the purpose of urging upon the Government the propriety of amending the Medical Act. What passed was, we believe, satisfactory to those present, although, as might be expected, not likely to be productive of any immediate result. The Government is very desirous of advancement and reform in medical education and in diploma-examinations, but at the same time well aware of the many difficulties which beset the matter, and unwilling to act so long as there is any chance of these being diminished by the spontaneous efforts of our Colleges. For the consideration of the Privy Council, a brief *Résumé* of the working of the Medical Act during the eleven years that it has been in operation had been prepared. This document impresses us as a very able one; and, whilst it is perhaps a little strong on the side of self-congratulation, it certainly puts in a strong light some of the benefits for which the profession is indebted to the Council, and which it has been rather slow to appreciate.

We learn, in the first place, that a task which had "previously appeared to be hopeless"—the preparation of a national *Pharmacopæia*—has been accomplished, and in a manner which has elicited "unqualified approval". It is added, also, that such has been the success of this work, that "it has already repaid its expenses"; under which head are, we trust, included those of the experimental first edition, of which no mention is made.

Next we have the formation of an official *Register* of duly qualified medical practitioners—a task which has been satisfactorily accomplished. In connexion with this, the Council has, we are informed, exercised the judicial power conferred upon it in not a few instances, having erased from the *Register* the names of twenty-two persons convicted of infamous conduct.

These two definite achievements having been recorded, the document next adverts to the larger and much more difficult tasks in which the Council has as yet only partially succeeded, or for which it is only preparing its way. "By far the most important and difficult of the duties imposed on the Council were those connected with the education of students who should in future claim to be placed on the *Register* as duly qualified practitioners." A great improvement in the preliminary education of medical men has, the Council thinks, been effected during the last eleven years, and chiefly as the result of its own exertions. In insisting on this point, we are not sure that there is not some little undue depreciation of the standard which previously obtained. The expression, "The profession was in danger of being overrun with illiterate and incompetent men," strikes us as rather strong; whilst, however, we freely acknowledge that the standard has been raised.

In its endeavours to harmonise the regulations of the various licensing bodies, and to issue recommendations as to a minimum course of study, the Council laments the great difficulties it has had to encounter, partly from its own constitution, and partly from the very limited powers which it has possessed.

On the subject of improved examinations, we have the following statement—a little, we fear, too warmly coloured.

"A most important improvement has been effected by the very general introduction of clinical examinations. Certain of the licensing bodies had greater facilities than others for applying this most valuable, not to say essential, test of competency; and it has, therefore, been

earlier adopted and more fully carried out by some than by others. The recommendation of the Council on this head has, however, been generally accepted; and at the present time there are very few of the examining boards that have not adopted it."

In the amalgamation of different examining boards, the Council has clearly been desirous to effect more than it has been able.

"In the opinion of many members of the Council, the Medical Act is deficient in not granting compulsory power to effect such amalgamations of examining boards as may seem desirable. The Council have already resolved to seek for power in any amending Medical Act to refuse registration to any candidate who has not been sufficiently examined both in medicine and surgery. It may, however, be questioned, whether even this power would prove sufficient for the end in view, and whether it would not be desirable to grant to the Council power of enforcing amalgamations on boards, in the event of recommendations of voluntary amalgamations not proving sufficient."

The same defect in power—the result, in this instance, of the blunders of those who drew up the Act—has been encountered in reference to the prosecution of unqualified persons.

"Very soon after the passing of the Act, and the publication of the official Register, it became evident that, to a great extent, the Act would fail to effect one important object at which it aimed; viz., to prevent unqualified persons from imposing on the public by assuming medical titles, and practising under them with impunity: and, in fact, Section XL, which enacted, or was intended to enact, penalties for unqualified persons practising under false medical titles, has been found to have been drawn up so badly, that legal prosecutions for offences against this portion of the Act have more frequently failed than not. The public has thus been deceived, and the profession discredited and dissatisfied. Loud and continued complaints have thus arisen; not only against the act, but also against the Council, for failure in remedying so great a grievance. As the Section now stands, any knave or impostor may, whilst assuming any medical title that he pleases, elude the penalty of the Act, as was done by one clever fellow, by simply adding to his assumed title the words "*not registered under the Medical Act.*" The clause suggested by the Council in lieu of Section XL, will be found in the Draft Amending Bill, submitted for consideration of the Government. Some such clause, in lieu of the present ineffective one, appears to be absolutely necessary."

We hope that the document from which we have made the above extracts will shortly be distributed widely. It contains proof of clear appreciation of the directions in which reforms are chiefly needed, and also of the special difficulties which will attend their realisation. We are sanguine that large improvements will very soon be achieved; and, when they do come, a very considerable debt of gratitude will certainly be due to the Medical Council for having prepared the way.

SETONS IN OPHTHALMIC PRACTICE.

THE use or the non-use of counter-irritation in the treatment of diseases of the eye is a matter in itself of considerable importance. The diseases for which they are recommended are very common, very troublesome, and often attended by permanent damage to an invaluable organ. Some authorities assert that the employment of blisters for various forms of temporary and acute inflammation of the eye is of the utmost use; and that for the ulcers of the cornea, attended by intolerance of light, so often seen in "strumous children", setons exceed in efficiency all the rest of the measures of treatment put together; whilst others denounce both setons and blisters as useless, and even barbarous. Meanwhile, our hospitals are thronged with poor children with their eyelids closed for months together, in whom the risk of a permanent corneal opacity is very considerable.

We select this moot point in ophthalmic practice for discussion, the more willingly, because it seems a definite one upon which an opinion might easily be formed, which should be beyond the reach of further doubt; and also for the additional reason that the decision, when arrived at, will be applicable to other departments of practice as well as to that of ophthalmic surgery.

It is not our intention to attempt to settle this question. We wish rather to present it to our readers for their consideration, supplying to them such data as we have been able to collect for its elucidation.

We propose for the present to confine our attention to setons. If it can be proved that permanent counter-irritation does good in chronic inflammation, we have some reason for believing that acute and recent forms of the same kind of morbid action may be benefited by transitory measures of the same character.

The first part of our task will be to place in juxtaposition the opinions of various authors of acknowledged authority; after which we shall try to explain some of the reasons for the vast differences in opinion on a simple and very practical question, and endeavour to remove certain hindrances to its satisfactory discussion. In the meantime we solicit the co-operation of our readers, that the verdict given may be to some extent that of the English profession.

It will be seen that there are several points for debate.

1. Are setons useful in any cases of eye-disease?
2. If useful, then in what cases?
3. Ought they to be reserved until the case has shown itself intractable under other so-called "milder methods", and when much damage has been done? or ought they to be used early, so as to stop the disease in the outset?
4. Is the place in which the seton is put of much consequence? Does it act as well in the shoulder as in the temple? Is the hairy scalp just behind the temple as good a place as the temple itself?
5. Do any dangers or inconveniences often attend it? Is it "a severe measure"?
6. Are there certain forms of inflammation of the cornea of which it may be predicated that no benefit will be obtained from setons, and in which, therefore, their use is only like to bring discredit on the practice? If there be such, what are they?
7. How long should the seton be kept in?
8. If both eyes be affected, is it needful to use two setons?

At the Eye-hospitals, as that of Moorfields, of course the widest field is offered for the investigation of such a question. At this Hospital, setons have, we believe, varied much in their degree of reputation. Some of its original staff were very fond of their use; and there are still those who well understand the expression "Scott's marks", which was in use in reference to the scars on the temple, which so often demonstrated the line of practice which that surgeon employed. Very probably in connection with these permanent and disfiguring scars the practice fell into comparative disuse; but it has always had a warm advocate in Mr. Critchett (a pupil of Scott), who, however, introduced an important improvement in recommending that the threads should be put further back, so as to avoid a visible scar. During the last ten years the practice has gained converts, and now counts numerous and warm advocates.

We may add that there is one easy method of testing the merits of the seton, which seems not to have claimed much attention. It is that of selecting for trial cases in which both eyes are affected, and then putting the seton on one side only and observing the result. We cannot but think that a tabular statement of five-and-twenty cases, carefully tried in this way, if possible under the observation of an umpire, who should authenticate the notes, would supply a kind of evidence which would be satisfactory to most minds.

An Anthropological Society for Austria is being formed in Vienna. Professor Carl Vogt is the originator.

DR. PAUL BERT has been nominated Professor of Physiology in the Faculty of Sciences in Paris.

THE last number of the *Quarterly Journal of Cutaneous Medicine and Diseases of the Skin* will appear on January 1st.

DR. S. COULL MACKENZIE has been appointed Professor of Hygiene in the Calcutta Medical College.

THE amount of money required for the completion of the Jews' hospital in Vienna being incomplete, Baron Rothschild, who has already contributed a large donation, has announced his intention of making up the deficiency.

WE are glad to see that the Sanitary Committee of the Islington Vestry are taking steps to prosecute cabdrivers who convey fever patients in public cabs, a practice which is shamefully prevalent in London.

THE Poor-law Board have requested the Camberwell Guardians to erect a dispensary near their workhouse. Nearly one hundred cases of relapsing fever have occurred in the parish of Camberwell.

DR. STEVENSON, Medical Officer of Health for St. Pancras, states, in a recent report that, in one house in Little Drummond Street, Euston Square, there was the body of child who had died of scarlet fever, another ill of the same disease, and four healthy adults, all together in one room.

THE following fine piece of composition, which appeared on Thursday in the advertising columns of the *Times*, throws into the shade, for impertinence, even the advertisements of some of our special hospitals: "Any gentleman looking out for a worthy object to bestow a thousand pounds will find it in the Girls' Orphan House, Lower Tottenham."

THE Correctional Tribunal at Lyons lately condemned a woman named Pradour to fifteen days' imprisonment and a fine of 25 *francs* for the illegal practice of medicine and for homicide by carelessness. The woman and the prosecution both appealed; and the result has been, that she is sentenced to a month's imprisonment and a fine of 50 *francs* for the homicide, together with a fine of 15 *francs* for practising medicine illegally.

THE mortality in London last week was again above the average. The number of deaths registered was 1,759, which is 151 above the estimated number, and 54 more than in the preceding week. The deaths from scarlet fever were 209, which is 36 less than the previous week. Three deaths from relapsing fever are reported. The mean temperature was 39.2 deg.

POISONING AN INFANT WITH OPIUM.

A MAN has been charged at Liverpool with administering opium to his infant child, and causing its death. He was in the habit of eating opium himself; and, as the baby was cross, he gave a little to quiet it. The child was seized with convulsions and died the following morning. An inquest is to be held.

THE ARGENTEUIL PRIZE.

THE Academy of Medicine of Paris, on the recommendation of M. Broca, have awarded the Argenteuil Prize (for improvements in the treatment of stricture) as follows: 5,000 *francs* to M. Corradi of Florence, 2,000 *francs* to MM. Mallez and Tripier, and 1,000 *francs* to M. Reliquet.

THE AMERICAN NAVAL SURGEONS.

A BOARD of officers has been formed for the purpose of inquiring into the differences between the line and the staff officers—the latter including the medical officers. The Board is under the presidency of Commander M. Smith, and consists, besides, of two Commanders, two Captains, a Naval Constructor, a Paymaster, a Chief Engineer, and two Surgeons, W. Wood (Chief of the Bureau of Medicine and Surgery) and N. Pinkney.

ANTHROPOLOGY.

SIR GEORGE GREY has added to our knowledge of prehistoric human races by his description of numerous stone weapons and implements found in the Cape Colony. None of the existing races have used stone implements since the colony was founded, either iron or bone being the materials used. Dr. Leitner has lately narrated his experience of the natives of the basin of the Upper Indus; he finds them, for the most part, friendly, instead of, as was supposed, of cannibal habits. A knowledge of the tribes beyond our Indian frontiers is of the utmost importance to the Indian Government. Dr. Leitner came across a remarkable Buddhist carving, representing what would be taken for the entry into Jerusalem, were it not that there is no reason to think that the facts of Christian history have ever reached this region.

THE THAMES AT BARKING.

MR. RAWLINSON's report on the Thames at Barking has just appeared. He finds that the town of Barking is without local governing powers, is unsewered, contains many cesspools and a tainted subsoil, and has a defective water-supply; and that, therefore, the allegation that deterioration of health has resulted from the metropolitan sewage works, cannot be established.

A NURSES' INSTITUTE IN PARIS.

THE Society for the Protection of Children has established, in the Rue Magnan in Paris, an office for providing families with nurses, recommended and chosen, from personal knowledge, by the inspecting physicians. Particulars regarding the nurses are kept at the office; and they are not required to come to Paris until an engagement has been made. No expense is incurred on either side.

SPIRITED CONDUCT OF A POOR-LAW MEDICAL OFFICER.

DR. HARPER, having called the attention of the guardians of Holbeach parish to the existence of eight cases of contagious fever in certain cottages on the "Common", received the laconic reply, that "the matter was out of their jurisdiction." Nothing daunted, Dr. Harper notified that the fever continued to spread; that there were then sixteen cases within a small circle of cottages; that the people were alarmed, and the sick, in the absence of nurses, had to wait on themselves. He also said that he should consider it his duty to demand a public inquiry, in the event of any deaths taking place. The Board then became impressed with the urgency of the case, and ordered requisite proceedings to be taken.

HIGHGATE POOR-LAW INFIRMARY.

WE learn that the works in connexion with the new Infirmary at Highgate are being pushed on with great rapidity; and that it is probable that, in the course of about a fortnight, one hundred and eighty beds will, in conformity with the order of the Poor-law Board, be fitted up for the reception of the sick poor of St. Pancras. Mr. D. H. Dyte, the present medical officer of the Jewish Board of Guardians, has been appointed resident medical officer for three months to this part of the Infirmary. We trust that, under the *régime* of this gentleman, we shall cease to hear of such scandals in relation to St. Pancras as those with which coroners' inquests have of late rendered us so painfully familiar. Mr. Dyte was formerly house-surgeon at the London Hospital. Two permanent appointments will, we believe, be made when the Hospital is completed.

SUDDEN DEATH FROM A STAB IN THE EYE, AND WOUND OF THE CAROTID ARTERY.

THE following unique case is recorded in the *Canada Medical Journal* for November. A man of colour, named Richards, was passing along the streets of Toronto when he was attacked by one Kavanagh. In retaliation, he drew from his pocket a pair of scissors (he was a tailor) and thrust them in Kavanagh's face. The latter fell to the ground and immediately expired. A careful *post mortem* examination revealed the fact that one blade of the scissors had passed in the right side of the left eyeball into the orbit, and then through the left side of the ethmoid bone, the orbital plate of the frontal bone, and the body of the sphenoid, into the right middle lobe of the brain. In its course, it had divided the cavernous sinus and carotid artery, and a large quantity of blood had been extravasated under the base of the brain.

MR. TORRENS ON HOSPITALS.

MR. W. M. TORRENS, M.P. for Finsbury, delivered a lecture last week in Bloomsbury on "Overcrowding in Hospitals and Homes." He discussed the question of the best mode of dealing with the sick poor of London, whether by relief and medical advice at home, or by sending them to hospitals or infirmaries. He considered the great expense consequent on the building of the Highgate Infirmary as much to be regretted. He thought the plan of joining several parishes together

for the relief of the sick inadvisable; one reason being the long distance the patients would have to be sent to the Hospital, and the probable loss of the opportunity of dealing with any disease at its first onset. He advocated the establishment of numerous small hospitals more on the cottage plan. He quoted various medical authorities in favour of the isolation of all cases of contagious disease, and insisted on the difficulty of changing large masses of polluted air. He quoted the experience gained in the Sadowa campaign of the greater number of deaths among the wounded taken to the towns than among those treated in tents on the field. He thought the more temporary and less costly the building the better, as there would be more chance of its being pulled down after it had served its term. In conclusion, he strongly advocated treating the poor, as far as possible, at their own homes, and ridiculed the fear which many people have of nursing the sick. He thought that there was no school like the sick room for educating the heart, and that visits to the sick poor were better than ostentatious subscriptions.

THE MASTERSHIP OF THE MINT.

THIS office is not to be filled up. The present Deputy-Master, Mr. Fremantle, will preside over the establishment, which will be attached to the Treasury.

ST. BARTHOLOMEW'S HOSPITAL.

THE ophthalmic wards in the course of erection are designed for the accommodation of thirteen male and thirteen female patients. It is intended that the wards and adjacent rooms shall be completely fitted up with appliances for the treatment and teaching of eye-diseases.

A TIMELY WARNING.

AT a meeting of the Medical Society of Victoria on October 7th, Dr. Richardson read a paper on the pollution of the Yan Yean reservoir. He had found that this reservoir, by which the inhabitants of Melbourne are supplied with water, receives the sewage of the township of Whittlesea, a place with a population of about 700 or 800 persons; and he urged the necessity of immediate action. At present, he said, the amount of organic impurity in the water may, according to analysis, be small; but the evil, now easily remediable, may be quite otherwise in another generation, when vested rights shall have to be regarded, when the population of Melbourne and Whittlesea may have doubled, and when the population may be decimated by an epidemic brought on by neglect of sanitary laws. After discussion, it was determined to consider the matter at a special meeting of the Society with the view of calling the attention of the Government to the subject.

RAILWAY CONCUSSION AS A CAUSE OF CATARACT.

THE doctrine of reflex disturbances of nutrition is often illustrated by the opinions given in our law courts; but it appeared to be pushed rather to an extreme when, the other day, it was made to account for opacity of the lens. That a patient could have double incipient cataract as a direct consequence of spinal concussion, is, perhaps, somewhat improbable as far as our knowledge of causes has yet taken us. If any disturbance of the nutrition of the eyeball should result in such connexion, the opacity of the lens would probably be a remote part of it, and by no means the single lesion. It is improbable that in such eyes any operation would be feasible. Possibly, the report of the trial which we have seen is not accurate; but, if it be so, we certainly think that the medical witnesses went beyond scientific warrant, in supporting the patient's belief that the cataracts were the consequences of the accident, and in supplying the jury with data as to the expense of their removal.

CONTAGION OF THE FOOT-AND-MOUTH DISEASE.

THE recent outbreak of the foot-and-mouth disease at the Agricultural Hall would appear, if report speaks truly, to be a good instance of the facility of contagion in this disease. The only opportunity for the communication of the disease occurred at Maiden Lane Station. The trucks containing the animals coming from Birmingham were for a time in some proximity with some foreign animals from Thames

Haven. The latter were simply let out of their pens and driven past the trucks containing the Birmingham beasts. It is also said, however, that the meal-bags belonging to the latter were placed on the ground over which the foreign animals had passed, and may thus have spread the disease. Possibly the bags were even taken into the Agricultural Hall afterwards. However, the contact between the two lots of beasts must have been remarkably slight.

ADMINISTRATION OF CHLOROFORM.

WE are indebted to several valued correspondents for letters and suggestions on this important subject, and shall be glad to receive others. We purpose to reprint, as a detached slip, the memoranda given a fortnight ago, and to distribute it with our issue for January 1st. A few additions and slight modifications will be made, and we shall still supply copies of it to those members who have applied for them. To those who have favoured us with suggestions, we may remark that a main object in compiling the memoranda has been to keep them as simple and brief as possible. By this means, we have hoped to prevent that distraction of attention which is apt to occur in the moment of danger. Too many expedients are sometimes almost as bad as none. We have mentioned what are, we believe, the most reliable, and have scrupulously omitted others which, although possibly good, would, we think, be confusing, more especially to those of but little experience, for whom principally our memoranda are designed.

A DISGRACEFUL ALLIANCE.

A WOMAN named Dupré de Saint-Hubert was, on the 13th of last month, brought before the Correctional Tribunal of Paris, charged with the illegal practice of medicine; and a Dr. Godefroy was charged with being her accomplice. The woman, who called herself a "*somnambule-medium*", was prosecuted at the instance of a Madame Duchêne, whose son had died after being treated by her. According to Dr. Bergeron, who made the *post mortem* examination, the deceased had suffered from scrofula, and had been treated by Madame Dupré with mercury, which, though it did not directly cause death, reduced the patient to a state which prevented him from taking food and medicine by which his life might have been prolonged. In the interrogation of Madame Dupré, it came out that she had already been convicted of illegal practice in the country. She had been told that, if she brought a medical man with her, she would be able to practise in Paris; and she accordingly came thither, having as her satellite Dr. Godefroy, whose function was to assist at her consultations and revise and sign her prescriptions. Dr. Godefroy, being questioned, admitted the charge, and expressed his confidence in the professional skill of Madame Dupré; for which he was rebuked by the President of the Tribunal, who expressed his regret that Godefroy had so far forgotten the laws of the profession to which he belonged, as to associate himself with a charlatan for the purpose of signing her prescriptions. The woman was condemned to a month's imprisonment for the injuries done to the young man Duchêne, a fine of 15 francs for the illegal practice of medicine, and one of 25 francs for practising pharmacy illegally. Godefroy was acquitted, on the ground that the penal code did not provide punishment for complicity in such cases.

THE BOSTON CITY HOSPITAL.

THIS is one of the most recent pavilion hospitals in America. It was begun during the late war, and is not yet completed, as one of the four blocks for patients is not yet built. A peculiarity of the construction is, that the arcades which connect the centre building and the pavilions form curved lines. The centre building has a high elevation, being crowned with a cupola; and under the roof of the latter is an amphitheatre. Two pavilions have, or are to have, two floors over a basement; and the two others, three: the former possess verandahs. There are large wards with the usual appendages, and small ones; the upper floors of two blocks being divided into small rooms. The wards are heated by steam-pipes; and roomy shafts, containing also steam-pipes, are used for the extraction of foul air. The daily average of in-patients

is 172. Last year, 2,319 in-patients were admitted, and 8,794 out-patients attended. They are divided into medical out-patients, surgical, ophthalmic, and cutaneous. For each department, physicians or surgeons are appointed. There are also visiting-physicians, who attend to patients at their homes; and consulting-physicians. The number of medical officers, including the house-surgeons and a pathologist, is thirty-one. The hospital is under a committee of trustees, nine in number, and a medical superintendent who lives in the hospital. The medical men select those who are to be admitted; but there is a small number of paying patients. The expenses are about £18,000 per year. There were 49 cases of typhoid fever admitted in 1868, of whom 16 per cent. died. Of 99 cases of tuberculous lung-disease, 11 per cent. only succumbed. The statistics of mortality after amputations during the year were as follows. *Shoulder-joint*: 5 cases (males); 4 primary—2 deaths, 1 recovery, 1 in hospital. *Arm*: 5 cases (4 males and 1 female); 3 primary and 2 secondary—all recoveries. *Forearm*: 5 cases (3 males and 2 females); 2 primary and 3 for disease—all recoveries. *Hip-joint*: 1 case (male); primary—died of shock. *Thigh*: 7 cases (males); 4 primary—1 recovery, and three deaths; 1 secondary—died; 2 for disease—1 recovery, 1 died of shock. *Leg*: 5 cases (males); 3 primary—1 recovery, and 2 deaths; 1 secondary—in hospital; 1 for disease—recovered.

THE MASSACHUSETTS BOARD OF HEALTH.

THIS Board, the formation of which we noticed some months ago, has issued to the several Boards of Health in the cities and towns of the State of Massachusetts, a circular calling for cooperation. In it they say: "In entering upon our duties, which are rather advisory than executive; we desire to establish such communication with the local Boards having this important subject in charge, that all may work together for the common advantage of the people, for the prevention of disease, and for the prolongation of life. We believe that all citizens have an inherent right to the enjoyment of pure and uncontaminated air, and water, and soil; that this right should be regarded as belonging to the whole community; and that no one should be allowed to trespass upon it by his carelessness, or his avarice, or even by his ignorance. This right is in a great measure recognised by the State, as appears by the General Statutes....It has been doubted whether the public mind is sufficiently aware of the dangerous elements around us; whether the connexion between filth and disease is as yet proved to the public satisfaction; whether the people are convinced that undrained land is unwholesome to live upon. All these doubts of the public intelligence have impeded the operation of our laws. It is thought also that local and private interests have often been so strong as to paralyse the action of the health-authorities. But we hope and believe that a better time is coming; and we confidently look to you to put in force the powers which the laws have placed in your hands." They call attention to the chapters in the General Statutes relating to the abatement of nuisances, to vaccination, to contagion, and to offensive trades; to the sale of milk; to the sale of unwholesome provisions; the corruption of springs, wells, reservoirs, or aqueducts; the sale of dangerous drugs, and the adulteration of drugs; etc. A system of registration of deaths has also been organised, by means of blank forms supplied to the town-clerks of the larger places in the State, and prepared for the entry of death from some of the epidemic and other principal diseases.

REMOVAL OF THE UTERUS AND ITS APPENDAGES.

At the meeting of the Imperial Academy of Medicine in Paris on the 7th instant, M. Péan presented a woman on whom he had successfully performed a very formidable operation. The patient had a large multilocular ovarian cyst, for the removal of which, M. Péan proceeded to perform ovariectomy; and, after having removed the greater parts of the cyst piecemeal, he found that it was impossible to remove the part which was adherent on the pelvis and to the uterus. The adhesions broken through in the course of the operation were very vascular, and there was much hæmorrhage, which was arrested by the actual cautery. M. Péan found, further, that there was a very large fibroid tumour of

the ovary on the other side; and the uterus was hypertrophied and soft. He therefore removed the uterus by passing into the vagina, from the abdomen, a double thread, one ligature of which was made to embrace the ovarian cyst, and the other (on the right side) the uterus with the corresponding portion of the vagina, and the ovary and Fallopian tube of that side. The ligatures having been tied, M. Péan cut off all above them. The wound in the vagina united completely; and the parts to which the ligatures were applied escaped by sloughing through the abdominal walls. When the woman was shown to the Academy, the abdominal wound had healed, and she was quite well. In making the communication, M. Péan stated that he now had performed ovariectomy in ten cases, seven of which had been successful. Two of the fatal cases occurred in aged subjects.

PROFESSOR CZERMAK.

PROFESSOR CZERMAK is in town for a few days; and we are pleased to be able to state that, in spite of the gloomy accounts we have had from time to time of his state of health, he appears perfectly well. The professor attended Dr. Morell Mackenzie's *clinique* at the Hospital for Diseases of the Throat on Thursday last, and demonstrated several cases of great interest before a large number of the medical profession. Amongst the cases were examples of polypoid growths on the vocal cords, syphilitic ulceration, and paralysis; one with total atrophy of the muscles of the left side, and a series which well showed the different phases of laryngeal phthisis. The demonstrations were made with the aid of the oxy-hydrogen light, which enables as many as five or six spectators to witness a case at the same time.

SCOTLAND.

PRESENTATION TO DR. BENJAMIN BELL.

AT a meeting, on Tuesday, of the blind connected with the Asylum in Nicholson Street, Edinburgh, Dr. Benjamin Bell was presented by the inmates with a handsome gold watch, for the attention which Dr. Bell had invariably shown the blind during the thirty years he had acted as surgeon to the institution.

PRESENT OF ENGRAVINGS TO THE EDINBURGH HOSPITALS.

MR. H. GRAVES, of Pall Mall, London, has presented 100 engravings to the following institutions:—Royal Infirmary, Convalescent Home, Chalmers' Hospital, and the Royal Hospital for Sick Children. Some of these are copies of great excellence and value, comprising studies after Sir Edwin Landseer, Faed, Rosa Bonheur, Edwards, Osborne, Herbert, Frank Stone, and others. The only conditions attached to these handsome presentations were—1. That the directors should frame them; and, 2. That they would promise to hang them on the walls of the wards in the various institutions.

NEW EPIDEMIC HOSPITAL IN LEITH.

IT is proposed to furnish a "Cholera Hospital" in Leith to be available in the event of any new epidemic breaking out in the town. The first step has, of course, been to look out for some dilapidated old building for the purpose; and the Town Council have fortunately succeeded in discovering the old Ragged School, which appears to have taken the fancy of some members of the Council, provided they can get it cheap. The matter has been referred to the Public Health Committee, which body will, if one may judge by its name, recommend the erection of a proper building.

THE SYME TESTIMONIAL.

ALREADY £1200 have been subscribed towards this testimonial, a sum which, at this early period, affords every evidence that the total amount originally suggested by the promoters of the Fellowship will be speedily obtained. We have been asked whether the Fellowship will be restricted to graduates of the University. This appears very evident, as it has been invariably understood, and indeed stated in all the circulars, that the object is "to perpetuate Mr. Syme's name in connection with the Chair of Clinical Surgery, by founding a Fellowship in the *Edinburgh University*, to be called the Syme Surgical Fellowship"; and we have authority further to state, that the Executive Committee make it one of the conditions under which the Fellowship is to be competed for, that candidates shall be Masters in Surgery of the University of Edinburgh.

THE ORIGIN OF LIFE.

VII.

Now, with regard to the first of the two alternatives to which we have found ourselves reduced in order to account for the presence of monads and bacteria in organic solutions—in spite of these having been boiled, and the air to which they have been exposed having been calcined—we can only say that, so far as the monads and bacteria themselves are concerned, it has been abundantly proved that they are unable to resist the influence of a boiling solution; that they are, in fact, completely destroyed in fluids by a temperature many degrees short of the boiling-point. How, then, is it with their germs? In the first place, it must not be forgotten that we have no direct evidence whatever of the existence of these germs. They are invisible to our highest microscopic powers; and we only suppose the case of their possible existence, in order to give the widest scope to our arguments. But, if the germs do exist, and are completely invisible, we can, of course, bring no direct evidence to bear upon their power of resisting high temperatures; and we are thrown back, necessarily, upon analogical considerations. These, however, appeal to us in no doubtful manner. It is true that the spores and germs of plants and animals are generally found to be capable of resisting a somewhat higher temperature than the parent organisms; and, taking living beings as little removed from the monads and bacteria as possible, we have evidence from M. Pouchet and others that, whereas no ciliated infusorium can resist the influence of a solution raised to 55 deg. C., the eggs of *Paramecia* and *Vorticellæ* can sometimes resist a temperature of 70 deg. C., though never one of 75 deg. C. It has been shown also, by M. Victor Meunier, that monads and bacteria are killed by about the same temperature as that which proves fatal to the higher ciliated organisms. Analogy, therefore, would not leave us much reason for expecting that these hypothetical germs of monads and bacteria could resist a fluid temperature anything like so high as that of the boiling-point, which almost immediately disorganises all those germs and spores of the lower organisms that are appreciable to us. But this argument, of course, though it is the only one open to us, can only be taken for what it is worth. We have been taken beyond the reach of experience, and are launched into the region of hypothesis, where we can be guided by the light of pure reason alone. Hence either monads and bacteria are propagated by germs which are completely invisible—by germs also that are produced in a manner completely unknown to us, and which are, moreover, capable of resisting temperatures that prove fatal to every other known organism and germ; or else the doctrine of the possibility of a new evolution of life out of solutions containing dead organic matter must be considered to have been proved. Further than this we cannot follow the question by direct experiment and observation, though there are other indirect considerations which it is impossible for us to ignore. And it cannot, we think, be denied that, whilst by the former method the question has been reduced to its simplest issues, so that we have to select one of two alternatives, these alternatives are by no means equally balanced as regards the amount of positive evidence in support of them. Now, also, we shall find that this indirect evidence is almost entirely in favour of the view that was previously most supported by direct and positive evidence.

The heterogenists affirm—and the panspermatists do not attempt to deny their statements—that the kinds and species of organisms met with are subject to the most marked variation under the influence of even the smallest change of conditions. Of course, this harmonises thoroughly with what we might expect if the evolution hypothesis is a correct one; and, if it is absolutely true and correct, it would be the most striking verification possible of the doctrines of Darwin and others as to the modifications that so-called species of animals may undergo when subjected to the influence of changes in their environment—changes which entail a different incidence of forces upon the organism. It was pointed out by Treviranus, as we have before stated, that the kind of infusoria met with in solutions varied with the nature of the solutions themselves. This has since been abundantly confirmed by Pouchet and others, who have shown that different results were obtained by varying the organic substances whilst they have been exposed to the same air and dissolved in the same water. Even the amount of organic matter in the solution will influence not only the rapidity of appearance, but also the kind of organisms which reveal themselves; and the same may be said, when solid portions of organic matter are immersed in solutions, concerning the influence of immersions at various

depths. The nearer the substance is maintained to the surface of the fluid, the more rapidly are living beings met with, and the higher are they in the scale of organisation. The boiling or not of the organic solution, also, as we have seen, has a very great influence over the kind of organisms produced, and also over their rapidity of appearance. In a similar way—though to a less extent—the kind and amount of air acting upon the solutions, the amount of heat and electricity, the kind and degree of light, and the presence or absence of saline materials of different kinds in the solutions, appear to be all more or less influential factors, variations of which exercise a most undoubted influence over the kinds of organisms that are to be met with in different cases. Many of these differences are very striking. For instance, M. Pouchet divides into two equal portions a filtered organic solution favourable for the appearance of ciliated infusoria, placing the one portion in a tall narrow glass, and the other in a broad flat receiver, so that the former may easily stand in its centre. He then encloses them both under a bell-jar, dipping into water; so that the deep solution and the shallow solution are both exposed to the same air under the one bell-glass. Then, he says, that, at the end of four or five days, with a mean temperature of 20 deg. C., he finds in the tall glass a thick proligerous membrane, and an abundance of ciliated infusoria; whilst the shallow vessel presents only an exceedingly thin and scarcely apparent proligerous membrane, and not a single ciliated infusorium. When the conditions were reversed—when the quantity of fluid was much diminished in the tall glass, and very much increased in the shallower one—so as to reverse the relative depths of the solutions in the differently shaped vessels, then the ciliated infusoria were still found with the deeper solution and the thicker pellicle, and the monads and bacteria only where the solution was shallow and the pellicle scanty. Remembering that the existence of either ciliated infusoria, or of the germs of these, to any notable extent, in the atmosphere, is little better than a theory, which its advocates have failed to establish upon anything like a satisfactory basis of experimental proof; and remembering, on the other hand, the positive statements which have been made by the heterogenists, founded upon direct observation, as to the mode of evolution of the ciliated infusoria out of altered and aggregated bacteria and monads,—it must be evident to all that the above mentioned experiments seem inexplicable if we fall back upon the atmosphere and the germ-theory, though they are perfectly consistent with the doctrine of evolution. Both solutions are exposed to the same air, and therefore to the same possible source of germs; yet in the solution of the one vessel, after the lapse of a few days, ciliated infusoria are found; in the other, there are none. Let the conditions of depth of the solutions in the two vessels be reversed, and then again the ciliated infusoria are met with in the deep solution, whilst not a single one appears in that which is shallow. How, also, can we account, on the germ-hypothesis, for the constant and admitted succession of life which appears always in solutions exposed to a limited amount of air, when it is also admitted on all sides that infusoria can live in almost any simple organic solution, if they once obtain entry therein—nay, that they can live even for days in pure distilled water? Yet, in organic solutions undergoing putrefaction, a definite order is always observable. First appear the monads and bacteria; then the vibrios; then the lowest forms of the microscopic fungi, and the sarcodal amœbæ or jelly-specks; whilst, lastly, these are followed, when the conditions are favourable, by the various forms of ciliated infusoria.

We feel bound to confess that, taking all things into consideration, there is such a mass of positive and presumptive evidence in favour of the possibility of a new evolution of life taking place now in our own day, as to fully entitle us to believe that such a thing may be—nay, that it probably does take place. The mass of evidence is so overwhelming, that even Professor Owen, whom none would accuse of previous leanings in this direction, has lately (*Anatomy of the Vertebrates*, vol. iii, p. 817) boldly announced his assent to the doctrines of heterogeny. He says: “It seems to me, then, more consistent with the present phase of dynamical science and the observed gradations of living things, to suppose that sarcode or the protogenal jelly-speck should be formable through concurrence of conditions favouring such combination of their elements, and involving a change of force productive of their contractions and extensions, molecular attractions and repulsions; and that sarcode has so become, from the period when its irrelative repetitions resulted in the vast indefinite masses of ‘eozoon.’”

And, if new forms of life can be called into being now in our own days, we are naturally led to the question of their mode of origin in past times, and of the original genesis, in fact, of organic matter. For, if living forms can really be evolved in present times out of dead organic matter, it seems, as Dr. Child has already said, to be “an almost irresistible conclusion, that there must have been a stage in the development of the universe when the earliest forms of organic life were evolved from some special collocation of inorganic elements by the continued operation of

the laws already in action." What Herbert Spencer's speculations on this subject are, may be seen in the Appendix which he has published to the first volume of his *Principles of Biology*; and we cannot help feeling that such speculations do acquire an additional interest and warranty, if we are to believe that the evolution of living things out of dead organic matter is taking place now, during every moment, all over our globe; that the mutations of force and the mutations of matter constitute a ceaseless and ever varying cycle, where Death intervenes, not as a reality in the sense of a negation, but as a mere change of state—as a link in the cycle of mutations, rather than as a severance of the chain.

What ennobling interest, then, may we feel in the study of these great doctrines of evolution! How shall we adequately express the feelings of awe and reverence with which the mysteries of natural phenomena inspire us! Puny workers as we are and have been—narrow-visioned as we must be, seeing the limits which our senses impose upon the bounds of our knowledge—how shall we ever hope to fathom the mysteries of existence and the possibilities of being—the secrets of the universe? Yet have we not cause to be thankful to that small army of indefatigable workers, the men of science—the men whose only aim is the elucidation of truth—whose only wish is to obtain, so far as may be, some feeble glimpses into the actual nature and course of physical phenomena; coming to their investigations, as far as possible, with minds unshackled by foregone conclusions—untrammelled by considerations as to the ulterior effects producible by the enunciation of certain doctrines, so long as such doctrines form parts of a great whole—the immutable truth? Are they not those who with untiring energy strive to make known to their fellow-men some of the laws or sequences observable in things around them—who do their best to widen the horizon of knowledge—who place us, as it were, upon successively higher and higher pinnacles, from which we may survey, as well as our limited senses will permit, those modes of being in our own universe of which we, as human beings, are capable of taking cognisance? And for how much are we indebted to them already! What grandeur and unity of conception is already arising as a result of their united labours!—what broad generalisations already seem possible! We know what the physicists and chemists have had to say concerning the "correlation of the forces"; how they all may have emanated from, and are convertible into, motion as the primary mode of force. We know also, from the doctrine of the "correlation of the physical and the vital forces", that most physiologists now maintain that many of the phenomena taking place in living bodies are purely physical processes; whilst others, still utterly obscure in nature, may be produced by modes of force having a physical origin, though transformed in kind and manifestation by their presence in, and action through, an organism. For, just as the ultimate constituents of matter must pass into entirely new modes of collocation to constitute an organic substance, so must force undergo new and mysterious modifications, that the union of the two may constitute a living organism. Having heard thus much concerning the correlation of force, we may be anxious to know what is the dictum of science and philosophy as to its origin—as to the source whence comes the Power acting in our own planet; and to this, reply may be made in the words of Herbert Spencer. He says (*First Principles*, p. 491): "The genesis of sensible motion by insensible motion, and of insensible motion by sensible motion, as well as the like reciprocal production of those forms of insensible motion which constitute light, heat, electricity, magnetism, and chemical action, was shown to be a now accepted doctrine, that involves certain corollaries respecting the processes every where going on around us. Setting out with the probability that the insensible motion radiated by the sun is the transformed product of the sensible motion lost during the progressive concentration of the solar mass, we saw that by this insensible motion are in turn produced the various kinds of sensible motion on the earth's surface. Besides the inorganic terrestrial changes, we found that the changes constituting organic life are thus originated." Such is the general conclusion arrived at; but we must refer our readers to the work itself for all the steps of the argument from which it is deduced.

It has often been said already, and it will probably be said again, that the views to which we have been referring are "materialistic", and the word itself, though so often and so perversely misapplied, does still carry with it an implication which is unfounded, and an odium most obnoxious to many. But before such epithet is again applied in an opprobrious sense, let him who would make use of it ponder well the full meaning of the term; let him think how it bears upon our present knowledge of phenomena, and how our only means of knowing these bear upon the term. And to assist him in his reflection, we would recommend to his notice these words of our great exponent of the doctrines of evolution, from whom we have previously quoted. Such doctrines, he says, "are no more materialistic than they are spiritual-

istic; and no more spiritualistic than they are materialistic. Any argument which is apparently furnished to either hypothesis, is neutralised by as good an argument furnished to the other. The materialist, seeing it to be a necessary deduction from the law of correlation, that what exists in consciousness, under the form of feeling, is transformable into an equivalent of mechanical motion, and, by consequence, into equivalents of all the other forces which matter exhibits, may consider it therefore demonstrated that the phenomena of consciousness are material phenomena. But the spiritualist, setting out with the same data, may argue, with equal cogency, that, if the forces displayed by matter are cognisable only under the shape of those equivalent amounts of consciousness which they produce, it is to be inferred that these forces, when existing out of consciousness, are of the same intrinsic nature as when existing in consciousness; and that so is justified the spiritualistic conception of the external world, as consisting of something essentially identical with what we call mind..... Though the relation of subject and object renders necessary to us these antithetical conceptions of spirit and matter; the one is no less than the other to be regarded as but a sign of the Unknown Reality which underlies both".

COMPENSATION CASES.

SEVERAL other actions for damages have arisen out of the accident at New Cross; among them we notice the following.

A young man, aged 23, since the accident had been liable to attacks of vomiting and various nervous symptoms. When in court, he appeared haggard, and looked very ill. Mr. Canton and Mr. Sydney Jones considered his symptoms due to nervous disturbance consequent on the accident. Dr. Ramskill, Mr. Walton, and Dr. McClure, were of opinion that, if such were the case, there must have been some paralysis in addition. The verdict was for the plaintiff; damages, £400.

In another action, the wife of the landlord of a tavern in Bermondsey received £1200 damages. She had been quite helpless since the accident, and it was doubtful whether she would recover. She was brought to the court in a chair.

In a third action, the wife of a licensed victualler obtained £580 damages.

The landlord of a publichouse in Commercial Road was awarded £1150 damages. He was so much injured that he could not attend to business.

The widow and nine children of a licensed victualler, who died one month after the accident of the injuries received, obtained £2,500 damages. The widow also obtained £224 for injuries she herself had received.

The following case, from a different accident, is of more than usual interest on account of the slight character of the early symptoms, and the great doubt which existed as to whether the final illness had anything whatever to do with the accident.

On October 16th, 1867, the plaintiff, an Independent minister, was travelling to Leeds to address a meeting on behalf of the Bible Society. In a collision, he was thrown against a passenger opposite, and the bridge of his nose was bruised, his mouth filled with blood, his left leg was bruised, and he received a blow on the back of his head. He proceeded on his journey and addressed the meeting for half the intended time (an hour). The next day he returned to Southport. He continued his duties, and consulted only a retired practitioner (Mr. Sidebottom), a friend of his. He complained of loss of memory and failure of sight. For a long time, on waking in the morning, he found his left hand tightly clenched, and had to open the fingers with the right hand. Whenever he struck his foot against anything, he felt a sensation along the spine, and he could not sit with his back to the fire. In August 1868, after riding out in a gig with Mr. Sidebottom, he fell into a stupor for five hours, and this left him so weak that he could hardly stagger along. From that time he did not attend any meetings; and in November 12th had a fit of apoplexy. Dr. Braithwaite considered the train of symptoms continuous from the accident to the apoplexy. The sermons which he had given since the accident were from old notes. The change of scene and travelling were better for him than staying at home. Dr. Lang and Dr. Wilkinson gave evidence to the same effect. Dr. Ward of London considered the fit due to the accident. Mr. Southam, surgeon to the Manchester Royal Infirmary, thought the paralysis arose from natural causes. He had never heard of a case in which such a course of symptoms followed from injury. He thought there was a constitutional predisposition to apoplexy. Dr. William Roberts said he did not know of any such case, and never heard of one like it, nor could he find such recorded. Mr. W. W. Beaver gave similar evidence. Mr. Baron Martin considered the plaintiff clearly entitled to damages for the suffering he experienced from the time of the accident to that of the fit of apoplexy, though the latter might have occurred

from independent circumstances. No claim was made on the company till April 20th, 1869. Verdict for the plaintiff; damages, £2000.

In another action (in which the Great Northern Railway Company were the defendants), a married woman obtained £50 damages for injuries received while getting out of a railway carriage. She was pregnant, and the shock brought on a miscarriage.

In an action tried at Manchester, a shoemaker, living at Bolton, claimed damages for injuries received on the 28th of May, at Salford. The plaintiff, though severely shaken, returned home the same night. He rested at home a few days, and then, as pre-arranged, went to London, partly on business and partly on pleasure. At the end of about ten days from the accident, he was taken very ill while at the South Kensington Museum, and was obliged to go to his lodgings, and then to bed. The next day, he felt so unwell that he resolved to return home to Bolton. He has remained ill ever since. His medical men considered he was suffering from an injury to the spine. He went to the sea-side, and for a few days he was better, but soon relapsed. His chief complaint seems to have been of restless nights. He obtained £200 damages.

The great majority of the actions for compensation lately have been in cases where the injuries were of a somewhat indefinite character, and the results remote. We notice one exception in the action "Dear v. London, Brighton, and South-Coast Railway." The plaintiff was a married woman, aged 50. At the time of the collision (at New Cross), she was standing up in a third-class carriage, and her side was struck so violently that four of her ribs were broken, and she afterwards vomited blood. Pains in the head and back came on, and she was quite incapable of moving about. It was stated that there was no possibility of her recovery for some years, and then only by her being kept exceedingly quiet. £1350 damages were awarded, and £150 for medical expenses. Dr. Tanner and Dr. Ramskill gave evidence for the plaintiff. She was carried into court in a chair.

There was another case the same day. A man and his wife had received "shock to the system", and pains in the head, limbs, etc., had followed. Dr. Jenkins, Dr. Marsh, and Dr. Ramskill, gave evidence for the plaintiffs. Damages, £550.

DR. STOKES ON MEDICAL ETHICS.

WE welcome Dr. Stokes' valuable lecture in a separate form. It is one which all should read. It contains most excellent advice to the student, put in an admirable manner. Space will not allow us to make long extracts; but we cannot refrain from alluding to a few points. While not undervaluing the subjects generally considered the A B C of medicine, Dr. Stokes points out that the end of all is "professional fitness", and that one influence thereto is often overlooked; that is the practice of medicine itself, under necessity. "There are men who, in their students' days, have been idle, neglectful of opportunity, deaf to advice, yet who manage, somehow, to get through a so-called test-examination, and who, with the growth of a more sober judgment, and under the silent influence of experience, become good and useful physicians and surgeons." This is most true. Next, we have comments upon the importance of a high estimate of our social duties, with references to previous writers on the same subject. The essay published by Professor Laycock in 1855 is spoken of in the warmest terms.

Further on, Dr. Stokes alludes to the "irreverence" of some schools of the present day "as regards the respect due to our noble band of predecessors." "To confine ourselves to medicine, how few have read John Peter Frank, or Sydenham, Haygarth, or Gregory." "Among our predecessors, there were many great physicians and surgeons—great, because they were good observers. This contempt for them, or this ignorance of them, is among the saddest things relating to medicine that I know."

Some remarks follow on the ill-advisedness of controversy as to priority of discovery in minor matters which may easily occur to several minds at once; and then the author discusses the shortcomings of medical witnesses at trials. For his advice on this subject, we must refer the reader to the pamphlet itself. The following also is excellent.

"We have touched on our duties to society and to our profession; let us now briefly speak of the duties to our patients. These duties, as relating to the treatment of the sick, are best learned in those monuments of Christian charity, our Hospitals and Dispensaries. Here I take leave to say that, in the student's career, his clinical attendance and study should be begun at an early period of his courses. It is held that the student should learn his anatomy, his chemistry, and his materia medica, before he enters the wards; but will this teach him to know the living, which it is his business to know? Will this teach his hand, his eye, his ear? But more. Will it teach him the look of a sick man, sympathy with the sick, charity to the sick, patience with the

sick? Will it soften his heart by witnessing their sufferings, or rejoice it by feeling their gratitude? No; and yet these things are of more importance to the moulding of his character and to his future usefulness than any knowledge of the accessory sciences; and he cannot begin to feel their blessed influence too soon."

ASSOCIATION INTELLIGENCE.

REPORT OF MEETING OF COMMITTEE OF COUNCIL:

Held in Birmingham, December 3rd, 1869.

PRESENT:—W. D. Husband, Esq. (in the Chair); Dr. Chadwick; Mr. Clayton; Dr. Falconer (Treasurer); Dr. Heslop; Mr. Nunneley; Dr. Philipson; Dr. Procter; Dr. Sibson; Dr. Simpson; Dr. Stewart; Dr. Waters; Mr. Wheelhouse; Dr. Wilkinson; and Mr. Williams (General Secretary).

The following resolutions were adopted.

That the Therapeutical Investigation Committee consist of Professor Hughes Bennett, M.D., Dr. Rogers, Dr. McAdam, and Mr. Smith and his assistant Dr. McKendrick; and that the sum of £100 to be divided between the assistants, be paid at the convenience of the Treasurer.

That Mr. Nunneley be added to the JOURNAL Subcommittee.

T. WATKIN WILLIAMS, F.R.C.S., *General Secretary*.

Birmingham, December 14th, 1869.

SHROPSHIRE SCIENTIFIC BRANCH: ANNUAL MEETING.

THE annual meeting of the Shropshire Scientific Branch was held, on October 20th, at Shrewsbury, in the Museum of the Natural History Society. SAMUEL WOOD, Esq., President for the past year, took the Chair. He briefly thanked the members for the courtesy he had received during his term of office, and resigned the Chair to Dr. OAKLEY.

Officers and Council.—Dr. JOHNSON moved, and Dr. BURD seconded, that J. D. Harries, Esq., be elected vice-president. The motion was carried with acclamation.

Mr. T. B. BARRETT (Welshpool) moved that the members of the Council be re-elected, with the addition of Mr. Ley. Mr. J. D. HARRIES seconded the motion, which was carried.

New Member.—Mr. EDDOWES moved that Dr. Greville Thursfield (Broseley) be elected a member, which was seconded and carried.

Representatives in the General Council.—Mr. J. D. Harries and Mr. Edwards were elected.

Papers.—The following papers were read.

1. A case of Tetanus cured by Injection of the Extract of Calabar Bean. By Samuel Wood, Esq.

2. A Successful Case of Ovariectomy, accompanied with unusual Difficulties. By J. D. Harries, Esq.

3. Case of Cæsarean Section—child saved. By J. D. Harries, Esq.

4. On Certain Chlorine Substitution Products of Marsh-Gas. By T. P. Blunt, B.A. Oxon., F.G.S.—In introducing his subject, the writer stated that he had selected bichloride of methylene, chloroform, and tetrachloride of carbon—specimens of which were exhibited—to lay before the present meeting, because they possessed equal interest for the physiologist and for the chemist; for the former, on account of their remarkable and well known action on the animal frame; for the latter, as presenting an excellent illustration, derived from organic chemistry, of the atomic theory. He chose the latter point of view for treatment on the present occasion, showing how the three bodies in question were derived from marsh-gas by the substitution of successive atoms of chlorine for hydrogen in its molecule; and he endeavoured to represent, by means of diagrams, how this might be conceived to occur, dwelling on the fact that the size of the molecule, as represented by two volumes of vapour, remained the same throughout. He then proceeded to describe, briefly, the common method for the production of the three substances, and added a short description of the chemical and physical properties of each. Attention was next drawn to the progressive character which these exhibited, the atomic numbers or equivalents showing an arithmetical progression with a difference of 34.5, each step being marked by a rise in the density and boiling point of the liquid produced, while at the same time a general similarity prevailed throughout the series. Upon these facts an analogy was founded with certain groups of the elements, of which that presented by lithium, sodium, and potassium, was chosen as a type; and it was suggested that a strong argument against the elementary character of the latter might thus be established.

Votes of thanks were passed to those gentlemen who had favoured the meeting by reading papers, to the Council of the Branch, and to the President, Dr. Oakley.

Dinner.—The members adjourned to the Lion Hotel at 5.30 P.M., when a most excellent dinner was provided, to which nearly fifty sat down, and a very successful meeting was thus brought to a pleasant termination.

REPORTS OF SOCIETIES.

MEDICAL SOCIETY OF LONDON.

NOVEMBER 29TH, 1869.

PETER MARSHALL, Esq., President, in the Chair.

MR. SPENCER WATSON read notes of a case of Traumatic Cataract, remarkable for the presence of symptoms similar to those met with in idiopathic glaucoma, all which symptoms subsided after the removal of the cataract by the linear incision.

MR. E. CALTHORP exhibited an Umbilical Belt for Infants, made of black India-rubber. Instead of the central pad, two wedges of wood, encircled by an elastic cord, are made to act laterally, and close the umbilical opening.

Dr. SEMPLE exhibited two specimens of Heart-disease. The first heart was large, fat, soft and flabby; the cavities were larger than usual; the pulmonary tricuspid valves were healthy, but the tricuspid orifice was very large; the mitral orifice was large enough to admit four fingers. There were four aortic valves. The patient had complained chiefly of dyspeptic symptoms. The other specimen was a contrast to the first. There was extensive disease of the aortic valves, which were almost bony; the mitral orifice was very small, and the valves hard and rigid. In this patient a præsystolic and systolic murmur at the apex was heard at the angle of the scapula, and a systolic and diastolic murmur at the base.

Dr. COCKLE read a paper entitled *Further Notes on Pulsating Tumours of the Neck*. This paper was to be considered as a complement to a former one, read before the Society at the close of its last session. Two additional cases of dilatation of the innominate artery were herein detailed, in one of which, independently of the pulsating tumour in the episternal hollow and lowest part of the right side of the neck, cirroid aneurism of the upper half of the left carotid artery existed, attended by forcible impulse and remarkable locomotion of the vessel. This case was exhibited for examination by the Society. In both cases, existed signs of implication of the aorta, but in the latter, the murmurs audible over the heart and aorta were attended with certain peculiarities which offered difficulties in the way of differential diagnosis. In adverting to these difficulties, the author was led to offer some remarks upon the subject of cardiac murmurs generally, pointing out the difficulty, at times, of determining either the precise time, during a cardiac revolution, at which such murmurs are heard, or the exact seat at which they are generated. The diagnosis of these tumours from some other affections of the chest and neck was then briefly alluded to; but more especially the points of difference between them and ordinary aneurism of the innominate artery, from which they clearly are to be separated. These more especial points of difference were stated to consist: in the peculiar intermitting prominence of the tumour: in the constant complication of dilatation of the aorta: in the indefinite duration of the affection: and, according to the author's experience, in its exclusive occurrence in females about the middle age.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, DECEMBER 1ST, 1869.

GRAILY HEWITT, M.D., President, in the Chair.

Dr. MEADOWS exhibited a large Fibroid Polypus removed by the single wire *écraseur*. Ten days previously this tumour had been completely intrauterine. The use of Dr. Barnes' dilating bags had induced dilatation of the os, and sufficient uterine contraction to cause extrusion of the tumour.

Dr. WYNN WILLIAMS exhibited the Heart and Lungs of an Infant who died when fourteen days old. The heart was much larger than natural; the foramen ovale was open to about one fifth of its extent; the walls of the right ventricle were much thicker than those of the left; and the aorta arose from the right ventricle, and the pulmonary artery from the left. Referred for further examination to Dr. Williams and Dr. Junker.

Mr. J. A. TAPSON exhibited a Placenta and Knotted Cord. The

child was stillborn, but its movements had been felt six days prior to its birth.

Dr. CLEVELAND exhibited an Apparatus for Injecting Solution of Perchloride of Iron into the uterus for *post partum* hæmorrhage. It was described by Dr. Cleveland in last week's JOURNAL.

Mr. W. RIGDEN communicated the statistics of the ages at which Menstruation commenced in 2696 women who had applied at University College Hospital for attendance in their confinement. The mean age was 14.96 years.

Dr. LLOYD ROBERTS (of Manchester) exhibited drawings of a large Fibroid Polypus which he had removed by the *écraseur*. The tumour weighed twenty-three ounces and a half, and had to be extracted by the forceps after the severance of its pedicle.

Dr. TYLER SMITH read a paper on a case of Puerperal Fever, treated by the Injection of Ammonia into the Veins, followed by recovery. The patient, a primipara, was delivered by forceps on November 1st. On the 5th, symptoms of puerperal fever supervened, and on the 12th, she was in such imminent danger that Dr. Smith determined to try the injection of ammonia into the veins, as practised by Dr. Halford, in Australia, for snake-bite. The operation was performed at 7.45 P.M. Half a drachm of a solution containing one part of liquor ammoniæ to three parts of water was injected into one of the veins of the right forearm. As soon as two or three drops had been injected, she roused, and complained of severe pain in the opposite arm. When the operation was completed, there was very great pain over the whole body, with intense smarting of the right arm. This continued without abatement for several hours. The sickness closed at 11 P.M., but the bowels were moved four times in the course of the night. Towards morning the pain subsided, and she got a little sleep. On November 13th, the abdomen had much diminished in size, and the pulse had fallen to 100. On the 14th, she felt better, and was quite sensible, though pale and weak; pulse 108; the right arm, at the seat of puncture, was red and swollen, and the veins of the whole arm were distinctly mapped out. She was able to take a little food without sickness. On the 15th, the tongue was becoming natural; the abdomen was smaller. On the 17th, she was still progressing favourably; a small ulcer had formed on the right arm, at the seat of puncture. A slight relapse occurred on the 20th; but, after the 22nd, her improvement was uninterrupted. Dr. Smith observed that he had never seen a patient in a similar condition recover; and, although he had adopted this treatment in this case alone, so successful was the result, that he had felt it incumbent upon him to bring the particulars before the Society.—Dr. AVELING would have liked a fuller account of the history of the plan of injecting medicinal fluids into the veins.—Dr. BARNES said that reference to the history of venous injections did not diminish the merit of applying this method to the treatment of puerperal fever. In this disease it was often difficult to get remedies absorbed; the only hope seemed to be in direct injection into the vascular system. He had already said that the injection of saline fluids and transfusion ought to be largely extended; and in his work on obstetric operations he had advised it in certain cases of puerperal convulsions, fever, and obstinate vomiting. He doubted whether the fluid used by Dr. Smith was the best; he should prefer a fluid like Dr. Little's, made of similar specific gravity to that of the blood, adding a little ammonia and alcohol. He thought the indication was to carry the ammonia in a considerable bulk of fluid, not concentrated.—Mr. SPENCER WELLS had been much struck by Dr. Halford's reports; and last March he had injected half a drachm of liquor ammoniæ into one of the veins of a woman, two days after ovariectomy. The pulse and temperature had risen to 140 and 102.8, with the usual signs of fibrinous deposit in the heart. Scarcely more than a momentary revival followed this injection, nor more after another by Dr. Junker, two hours afterwards. A large clot was found after death, filling up the left ventricle. Mr. Wells suggested that, if Dr. Smith's example be followed, great care should be taken only to inject ammonia when there is an excess of fibrine in the blood.—The PRESIDENT observed that the Society was much indebted to Dr. Tyler Smith for bringing this interesting case forward. One swallow did not make a summer, but new facts were always deserving of attention.

On the Complication of Pregnancy with Ovarian Disease. By T. SPENCER WELLS, F.R.C.S. The author related fifteen cases of pregnancy complicated with ovarian disease, which had fallen under his own observation. In three cases, sudden death followed spontaneous rupture of the cyst, in or before the seventh month of pregnancy. In two cases pregnancy and ovarian disease went on together without interference, and lingering labours ended in the birth of still-born children. In one case, twins were born alive; but the mother had suffered greatly from distension. In one case five, and in another six pregnancies had gone on, and ended normally without interference, but in the last case, the cyst ruptured spontaneously in the seventh preg-

nancy. Five patients were tapped during pregnancy; one, twice; one, three times; and three, one each. In all, five living children were born after natural labours. In one of them, ovariectomy was successfully performed, four months after delivery. In one case, ovariectomy was performed in the fifth month of pregnancy, the uterus was emptied at the same time, and the patient recovered. In the concluding case of the series, ovariectomy was performed successfully in the fourth month of pregnancy, after spontaneous rupture of the cyst, and peritonitis, pregnancy proceeding without interruption. The author believed that a careful consideration of these cases would lead to the following conclusions. 1. Pregnancy and ovarian disease might go on together, and end safely both to mother and child. 2. But, in a large proportion of cases, probably in nearly all where the ovarian tumour was large, there was danger of abortion; or, if the pregnancy proceeded to the full term, of lingering labour, and a stillborn child; and throughout the later months of pregnancy there was danger of sudden death to the mother, from rupture of the cyst, or rotation of its pedicle. 3. Spontaneous premature labour might not save the mother from these perils; and the induction of premature labour almost implied sacrifice of the child, with considerable risk to the mother. 4. There was no proof that tapping an ovarian cyst was more dangerous during pregnancy than at any other time. It would generally afford immediate relief to distension, and lead to the normal termination of pregnancy in the birth of a living child, at a very slight risk to the mother, if proper precautions were taken to prevent the escape of ovarian fluid into the peritoneal cavity, and the entrance of air into this cavity and into the cavity of the cyst. 5. If an ovarian cyst should burst during pregnancy, removal of the cyst, and complete cleansing of the peritoneal cavity, might save the life of the mother, and pregnancy might go on to the full term. 6. Of three cases on record where a pregnant uterus had been punctured during ovariectomy, the only recovery was in the one case where the uterus was emptied before the complication of the operation.

Dr. BRAXTON HICKS read a short account of ten cases comprising eight pregnancies where pregnancy was associated with ovarian cystic disease. In none had any symptoms of danger arisen, and all were delivered of live children at full term. Dr. Hicks also mentioned that he had never seen any other case, with this complication, attended with untoward symptoms. He thought a collection of a larger number of cases necessary, before the necessity for the induction of premature labour could be established as a rule.—Dr. BATHURST WOODMAN referred to the bursting of thin-walled cysts as not uncommon; where there was no complication with pregnancy, he considered that the relative frequency of a favourable or unfavourable result in such cases, was an important element in the discussion.—Dr. PLAYFAIR had collected the details of fifty-seven cases of labour with ovarian tumour. Of these fifty-seven, thirteen had proved fatal; and this mortality was probably due to the contusion to which the tumour was subjected during the pains. Every case in which the cyst had been punctured, seven in number, had done well.—Dr. WILTSHIRE asked Mr. Spencer Wells how he would treat cases of solid or semi-solid ovarian tumour, complicating pregnancy.—Mr. BATEMAN gave some particulars of a case of ovarian tumour obstructing labour and necessitating craniotomy, which had occurred in his practice many years ago. About three weeks after her confinement, the patient succumbed to an attack of erysipelas.—Dr. BARNES said the practical rule was, when the tumour obstructed labour, to act upon the tumour, so as to free the passage for the child; when this could not be done, then act upon the child.—Mr. SPENCER WELLS could not see why an ovarian cyst should not be tapped during labour. In the case of a multilocular cyst, probably one of the largest cysts might be emptied by tapping. If not, and the whole tumour were more or less solid, the case would then be one for careful consideration, and the question of instrumental delivery, the Cæsarean section, or ovariectomy, would have to be determined by the circumstances of the case.

Dr. HALL DAVIS read a paper on Puerperal Convulsions, illustrated by a history of thirty-three cases. Dr. Davis commenced his paper with a statement of the various pathological conditions under which convulsions presented themselves. He viewed the disease as occurring under two types, sthenic and asthenic, and also as partaking of the characters partly of epilepsy, partly of apoplexy. He found that at least in twenty-two of the cases, premonitory symptoms occurred; viz., emotional, or other disturbance of the cerebro-spinal centres; renal mischief; eccentric local irritations, gastric, intestinal, uterine, etc. Eight of the cases preceded labour; seventeen commenced during labour; eight followed. Obstructive difficulties in the labour were the exception. Fifteen of the cases occurred in primiparæ, their ages ranging from 18 to 25; fifteen in multiparæ from 25 to 47, only one being of the latter age. The medical treatment was as follows: bloodletting, followed by purging, sinapisms, or vesicants when necessary, and in

two by opium, twenty-one; chloroform, seven; purging and sinapisms, three; opium, one; supporting and antiseptic treatment, in a case of septic origin in one; total, thirty-three. Delivery was normal in twenty-two; manual aid in breech-births, two; version, two; forceps, five; craniotomy, one; embryotomy, one. The results to the mothers were: recovered perfectly, thirty; partial recovery, hemiplegia, which had preceded the convulsions, remaining in one; died two, one of asthenic peritonitis; one with gall-bladder distended by calculi, and in second paroxysms. Two other cases, not included in the above thirty-three, died in their first paroxysms, not having been previously treated. In three cases of threatened convulsion, treated prophylactically, the results to the mothers were: recovered perfectly, one; recovered partially, two; one with dimness of vision, which had long preceded labour; one with hemiplegia, which had existed previously. The result to the thirty-eight children (five being twin cases) was as follows:—twenty-eight living; of these, twenty-four were born without operative interference; one version; one breech case; three forceps:—ten stillborn, viz., four head-presentations, without operative aid; two forceps; one breech; one craniotomy; one embryotomy; one induction of premature labour. In twenty-four cases the convulsions preceded delivery, and here the results to the children were fourteen living, ten stillborn.

EPIDEMIOLOGICAL SOCIETY.

DECEMBER 8TH, 1869.

INSPECTOR-GENERAL LAWSON, in the Chair.

On the Later History of the Outbreak of Fever in Mauritius. By F. H. BLOXALL, Esq., R.N.—Mr. Bloxall having recapitulated the earlier history of the outbreak of the epidemic in 1867, when it devastated the leeward or north-west shores, stated that it subsided in the cooler months of August, September, October, etc., but awoke with renewed vigour on the return of the hot weather in January 1868; and it was then no longer confined to the leeward districts, but appeared also in the windward, particularly in the town of Mahebourg, the chief town of Grand Port. All the concomitant circumstances favourable for the generation of malaria were there present in a marked degree; i.e., exposed banks of rivers, swampy ground, vegetation, and great heat. The sanitary state of the inhabitants, as at Port Louis, was most unsatisfactory. Overcrowding to a very considerable extent prevailed; of drainage, there was little or none; defæcation was in some instances performed into simple pits dug in the yards belonging to the houses. There was also much underfeeding; consequently, the people were a ready prey for the malarious poison. The deaths were 1,076. He stated that evidently the poison was much less virulent in 1868 than in 1867; for, although the whole island was encircled in 1868, still, the mortality from fever was two-thirds less than in 1867, being 10,049 against 32,241. The total mortality from the epidemic, which is now acknowledged to be of a paludal malarious nature, amounted in October 1868 to about 48,000 out of a population of 350,000. The author thought that, if the island and the inhabitants are allowed to remain in the same state as at present, malaria will be persistent and disease rife. He recommended the prevention of overcrowding in the towns and Indian camps; the removal of the latter from the neighbouring rivers to more healthy spots, as they now frequently contaminate the waters by excreta, washing, etc.; the building of loftier and better ventilated huts; a plentiful supply of wholesome water, and drainage; and the establishment of latrines on the dry earth system, with stringent laws for their regulation. To endeavour to prevent the formation of malaria, trees should be planted on the mountains, to induce a greater rainfall and to prevent rapid evaporation; also along the banks of rivers and canals, which canals should be cut through the marsh-land, as suggested by the subcommittee. All this would take time and be expensive, but the local government would reap a rich reward in the decrease of disease and mortality, and in the enhanced value of the land. The author concluded by giving an interesting history of four cases of intermittent fever that occurred on board H.M.S. *Urgent*. The first (quotidian) appeared on the twelfth day after leaving the Mauritius; the second, also quotidian, on the fourteenth; the third, tertian, on the forty-eighth; and the fourth, also tertian, on the 184th day. Although the periods of incubation varied so much, there was no doubt that each individual contracted the disease during the *Urgent's* stay of five days in Port Louis harbour.

HUNTERIAN MUSEUM.—Another large and most interesting collection of illustrations of cutaneous diseases has just been made to the College of Surgeons by Mr. Erasmus Wilson, F.R.S. These are in continuation of those already presented by Professor Wilson, and have reference more particularly to syphilitic and cancerous, as well as to the more common eruptions.

OBITUARY.

A. BRYSON, C.B., M.D., F.R.S.,

LATE MEDICAL DIRECTOR-GENERAL OF THE NAVY.

WE regret to announce the death of this estimable gentleman, which took place on Sunday at his residence, the Hermitage, Barnes. Dr. Bryson entered the navy as Assistant-Surgeon in 1827, and was promoted to the rank of Surgeon in 1836, Deputy Inspector-General in 1854, and Inspector-General in 1855. He served as Assistant-Surgeon nearly nine years in Haslar Hospital, on the North American and West Indies station, and the West Coast of Africa. Subsequently he served as Surgeon nearly fifteen years in the Channel Fleet, and on the West Coast of Africa. He also served for some time as Surgeon, Deputy Inspector-General, and Inspector-General, as additional to the *Fisgard*, for service in the Medical Department of the Admiralty. The duties of this appointment, in which he at first assisted Sir William Burnett, consisted especially in preparing the Statistical Reports on the Health of the Navy.

In January 1864, on the retirement of Sir John Liddell, he was appointed Director-General of the Medical Department of the Navy, from which post he retired on the 15th April, 1869. He was appointed Honorary Physician to the Queen in September 1859; and subsequently the Companionship of the Civil Order of the Bath was conferred upon him. Amongst several other works of great interest, there are two which should be in the library of every medical officer in the Navy; viz., his *Report on the Climate and Principal Diseases of the African Station* (1847), and his *Account of the Origin, etc., of the Epidemic Fevers of Sierra Leone* (1849).

Dr. Bryson had suffered for some time from occasional severe headache, vertigo, loss of memory, and other brain-symptoms, but it was not until Friday that his fatal illness (a well-marked instance of apoplexy) commenced. Whilst walking in the garden on Friday afternoon, he complained of feeling very unwell; he walked into the dining-room, went up stairs to his bedroom, and returned. His speech then became confused, and he almost immediately afterwards fell on the couch insensible. He showed no symptoms of consciousness from this time, and died on Sunday morning. Dr. Willis of Barnes (his usual medical attendant), Dr. Russell Reynolds, and Dr. Mackay, paid him kindly attention during his attack. At the examination made after death by Dr. Marshall of Mortlake, two patches of extravasated blood of uncertain date were found under the dura mater on the surface of the right hemisphere. This extravasation had probably taken place about eight weeks before, when Dr. Bryson had felt suddenly and more than usually indisposed. On further examination, the middle lobe of the right hemisphere, at its anterior part, was found broken down with clot, and from this a quantity of blood had entered the lateral ventricles. The cerebral arteries were found highly atheromatous, and some of them were occluded.

While Director-General, Dr. Bryson endeavoured to be honest and impartial in the distribution of his patronage. His manners were blunt, and he did not care to conceal his dislike of the self-conceit of those who entertained an inordinate estimate of themselves and their services. With many he was, therefore, not popular: but, under a somewhat cold and dry exterior, he was known to possess a very kind heart and generous disposition.

THE JOURNAL OF THE QUEKETT CLUB.—The *Journal of the Quekett Club* is to be discontinued. The proceedings of the Society will henceforth appear in the form of an annual volume of *Transactions*.

DONATIONS.—The sum of £1,000 from H. G. has been paid into the Alliance Bank for the East London Hospital for Children. A similar sum has been acknowledged by the Westminster Ophthalmic Hospital.

MEDICAL TEACHERS' ASSOCIATION.—The following list of officers and Council have been elected for the year 1869-70:—*President*: W. A. Miller, M.D., D.C.L., F.R.S. *Vice-Presidents*: T. King Chambers, M.D.; B. E. Brodhurst, F.R.C.S. *Treasurer*: F. Sibson, M.D., F.R.S. *Secretaries*: W. Rivington, F.R.C.S.; H. Power, F.R.C.S. *Elective Members*: A. W. Barclay, M.D.; W. H. Broadbent, M.D.; J. S. Bristowe, M.D.; J. Langdon Down, M.D.; G. G. Gascoyen, F.R.C.S.; T. H. Green, M.D.; A. Dupré, Ph. D.; Tilbury Fox, M.D.; E. Headlam Greenhow, M.D.; C. Heath, F.R.C.S.; T. Holmes, M.A., F.R.C.S.; C. Holthouse, F.R.C.S.; R. Liveing, M.D.; C. F. Maunder, F.R.C.S.; T. W. Nunn, F.R.C.S.; J. W. Ogle, M.D.; Hyde Salter, M.D.; A. Silver, M.D.; H. Trimen, M.B.; John Wood, F.R.C.S.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 9th, 1869.

Bossy, Alfred Frederick, Stoke Newington
Ling, Edward Clayton, Saxmundham

The following gentlemen also on the same day passed their first professional examination.

Cartwright, J. H., St. Thomas's Hospital
Dunstan, H., University College
Haines, A. H., Guy's Hospital
Hill, C. H., St. Bartholomew's Hospital
Ling, J. M., University College
Longhurst, A. K., University College

MEDICAL VACANCIES.

THE following vacancies are declared:—

ABINGDON UNION, Berks—Medical Officer for District No. 2, and the Workhouse: applications, 18th; election, 20th.
ABINGDON DISPENSARY—Surgeon.
BALLYMONEY UNION, co. Antrim—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Derraw Dispensary District: 28th.
BRIGHTON AND HOVE DISPENSARY—Physician-in-Ordinary.
BRIGHTON AND HOVE LYING-IN INSTITUTION AND DISPENSARY FOR DISEASES OF WOMEN AND CHILDREN—Two Surgeon-Accoucheurs.
CASTLEREA UNION, co. Roscommon—Medical Officer for the Workhouse: 1st January.
DOWN DISTRICT LUNATIC ASYLUM, Downpatrick—applications, 30th Dec.; election, 1st Jan.
EAST SUFFOLK AND IPSWICH HOSPITAL—Two Surgeons: 22nd.
EDINBURGH ROYAL INFIRMARY—Resident Medical Officer to the Fever and Lock Hospitals.
GERMAN HOSPITAL, Dalston—Physician; Assistant-Surgeon: applications, 3rd Jan.; election, 24th Jan.
GLENELG and KNOYDART, Inverness-shire—Medical Officer: applications, 28th; election, 20th.
HOLBEACH UNION, Lincolnshire—Medical Officer for the Sutton Bridge District: applications, 24th; election, 27th.
HOLBECK UNION, Yorkshire—Medical Officer for the West District.
IPSWICH, Borough of, LUNATIC ASYLUM—Resident Medical Superintendent: applications, 15th Jan.; duties, April.
JEDBURGH DISPENSARY—Surgeon.
LIVERPOOL DENTAL HOSPITAL—Dental Officer: applications, 21st.
LIVERPOOL DISPENSARIES—Medical Officer at the South Dispensary: applications, 22nd Dec.; election, 6th January.
MIDDLESEX HOSPITAL—Surgical Registrar, and Superintendent of *post mortem* Examinations.
MOUNTBELLEW UNION, co. Galway—Medical Officer and Public Vaccinator for the Clonbrock Dispensary District: 20th.
OUNDLÉ UNION, Northamptonshire—Medical Officer for the Oundle District and the Workhouse.
OXNAM, CRAILING, JEDBURGH, ECKFORD, SOUTHDEAN, and JEDBURGH UNION POORHOUSE, Roxburghshire—Medical Officers.
ST. MARY'S HOSPITAL, Paddington—Resident Registrar.
ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Resident Medical and Surgical Officer: applications, 31st.
SOUTH SALOP & BRIDGNORTH INFIRMARY—Resident House-Surgeon.
WESTMINSTER HOSPITAL—Resident House-Physician: applications, 25th Dec.; appointment, 4th Jan.
WHITEHAVEN and WEST CUMBERLAND INFIRMARY—House-Surgeon.
WORCESTER INFIRMARY—House-Surgeons, Assistant, and Dispenser.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

DE LESSERT, Alex. N., Esq., appointed Surgeon-Dentist to the Aberdeen Dispensary.
MOORE, Milner M., Esq., appointed Resident Medical Officer to the Royal Albert Hospital, Devonport.
POLLARD, Frederick, Esq., appointed Resident Medical Officer to the St. Pancras and Northern Dispensary.
SYLVESTER, Henry T., M.D., elected House-Surgeon to the Swansea Infirmary, in the room of *George Mowat, Esq., resigned.
WILLIAMS, Charles, Esq., appointed an Assistant Surgeon to the Norfolk and Norwich Hospital.

BIRTHS.

AVELING.—On December 6th, at Homerton, the wife of Charles T. Aveling, Esq., Surgeon, of a daughter.
DURHAM.—On December 9th, at Brook Street, the wife of *Arthur E. Durham, M.D., of a daughter.
HOLTON.—On December 7th, at Kingstown, the wife of F. Holton, M.D., Surgeon 77th Regiment, of a son.

ROYAL COLLEGE OF SURGEONS.—The half-yearly preliminary examinations in Arts, etc., of candidates for the diplomas of fellowship and membership of the College, were commenced on Wednesday the 15th instant, at the Whittington Club, by a staff of examiners from the College of Preceptors, and were not brought to a conclusion until six o'clock yesterday (Friday) evening.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.

WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.

THURSDAY...St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY...St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.

MEETINGS OF SOCIETIES DURING THE NEXT WEEK.

MONDAY.—Medical Society of London, 8 P.M. Dr. Leared, "On Sulpho-Cyanides in the Blood and in the Urine"; Dr. Farquharson, "On Longevity and Premature Decay, with special reference to our Military Population."

TUESDAY.—Ethnological Society of London, 8 P.M. Professor Busk, F.R.S., "On an Ancient Calvaria assigned to Confucius"; Major Millingen, F.R.G.S., "On the Koords and Armenians"; Dr. Gustav Oppert, "On the Kitai and Kara-Kitai."—Pathological Society of London, 8 P.M. Dr. Moxon, "Thrombosis of Inferior Cava, with Embolism of Pulmonary Artery—Congenital absence of Right Kidney"; Dr. Clapton, "Perforating Ulcer of Stomach"; Mr. Sydney Jones, "Aneurism of Aorta, with Caries of Clavicle"; Sir Wm. Jenner, "Mass of Hair from Stomach"; Dr. Whipple, "Cystic Disease of Kidney"; Dr. Dickinson, "Pyelitis"; etc.

WEDNESDAY.—Hunterian Society.—Geological Society.

THURSDAY.—Royal Society.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

DR. H. TUKE is thanked for his enclosure.

NEW KNIFE.

SIR,—Will you favour me by correcting an error in your description of a new knife exhibited by Dr. Dick at the Medical Society of London, on November 15th, of which I am the maker. You describe it as "the cutting blade being covered by a sliding sheath," etc.; whereas it is the sharp point of the blade only which is covered by an advancing probe, thus converting it instantly either into a sharp or a probe-pointed knife. Blades covered with advancing sheaths have been in use for some time past, for a very different purpose.

I am, etc., FR. GUSTAV ERNST.

80, Charlotte Street, Fitzroy Square, W., December 6th, 1869.

* * The description inserted was furnished to us from the Medical Society. We willingly, however, insert Mr. Ernst's correction.

DR. WILLIS (Barnes) is thanked.

DR. DRYSDALE.—During the pressure upon our space by more strictly professional subjects, it is not our intention to insert any letters on the subject of your communication.

THE ANATOMY PROFESSORSHIP AT THE ROYAL ACADEMY.—The first Professor of Anatomy to the Academy was Dr. William Hunter, who held the appointment from the foundation of the institution in 1768 until his death in 1783. He was succeeded by John Sheldon, who also retained the office until his death in 1808. He gratuitously dissected a horse, and had casts made from it for the sole use of the students. Sheldon was succeeded as Professor by Sir Anthony Carlisle, twice President of the Royal College of Surgeons, whose lectures were highly attractive. He resigned in 1824, and was succeeded by Mr. Joseph Henry Green, also twice President of the College. His lectures were hardly less popular than those of Carlisle. Mr. Green resigned the Chair in 1851, and was succeeded by Mr. Partridge, F.R.S., late President of the Royal College of Surgeons.

E. W. W.—The subject for the Jacksonian Prize for the present year is "Aneurism by Anastomosis, the various forms of this disease, and the different methods of treatment, with the author's experience and views thereon." The essays must be delivered before Christmas-day next. The Secretary will give you the conditions.

THE NOMENCLATURE OF DISEASES.

SIR,—Would you kindly inform me where am I to apply for the *Nomenclature of Diseases*? I believe most members have been supplied with some by Government.

I am, etc., MEDICUS.

* * Apply to the Registrar-General, Somerset House, London.

NEW MEMBERS.

GENTLEMEN desirous of proposing candidates for admission into the Association, should send in the names to the General Secretary or the Secretaries of the respective Branches, in order that the JOURNAL may be supplied to the new members from the commencement of the year. Forms of application and nomination may be had at the office of the BRITISH MEDICAL JOURNAL, 37, Great Queen Street, W.C.

L.R.C.P. (Chester).—Dr. John Willett is not a member of the College of Surgeons of England.

I. R. A.—We shall be glad to receive the case.

T. T. B.—It is most unlikely that pemphigus occurring in an infant could be in any relation to the administration of chloroform to its mother during labour.

CLIMATOLOGY.

SIR,—Could you, or any of the subscribers to the JOURNAL, direct me to the best and most recent work on the Medical Geography and Climatology of North America, and also of Australia? In case no such special works are published, I should be glad to be informed what are the best works on the Geological Arrangements of the Countries named.

I am, etc., VIATOR.

November 23rd, 1869.

DR. JOHN BRUNTON was noticed in a recent number of the JOURNAL as having been appointed Lecturer on *Materia Medica* to the Middlesex Hospital. It should have been Dr. Thomas Lauder Brunton.

MR. ALFORD is thanked.

J. DAW, M.D.—It is a mistake on the part of our contemporary. The gentlemen of whom biographical notices appeared last week, were not, as then stated, "Fellows" of the College.

MEDICUS (Liverpool).—The fine collection of medical portraits made by the late Dr. Young, was presented to the College of Surgeons by his brother, the late Sir George Young, Garter King at Arms. The son of his successor, Sir Albert Woods, is an articled student of the College.

SMALL-POX AT DEVIZES.

SIR,—In the JOURNAL for Nov. 27th, there was a statement, copied, I believe, from a local paper, which, if allowed to pass without comment, might tend to bring vaccination into disrepute. The statement in question was as follows:—"Small-pox is more general at Devizes than it has been for many years. It is stated that several amongst those who have it badly, have been recently vaccinated." It is true that we have an epidemic of small-pox here; during the last six months, there have been at least two hundred cases in this town, but not a single death has resulted. This is a strong proof, in my opinion, of the modifying power of vaccination, and of its general and successful operation in Devizes. I am informed by Mr. Thornley, the Poor-law Medical Officer for the town, in whose practice nearly all the cases have occurred, that the general character of the epidemic is mild. Severe confluent cases have presented themselves; but, as a rule, they have been amongst those who have never undergone vaccination, or in those who have not been re-vaccinated.

I am, etc.,

EDWARD CHAPMAN, M.D., Mayor.

DEVIZES, November 1869.

NEW TREATMENT OF PHIMOSIS.—Dr. Francis R. Cruise (*Dublin Quarterly*, November 1869) describes his method of "sudden dilatation", or rather splitting, for the cure of phimosis. Dr. Cruise uses a special kind of forceps, the blades of which open when the handles are closed. The amount of dilatation can be regulated by a screw and nut acting on the handles.

GUSTATORY BULBS.—Drs. Schwalbe and Leven have discovered certain terminal organs in connection with the nerves of taste analogous to those of sight, hearing, etc. They may be called gustatory bulbs. They occur only in the walls of the papillæ; in some animals, only in the papillæ vallatæ; but in others, in the fungiform as well. The nerve-fibres lose their double contour, and the only connection is between the axial cylinder and the elongate gustatory cells making up the bulb. Each bulb, enclosed in an epithelial stratum, rests by an attenuated extremity on the mucous layer; its shape is that of a thick spindle, and its epithelial covering is pierced by openings which correspond to points of gustatory bulbs, so that fluids communicate directly with the nerve-terminations.

THE RIGHTS OF WOMEN.—We are told that the Chilas allow much more power to their women than we do in Europe. The Chilas Council may, indeed, be commended to the attention of the advocates of women's rights, as the realisation of their dream, for the old women share in the deliberations on the common affairs of the tribe. The fair sex also are wont to have regular stand up fights, with their hands armed with iron wristlets, and in actual warfare proved themselves no despicable foes to the Maharajah of Cashmeer.—*Pall Mall Gazette*.

DETERIORATION OF SOIL-PIPES.—Mr. Stanford has called the attention of the Glasgow Philosophical Society to the serious deterioration which lead pipes, in connection with water closets, undergo after long periods. The change consists principally in the deposit of a white powder on the inner surface of the pipe at any part exposed for a long time to the action of air, as well as the sewage water. When the deposit is scraped off, the pipe is seen to be pitted underneath. Carbonate of lead is a chief element in the crust. We are indebted to Dr. Fergus for first calling the attention of the public to the connection which often exists between the prevalence of zymotic disease and such changes in the soil pipes leading to the escape of the sewer gases. Mr. Stanford recommends the discontinuance of the use of lead soil pipes and the substitution of earthenware syphons and flanged cast-iron pipes. The explanation of the cause of the deposit is not at present thoroughly worked out.

DR. BURDON SANDERSON has constructed an ingenious instrument for measuring the frequency and intensity of the respirations. A large square pair of steel calipers grasps the chest, and movements are communicated by means of a steel spring inside the calipers, and, by the movements of the spring, an India-rubber sack containing air is compressed. The compression of the first sack is communicated to a second large one, and the motion of this to a delicate lever, furnished with a brush and ink to record the motion on a revolving cylinder. The whole movement of the chest is given in outline, and the instrument is sufficiently delicate to act as a cardiograph.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

PREVALENCE OF PHTHISIS IN THE BRAZILS.

SIR.—In the number of your JOURNAL for the 28th of last August, the *Gazeta Medica da Bahia* is reported to have said that phthisis was becoming frightfully frequent at Bahia, owing to the habits of intemperance introduced here by the Germans. By the wording, I recognised at once the reproduction of a notice given in the *Gazette des Hôpitaux* for August 24th, concerning which I have already written to the editor. That notice refers, no doubt, to a paper on the causes of the increasing frequency of phthisis in Brazil, and especially in Bahia, published by me in No. 57 of the *Gazeta Medica da Bahia* (translated in the *Archives de Médecine Navale* for November 1868, by Dr. le Roy de Méricourt; and in the *Boston Medical and Surgical Journal* for November 1868, by Dr. Colting).

In this paper, I tried to show that phthisis, far from being rare, as it had been supposed to be in hot countries, was very frequent in Brazil, and becoming more and more so; that this could not be attributed to immigration of foreigners, but rather to the increase of population, the crowding of individuals in the large maritime cities, with its necessary baneful influences and the greater facility for transmission of the disease it afforded. And, what I considered particularly active in predisposing the population of Brazil to phthisis, was a change in their habits of living, noticeable chiefly since twenty or thirty years, which I tried to exemplify and demonstrate statistically. I had then, of course, to mention the greater consumption of strong drinks; but I did not allude to Germans or Portuguese in a single word. I feel the more bound to protest against such a disfiguration of my paper, as the *Gazette des Hôpitaux* attributes its statements to the *Gazeta Medica da Bahia*, of which I have no pretensions of being the representative, having only stated in my paper my own individual opinions.

By the insertion of these lines in an early number of your JOURNAL, you would greatly oblige me.

I am, etc.,

Bahia, October 12th, 1869.

DR. OTHO WUCHIERER.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Mr. P. Hewett, London; Dr. J. Paget, London; Mr. J. Z. Laurence, London; Mr. J. Birkett, London; Dr. G. Harley, London; Dr. D. C. Black, Glasgow; Dr. E. P. Philpots, Leamington; Dr. E. P. Philpots, Leamington; Dr. W. Mac Cormac, Belfast; Mr. J. Troutbeck, Carlisle; Dr. Nicolson, Portland; Mr. Milner M. Moore, London; A Member of the British Medical Association; Mr. F. G. Passmore, London; Dr. W. F. Ramsay, London; Mr. W. Dickinson, London; The Secretary of the Pathological Society; Mr. Cross, London; Mr. S. Westwood, Birmingham; Dr. Brittan, Bristol; Mr. Pollard, Torquay; Mr. W. P. Knott, Bugbrooke; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. J. Russell Reynolds, London; Dr. C. B. Fox, Scarborough; Mr. Victor De Méric, London; Dr. Bryan, Northampton; Dr. Gervis, London; The Secretary of the Epidemiological Society of London; Dr. Bastian, London; Dr. R. Buck, Inkberrow; Dr. G. Shannon, Wigton, Cumberland; Dr. R. Lord, Crewe; Mr. J. T. Waller, Fleggburgh; Dr. E. L. Copeman, Norwich; Dr. Skinner, Liverpool; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Treutler, Kew; The Registrar of the Medical Society of London; Quærens; Mr. W. Rivington, London; The Honorary General Secretary of the Ethnological Society of London; Mr. T. Watkin Williams, London; Dr. Felce, London; Dr. L. Kidd, London; Messrs. Herbert, Paterson, and Probyn, London; Mr. W. Monckton, Brenchley; Dr. Whitelaw, Kirkintilloch; Dr. J. Hardie, Harpurhey; Dr. Leonard, Upper Norwood; Dr. Willis, Barnes; Mr. C. Williams, Norwich; etc.

BOOKS, ETC., RECEIVED.

Scarlet Fever; a Manual for Mothers and Nurses. By J. Marshall, M.R.C.S. London and Dover: 1869.
Special Report of the Medical Officers of Health for Mile End Old Town upon the Epidemics of Scarletina and Relapsing Fever for 1869.
Observations on the Cure and Prevention of Puerperal Fever. By Thomas More Madden, M.R.I.A. Dublin: 1869.
Lectures on Surgery. By James Spence, F.R.S.E. Part II. Edinburgh: 1869.
Report on Public Health. By C. A. Cameron, Ph.D., M.D. Dublin: 1869.
An Historical Review of Nature and Results of Vaccination. By Vigorniensis. Cheltenham: 1869.

Results of Meteorological Observations, for the week ending Saturday, December 11th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.							Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	WIND.										RAIN.		
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.			Number of days it blew in certain directions.										Mean Force 0-12.	Number of days it fell.	Amount in inches.
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm, etc.				
BATH	30.020	1.173	39.2	38.4	37.4	93	49.2	28.1	21.1	43.1	36.9	65.0	..	9.2	3.4	..	2.3	2.7	..	..	0.7	..	..	1.3	5.1*	5	0.59
Dr. Barter, F.M.S.																												
BOURNEMOUTH	30.040	1.110	39.9	39.0	37.8	93	47.9	29.9	18.0	42.9	36.1	57.0	27.9	7.0	5.0	0.3	1	1	..	..	1	0.7	..	1	2.2	5	0.47
Dr. Compton, F.M.S.																												
DOVER	30.030	1.094	41.1	39.3	37.0	86	46.4	24.4	22.0	40.3	27.0	..	..	8.9	..	..	0.3	5	0.3	0.3	1	..	..	..	2.9	3	0.11
Dr. Parsons.																												
DUBLIN	30.013	1.361	42.6	40.9	38.9	87	50.8	33.4	17.4	44.6	39.4	..	28.8	7.4	..	0.5	0.9	2.6	0.7	..	1.5	0.5	0.3	..	2.6	3	0.35	
Dr. J. W. Moore.																												
KEW	29.987	1.179	40.4	39.7	38.8	95	50.3	30.9	19.4	41.9	37.5	53.7	..	10	1.1	..	0.7	2.3	..	..	1.3	0.3	..	2.3	1.7	3	0.33
Dr. Treutler, F.L.S., etc.																												
LLANDUDNO	30.000	1.280	39.7	38.1	36.0	87	50.0	30.6	19.4	42.2	35.2	..	..	7.9	..	..	..	4.7	0.3	..	0.3	1.7	..	..	?	1	0.35
Drs. Nicol and Dalton.																												
MALVERN	30.076	1.162	36.8	36.1	35.1	94	46.3	29.2	17.1	40.0	33.6	46.2	25.3	9.8	?	..	1	0.7	0.3	..	1	0.7	..	3.3	2.6*	4	0.41	
Messrs. W. and J. Burrow.																												
NORWICH (BETHEL STREET)	30.102	1.206	39.8	38.8	37.5	92	49.0	33.0	16.0	42.0	39.9	..	31.5	..	..	..	1	4.5	1.5	..	..	..	..	..	..	0	0
C. M. Gibson, Esq.																												
SCARBOROUGH	30.099	1.351	40.0	39.0	37.7	92	45.3	36.3	9.0	42.3	38.3	..	..	9.5	4.5	..	1.3	1	0.7	..	1	1.7	1	0.3	2.7	3	0.33
Dr. Fox, M.R.C.P.																												
SIDMOUTH	30.017	1.124	40.6	39.1	37.2	88	49.2	31.0	18.2	44.9	36.0	..	..	6.4	3	..	2	4	..	..	..	..	1	..	1.2	4	0.78
Dr. Mackenzie, F.M.S.																												
VENTNOR, I. OF WIGHT	30.036	0.856	42.4	41.1	39.5	90	48.0	33.4	14.6	43.8	37.6	..	..	7.0	4.1	0.3	0.7	4.3	0.3	..	1	..	..	0.3	4.4	3	0.30
J. B. Martin, Esq., M.R.C.S.E.																												
WORTHING	30.033	1.105	40.0	38.5	36.5	88	49.2	29.3	19.9	43.5	34.7	78.7	26.3	7.1	2.9	0.3	4	0.3	..	0.7	..	..	..	1.7	1.8	4	0.30
W. J. Harris, Esq., M.R.C.S.E.																												

* Mean hourly velocity in miles.

REMARKS.—The mean pressure of the atmosphere has been slightly above that of the previous week, but the range has been considerably greater, amounting in all cases, except Ventnor, to more than 1 inch. The range extended over the whole week, the highest reading of the barometer occurring at nearly all stations on the first day of the week, and the lowest on the last,—the reverse of what was noticed last week. Mean temperature has been rather higher, owing chiefly to the increase which took place towards the end of the week; and its range has been more limited, though still variable, amounting to 22 degs. at Dover and only 9 degs. at Scarborough. The degree of humidity has been considerably higher, and generally but little below the point of saturation. Winds have varied but little, E. and N.E. being the prevailing directions; their mean force has been on the whole light or very moderate. The amount of clouds has been generally great, and the sky mostly overcast at nearly all stations. Ozone has diminished slightly. Rain fell at all stations, except Norwich, but the quantity has been mostly small. The weather of the week has been gloomy and dull;—the sky being for the most part obscured by the heavy clouds. Fogs and mists, too, have been very prevalent both at the coast and inland stations, and the air has been almost saturated with moisture. Towards the end of the week a rather rapid fall of the barometer set in, accompanied by fresh S.W. winds and an increase in temperature. At Bath measles and bronchitis are reported as prevalent. In Dublin during the week ending December 4, scarlatina caused 7 deaths, being a decrease of 11 on the preceding week; fever caused 13 deaths, the average for 5 years being 8; and bronchitis caused 31 deaths, being 3 less than the previous week. In the metropolis 1,759 deaths occurred during the week, being an increase of 54 deaths on the week before (Registrar General's Report). No fresh cases of scarlatina have occurred at Worthing. The general death-rate throughout the country has been higher during the week (*Vide* Registrar General's Report).

Kew, December 15th, 1869.

W. J. TREUTLER.

REMARKS

ON

A MODE OF APPLYING THE SHORT
MIDWIFERY-FORCEPS,PRODUCTIVE OF LESS PAIN TO, AND DISTURBANCE OF, THE
PATIENT, THAN THAT USUALLY ADOPTED.*By JAMES BRAITHWAITE, M.D., Leeds,
Editor of *Braithwaite's Retrospect of Medicine*.

THERE is a large class of cases, especially in primiparæ, in which, perhaps from some slight disproportion between the head of the child and the pelvis of the mother, from constitutional debility, or from accidental rupture of the membranes early in the case, the labour is exceedingly tedious, and the recovery afterwards correspondingly tardy and imperfect.

Now although, as an obstetric instrument, the forceps is everything that can be desired in cases of a severe type, yet for those in question it is hardly suitable. The instrument is seldom at hand when wanted, and has to be sent for, to the great alarm of the patient and her friends. It is, moreover, necessary, before it can be used, to move the patient to the edge of the bed, to empty the bladder, and to make other preparations, which arouse her fears still more; and they are not lessened if she hear the metallic click of the blades.

It is unnecessary for me to picture to you the questioning one has to undergo from the friends, the trouble required to calm the fears of the patient, and the unjust blame to which we may be subjected by our female critics for using instruments which "never were needful when they were having a family". You will doubtless be able to recall to mind times when you have waited many weary hours, wishing you had some means of assisting the descent of the head, yet where you hardly liked to apply the forceps, though the waning powers of the patient made you anticipate such a termination to the case. Doubtless, it has been during the ample time for thought unwillingly enjoyed at such times, that the vectis was invented—the whalebone loop, the suction-tractor; also, more recently, Sheraton's steel fillet and Debenham's whalebone fillet. There is no doubt, however, that none of these instruments can compare with the forceps for safety to both mother and child, if only the latter can be deprived of its objectionable features. If, although really an instrument of two blades, we can have one possessing the portability of the vectis, so that, when going into the country or to a place some distance from home, this blade can be slipped into the breast-pocket, and there remain out of sight, and without the chance of the noise which would arise if two blades were so placed; if we can apply this blade almost without the knowledge of the patient, without causing her the least pain during its introduction, and without disturbing her position in the bed, unless too near its foot to allow of the proper movements of the handles during extraction,—it appears to me that we shall have all we want. There would be, moreover, this additional advantage, that one instrument would do for all cases, whether those in which a little judicious assistance will be of great advantage to the patient, although not *absolutely* necessary to the termination of the case; or serious cases of impaction.

I am not writing a paper advocating the very frequent use of the forceps; but I cannot here refrain from reminding you how fatal ergot is to the child, when given in tedious labours from disproportion; and how preferable aid of the nature we speak of is, with the view of saving the life of the child.

Acting upon the hint conveyed by Sheraton's steel fillet, I have had an instrument constructed, consisting, as you see, of an ordinary pair of short forceps-blades, accurately adapted to one another—the convexity of one to the concavity of the other, and connected firmly together in this position by two India-rubber bands, which are easily removeable by rolling off, when it is wished to separate the blades. This is the position in which they are intended to be maintained when not in use, and during introduction. When not in actual use, the blades are protected by a small leather case. They are used in the following way. The external parts being separated by the first two fingers of the left hand, the blade is to be slipped in between them (and it is sufficiently narrow for that purpose). Keeping the point in close contact with the head, it is to be passed directly into the hollow of the sacrum, precisely

as the vectis is introduced. In the ordinary position of the foetal head, the point of the blade will now be over the left eye, but above it about two inches. The blades must now be separated, and glided one downwards and the other upwards, until, as regards the pelvis of the mother, a line running from the concavity of one blade to the concavity of the other would be exactly at right angles to its antero-posterior diameter. With exercising a little pressure, they will now lock, and the case may be proceeded with. In the first or common position of the foetal head, the upper blade will be on the right temporal ridge, just within the line of the hairy scalp; and the lower blade just behind the left ear. In the second position, this will be reversed, and the lower blade will be just behind the right ear. The occipito-posterior position's nature will have almost invariably converted into occipito-anterior by the time the head is sufficiently low down in the pelvis for the application of the short forceps. To those who may object to the parts of the foetal head grasped in this way of using the forceps, I may reply as follows.

1. I have not recommended its use in this position, except in the less severe class of cases. At the same time, I may say that I have applied it at least forty times in this position, and that some of these cases were very difficult; and only in one case was there any bad result for which I could blame the forceps—the child dying in convulsions soon after birth. This might have resulted simply from the severe labour.

2. The long forceps seizes the child in almost exactly the same position, being applied at right angles to the pelvis of the mother, without reference to the position of the child's head; and, when the head has been brought down by them into the cavity of the pelvis, it is not thought necessary to alter its position on the head, or to substitute the short forceps applied over the ears.

3. Compression is effected by elongating the head exactly in the direction in which nature does it. A child's head is not compressed laterally in labour; it is elongated, the anterior part of the skull being flattened.

4. Compression is not effected in a dangerous direction. It is not along the same plane as it would be if from the forehead to the occiput. The line of pressure extends diagonally across the head, and from the top to the base. The lower blade lifts, as it were, the occiput into its hollow; whilst the upper slightly compresses the vertex. At the same time, the hold of the instrument being to a great extent a side to side one, we have almost all the advantages of the latter mode of grasp, in depressing the vertex, and rotating the head under the pubic arch when the time for that movement occurs.

I need hardly say that there is nothing to prevent the blades being passed separately in the usual manner, if thought desirable from the degree of impaction being considerable, and the difficulty in extraction expected to be great.

Before concluding, I will enumerate the advantages which are offered by the use of this form of forceps; and, in so doing, I leave the subject to your judgment.

1. It is light, portable, and can be carried in the breast-pocket, where it is invisible, and where it cannot be lost in travelling.

2. Its application is much more rapid than that of the ordinary short forceps; indeed, I think a minute and a half or two minutes is generally sufficient.

3. It causes so little annoyance to the patient, that its introduction and application to the head may be said to be painless. Now, this certainly cannot be said of the ordinary way in all cases; for, when the head is distant an inch and a half from the perinæum, the blades have to press considerably upon the external parts of the mother to get the points round the convexity of the head.

4. It is much safer to the child than the use of ergot, which should be confined to those cases in which the sole cause of delayed delivery is sluggish pains.

5. It is unnecessary to disturb the position of the patient, unless she be too near the foot of the bed. It is also needless to empty the bladder, unless we can feel it sensibly distended with urine.

6. Compression is effected naturally, the elongation of the head being assisted. I may here remark that, unless a certain amount of compression be exercised by forceps, the traction-power is confined entirely to the tips of the blades, and injury is likely to result.

7. A peculiarly distressing accident sometimes results from the use of the short forceps across the ears; viz., paralysis of the portio dura. There is no risk of this when it is applied in the way of which we are speaking.

8. The same instrument may be applied in the ordinary way in severe cases of impaction, if the operator think it desirable.

Of course, any ordinary pair of forceps can be applied in this way, except that each blade must be introduced separately.

The best way of avoiding rupture of the perinæum is, as the head

* Read before the Midwifery Section at the Annual Meeting of the British Medical Association in Leeds, July 1869.

presses on the external parts, to unlock the blades, and to let the handles cross one another as much as they will. The blades will now lie closely adapted to the head, and will not stretch the perinæum at all. At the same time, they can be reapplied instantly, if necessary. This is better than entirely withdrawing them, which should only be done when the head is pressing well upon the perinæum and stretching it; the pains being sufficiently strong to render it evident that no further artificial aid is required.

ON THE NATURE OF THE CONDITION KNOWN AS CATALEPSY.

By J. THOMPSON DICKSON, M.A., M.B. (Cantab.), M.R.C.P.,
Medical Superintendent of St. Luke's Hospital.

THERE is no doubt that catalepsy is one form of the manifold subjective phenomena which may be attendant upon an imperfectly nourished nervous system; but the vague notions which have floated in the minds of many regarding its absolute cause have induced me to seek for facts upon which some certain explanation or probable theory may be founded.

The difficulty in such an inquiry necessarily is the rarity of death under such a condition, whereby a reasonable or probable theory might be ratified by observation of the morbid anatomy of the brain and spinal cord in the subjects of this form of nervous disorder. I am inclined, however, to think that pathological observation would not assist us very materially; while we may draw some very certain conclusions from the comparison of the manifestation of this state with the expressions of allied nervous conditions.

Dr. Watson, in his ever recent *Lectures*, has placed catalepsy and hysteria in the same category with neuralgia and tic douloureux; which latter forms of nervous disorder Trousseau placed under the head of epilepsy, and with good reason. Dr. Watson (*Lectures on the Principles and Practice of Medicine*, vol. i, p. 716) expresses his opinion, which is endorsed by Dr. Chambers, that the condition, in one case at least under their observation, of temporary loss of muscular power, without loss of consciousness, was dependent upon a diseased state of the blood-vessels of the brain.

The late Professor Schroeder van der Kolk demonstrated beyond all question that in epilepsy the capillaries of the medulla oblongata become dilated—a fact which every one can observe, either upon the human subject, or upon animals the subjects of induced epilepsy. Trousseau advanced the idea that the condition of the brain in epilepsy was that of anæmia; which opinion was not only afterwards reduced to absolute demonstration by himself, but has been shown to be true by the beautiful experiments of Dr. Brown-Séquard.

The many experiments performed by myself on animals confirm, in my mind, the same facts. The brains—particularly the surfaces of the hemispheres—of guinea-pigs and rabbits, which have died during convulsions, I have found on examination almost absolutely anæmic.

These observations I have mentioned in order to lead up to the absolute pathological fact of which I am about to speak—viz., the identity of the condition of catalepsy with that of epilepsy.

The exception taken to this idea, no doubt, will be the assumption that catalepsy is “loss of voluntary power over the muscles, without loss of consciousness;” while the pathognomonic symptom of epilepsy is “loss of consciousness,” with or without loss of voluntary power over the muscles. The distinction, however, will not bear the test of close scrutiny and comparison; and it is impossible to draw a line of demarcation, when we consider the wide extension of the generic term epilepsy. The absolute duration of loss of consciousness in *le petit mal* is often only momentary, and yet the condition is unquestionably epileptic. A patient with *le haut mal* not long since under my care, violent in the extreme, was only unconscious during the first few moments of the seizure, and was able to repeat accurately conversation that had occurred during the whole time she was in the state of clonic spasm. While reviewing the cases of so-called partial catalepsy that I have had the opportunity of observing at Guy's Hospital and in private, although all the patients have been able to relate circumstances that have occurred during their paroxysms, yet I have never yet seen one in which there was not some amount of loss of consciousness. The patients may remember the invasion of the attack, and be conscious of what passes during the period of recovery; but I am convinced that there is a stage in which the mental faculties are altogether in abeyance, and during which time consciousness is absent.

The loss or retention of muscular control hardly need enter into our consideration at this point; as, in epilepsy proper, there may or may not be any appreciable disturbance of the muscular function.

In the instance of one case of catalepsy that has for several years been under my observation, although, after the attack, the patient is able to speak of almost every subject that has occurred during the seizure, which is marked with great rigidity, yet she has never been able to remember all the occurrences of the invasion of the fit. This lady has a daughter who is the subject of *le haut mal*.

The most instructive and confirmatory instances indicative of the identity of the conditions of catalepsy and epilepsy, or rather, perhaps, showing catalepsy to be a specific manifestation to be classed under the generic head of epilepsy, are to be found in those almost perfect cases such as the one detailed by Drs. Sutherland and Gooch, and narrated by Dr. Watson. The close correspondence between the more perfect cases of catalepsy and *le petit mal*, especially the maniacal excitement which is sometimes attendant upon both forms of nervous affection, seems to render the essential condition and pathognomonic sign—the loss of consciousness—merely a question of degree, which may be greater or less in either the one or the other; while the loss of muscular control, so far as it may be taken to be a phenomenon of value, would certainly preponderate towards the epileptic viewing of catalepsy. A very striking case was in April last admitted into St. Luke's Hospital. The evidence afforded by her certificates pointed towards mania as her special mental condition; and she spoke of a delusion under which she was labouring—viz., an operation which she believed had been performed on her while she was under the influence of chloroform. She then complained that chloroform was often administered to her, and that she thereby often became insensible. On the day after her admission, while passing from the airing-court to her ward, she sat down on the staircase; and, when I spoke to her, I found she was unable to answer me. On trying to move her, I found that she was as rigid as *rigor mortis*; and she was as blanched as death. She very soon recovered, and was able to walk to her ward; and, on being questioned, she said that chloroform had been given to her. For several days she had, at variable times, a similar attack—each being preceded by maniacal excitement, and followed by violence; the intervals being more or less lucid, and often occupied with needlework, or in music and singing, which she was able to execute with both ability and taste. The attacks continued of daily occurrence for a fortnight, and they disappeared for three days; she then became again maniacal, and remained so for hours; after which she had a seizure, which was followed by a secondary period of excitement; and she again complained that chloroform had been given to her. This attack was succeeded by an intermission of three days, and then by another outbreak. About an hour afterwards, she became deathly pale; and I ordered her to bed. It was, however, only possible to place her on her bed; for she was insensible immediately she reached her room; and, on attempting to move her, I found that she was as fixed as a rigid rod. I then placed her arms and hands in various positions, in all of which they were retained as though fixed; but it was necessary to hold them in their position for a few moments, in order to allow the muscles to become set. I then pricked her two or three times with a pin, from which she did not in the least shrink. She was throughout as pale as an ordinary epileptic; and on recovery, in about thirty minutes, was again violent and maniacal. After recovery, she told me that she remembered being on her bed, but did not remember how she came there. She remembered my being in the room, that I had pricked her with a pin, and that I had spoken of her fit as being cataleptic; but said that she had never been subject to either catalepsy or epilepsy. Similar attacks recurred three or four times, each becoming less marked in their physical manifestation, and at longer intervals. After each, however, her mind became increasingly obfuscated; and, although the fits have disappeared entirely since the 1st of June, she is more or less imbecile.

This almost perfect case furnishes us with additional evidence; and from the comparison of the facts we have adduced regarding catalepsy with those established regarding epilepsy, I think we may fairly draw the following conclusions.

1. Although we cannot positively assert what the proximate cause of either condition is, yet it is incontrovertible that anæmia of the cerebral lobes is the first attendant phenomenon of epilepsy; and all observation leads to the same opinion as regards catalepsy.

2. Loss of consciousness, the immediate result of cerebral anæmia, occurs equally in catalepsy as in epilepsy, though it may be as fleeting in the former as in some forms of the latter, as exemplified in *le petit mal*.

3. The mental disturbance in either epilepsy or catalepsy is identical, and results from the same cause—viz., the anæmia and consequent malnutrition of the cerebral lobes; while its termination—dementia—is likely to be the same in either case.

The evidences afforded are strong, and I think sufficiently so to warrant the opinion that catalepsy, instead of being a special and distinct form of nervous disorder, is to be considered as a specific form of epi-

lepsy, and to be regarded as epilepsy, in the same manner as *le petit mal* is considered epilepsy, and a result of the same proximate cause; the difference in the muscular manifestation bearing comparison with any other specific form of epilepsy, and occurring in consequence of one or other, but as yet unknown, particular cerebral centre becoming more or less implicated in the disturbance.

CLINICAL MEMORANDA.

[Under this head, we shall publish from time to time, as materials accumulate, short records of remarkable cases in practice which are sufficiently rare, interesting, or instructive, to deserve record, but do not call for lengthened statement or comment. Brevity and point should be the valuable characteristics of cases forwarded for this column.]

FRACTURE OF BASE OF SKULL: OBSCURE SYMPTOMS: DEATH: EXTRAVASATION OF BLOOD.

By FREDERICK GULL, Esq., Ipswich.

ON the 26th inst, G. C., a man addicted to drink, whilst putting up the shutters at an inn, was heard by his master to fall heavily upon the pavement, and, upon going to his assistance, he was found lying on his back, with the shutter upon him. He was taken into the house, and speedily became conscious, and soon afterwards got up, and said he would go on with his work. This his master would not allow him to do, but advised him to sit still for a while and then to go to bed; this he did, walking upstairs, and not complaining of anything. Two men slept in the same room. Nothing was heard of him during the night, but when the last man left the room, about 7 o'clock A.M., he found him dead. Dr. Mills was at once sent for, and, upon examining the body, found only a slight contusion on the left side of the head; there was no escape of blood or serum from the ear. As he thought there was not sufficient evidence of the cause of death, the coroner ordered a *post mortem* examination, and, at the request of Dr. Mills, I assisted him.

On reflecting back the scalp, a portion of it on the left side, about as large as the palm of the hand, was found contused, and infiltrated with blood. On removing the calvarium, a large clot of blood between the dura mater and skull was at once seen, extending over nearly the whole of the left hemisphere of the brain. On removing this, a fracture was found, reaching from the occipital protuberance to and through the petrous portion of the temporal bone. Blood was also extravasated at the base of the brain, and in the lesser lateral ventricle. The brain-matter was softer than it should be in health.

CASE OF POISONING BY ATROPIA.

By FRANCIS H. PARSONS, M.D., Admiralty Surgeon, Barking.

A STRONG healthy man, aged 45, swallowed by mistake rather less than two drachms of solution of sulphate of atropia, which had been prescribed as an ophthalmic remedy for his son. He described the taste as like that of quinine; but thought nothing more about it until symptoms began to manifest themselves. When I was called to his assistance, he was perfectly conscious, and able to describe his symptoms clearly. He said that he thought he had accidentally swallowed some solution of caustic, which his son was using for his eyes. I therefore tested the three or four drops that remained in the bottle, with a little chloride of sodium, but, getting no precipitate, I began to suspect that he had taken atropia. An emetic of mustard and warm water was immediately administered, and followed, after a short time, by vomiting. The pupils now became dilated, and he complained of excessive dryness of the mouth and throat, with a sensation of burning and choking. He had great difficulty in swallowing, but the respiration was free, the pulse was 130. He complained of great dizziness, and a sensation of weight on the top of his head, and over his eyes. He had frequent rigors, and loss of muscular power, being unable to walk, or, as he expressed it, "to feel his legs," he became very restless and agitated; he had great difficulty in articulation, and micturition was only accomplished after some trouble.

The stomach having been thoroughly evacuated, by means of the stomach-pump, animal charcoal was administered to the extent of four ounces, and some solution of carbonate of ammonia was given at frequent intervals. After about two hours he became very drowsy, but was kept awake with strong coffee for eight hours; after which he slept soundly for some time. On the following morning, his pulse had fallen to 50, he still complained of dryness of the mouth and throat, and slight dizziness; the pupils were somewhat dilated, but he was able to read large print. A dose of castor-oil was ordered, and a con-

tinuance of the ammonia. He had quite recovered in forty-eight hours, and was able to walk out on the third day. A peculiar effect was noticed by all his friends; his hair, which had been previously but slightly tinged with grey, had become almost white.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

ST. BARTHOLOMEW'S HOSPITAL.

ENTERIC FEVER: RELAPSE: RECOVERY.

MR. ARTHUR ANDREWS, House-Physician, has sent us an interesting case of enteric fever, occurring in a boy aged 15, in Dr. Black's wards, in which convalescence took place, but, after a month's interval, a relapse occurred, which terminated favourably in a fortnight. The patient was admitted on October 4th. Ten days previously, he had received a blow on his head, followed by headache and sickness. On the 28th, rigors and looseness of the bowels supervened. On admission, he was suffering from febrile symptoms; the tongue was thickly furred in the centre, the abdomen was slightly distended and tender over the right iliac fossa, and there were several elevated rose-coloured spots, disappearing on pressure, on the back. His pulse was 100, and his temperature 102.4. He passed through the first attack, which was not one of much severity, and presented nothing unusual of interest. There were abundant spots, sudamina, and but slight diarrhoea. His temperature, which rose to 105, its greatest height on October 8th, commenced decidedly to descend about the 14th, and, three days later, was about normal. After this, he rapidly recovered strength, and, on Nov. 1st, was sitting up every day. On Nov. 14th (the 48th day), he was seized with pain in his left side, outside the left nipple, troublesome dry cough, pulse 120, and temperature 103.8; but no abnormal chest-sounds were present. His temperature rose on the 15th as high as 105; the cough and pain continuing, but, still, without physical signs. On the 19th, however, about twenty rose-coloured spots were observed on the chest and abdomen, and, on that day, there was scarcely any cough or pain in the chest. The temperature began to subside on November 25th, and, on the 29th, it was normal. During the whole of the relapse, the bowels were opened generally once a day, but not loosely. On November 30th, he was ordered fish for dinner; and, on December 2nd, was allowed to sit up. He is now advanced in convalescence. No indiscretion in diet or otherwise could be discovered to account for the relapse.

THE UNITED HOSPITAL, BATH.

[Continued from page 656.]

THE Museum is small, but very well lighted, and the specimens are well arranged and displayed. There is a complete manuscript catalogue, which might be rendered still more valuable if more of the specimens were described at some length. The room contains a good series of comparative anatomy, in addition to the pathological collection, and might, with little trouble, be made an efficient educational museum for medical students.

There is an interesting specimen of melanosis of the eyeball, for which excision of the globe was performed, after several operations had been done for the partial removal of the rapidly recurring growth. There is no information as to the condition of the optic nerve at the time of the excision, but it was found after death that the disease had extended to the brain.

Dr. Barton, the registrar, showed us another specimen (not yet put up) of tumour in the longitudinal fissure, projecting into the anterior lobe of the left cerebral hemisphere; it is as large as a small apple; the catalogue tells us that the "eyesight was affected; the eyes were prominent, small, unaffected; no paralysis, loss of language, or speech, patient, a female, aged 34; disease ten years' duration."

Students and Clinical Work.—There are only two or three students attending the hospital, as dressers. It seems a great pity that so much good clinical work as this hospital affords should be, as regards students, comparatively speaking, thrown away. The opportunities for work, especially surgical, are excellent. There is no maternity department, but we understand that a lying-in charity, which was formerly separate, has lately been connected with the hospital, in a way which renders it easy for students to attend plenty of midwifery cases.

Out-patients, accidents, and emergencies are admitted without recommendation; in-patients, not urgent, obtain subscribers' letters.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, DECEMBER 11TH, 1869.

GEORGE BURROWS, M.D., F.R.S., President, in the Chair.

ON AMPUTATION AT THE KNEE-JOINT. BY GEORGE D. POLLOCK, F.R.C.S.

THE author commenced by drawing attention to the circumstance that amputation at the knee-joint had not been very favourably entertained until within the last thirty years, and that only very lately had it been much advocated. Having himself performed the operation in several cases with satisfactory results, he desired to bring his experience before the Society. After referring to the practice of Mr. Syme and of Mr. Samuel Lane, the author proceeded to say that, in the consideration of amputation through the joint, two considerations must be borne in mind; first, if there were disease of the joint and ulceration of the cartilages after the leg was taken off, the articular surfaces of the condyles and patella should be removed; secondly, if no disease of the joint existed, but amputation were requisite on some other account, then the articular cartilage should be left intact. The author related the particulars and results of eight cases in his own practice, and quoted communications received from other English surgeons. From various sources he had been able to collect forty-eight cases operated upon in England. These showed a gross result of thirty-six recoveries, and twelve deaths. A collection of American cases showed thirty-two recoveries and thirteen deaths,—thus giving a total mortality of 26·88 per cent. After some further account of American experience in the matter, the author described the improvement suggested by Mr. Carden of Worcester, of making the flap of skin from the front of the leg. He himself approved of the suggestion. The anterior flap should be long enough and broad enough to cover the whole of the exposed end of the femur. It should be so broad at its base as to be at least two-thirds of the circumference of the joint, the posterior flap at its base forming the other third. The author laid stress upon the anterior flap being of sufficient length (at least five inches below the lowest point of the patella), and was inclined to leave the patella in the flap when the joint was healthy. When it was diseased, he recommended the removal of the articular surface alone. The comparison between the stump usually obtained after amputation through the thigh, and that obtained after amputation through the knee-joint, was very much in favour of the latter, which was never conical or retracted, and was superior in strength and fitness for locomotion, in comfort and freedom from pain, and in capability to bear weight and endure exertion. It was also more easy to adapt a good serviceable artificial leg to such a stump. In conclusion, the author thought that the facts which he had brought forward, although not enough to lead to positive conclusions, were enough to commend the operation to favourable consideration.

Mr. HOLTHOUSE had performed amputation at the knee-joint in 1856, on a brewer's drayman who had a bad compound fracture of the leg. The constitutional symptoms denoted that the man could not recover without an operation; and the limb was removed at the knee-joint by a long anterior flap. A good stump was formed; but the man died soon afterwards. He would probably, being an unhealthy subject, have died under any circumstances. He had not since had an opportunity of performing the operation, but thought it preferable to amputation at the lower part of the thigh. The cartilage and the patella should be left.—Mr. R. B. CARTER said that Mr. Fearn of Derby had for several years performed the operation with good results. He (Mr. Carter) had done it in three or four cases of bad compound fracture in patients in the country. The wounds healed quickly; and the patients had useful limbs sooner than after amputation through the thigh. He made an anterior flap, leaving the patella. He thought that the flap recommended by Mr. Pollock was too long.—Mr. J. R. LANE said that the results of the operation showed it to be less dangerous than amputation through the thigh; and it had the advantage, that the stump could rest directly on the artificial leg, without the necessity of taking the pelvis as the point of support. The long anterior flap was necessary to the success of the operation. The cartilages of the femur and patella should not be removed. He hoped that the reading of the paper would lead to the establishment of amputation through the elbow and wrist joints. He had amputated through the elbow several times, with good results. Suppuration sometimes followed amputation at the knee; it apparently originated in the pouch of synovial membrane above the patella, but was ultimately followed by no bad result. It was not essential that the flap should adhere to the surface of the bones, as Velpeau supposed. The patella in the stump was drawn up above the con-

dyles, and the patient did not rest on it.—Mr. HOLMES pointed out, as advantages of the operation, the greater length and leverage of the limb, and the preservation of the attachment of the extensor muscles of the leg. These points were insisted on by Gritti, who, in cases of disease of the knee, divided the femur a little above the condyles, cut through the patella perpendicularly, and adapted the cut surfaces of the patella and femur to each other, to obtain osseous ankylosis. He (Mr. Holmes) had once operated in this way; but a sufficient time had not elapsed to enable him to judge of the result. He had examined the stump in a child who died some months after amputation of the knee, and had found the parts moveable on each other, the cartilages of the femur and patella being quite smooth.—Mr. BARWELL asked in how many cases it was necessary to make incisions to allow the escape of matter. He thought the preservation of the attachment of the adductor magnus of great importance.—Mr. BIRKETT would have performed the operation many times, if he had not been assured by mechanicians that the stumps could not be dealt with. Among his cases, in one there had been a remarkably sudden loss of blood, and sloughing, in the flap; the patient died of pyæmia. Another case—a child—did well. In another, the result was less satisfactory than could be wished, probably from the posterior flap having been made too small, so that, a part of the anterior flap having sloughed, the wound healed only by a tedious process of cicatrisation. He thought that a modification of the ordinary semicircular incision was the best.—Mr. COOPER FORSTER had amputated through the knee-joint twice; but he thought that the head of the tibia should be preserved, if this were practicable. He had made the old circular incision, and was well satisfied with the stump. In one case, the patient recovered; in the other, death occurred from pyæmia.—Mr. THOMAS SMITH had performed the operation in four cases. In one—that of a man aged 55, with a malignant tumour—the patient died; the other three recovered with excellent stumps. As to the instrument-makers, they had so long been in the habit of fitting bad stumps, that they found it difficult to deal with good ones. The wound was almost entirely integument; there were only two heads of muscle (the gastrocnemii) divided, and three arteries—the two sural and the popliteal. He thought that the patients suffered less from shock than after amputation through the thigh.—Mr. CALLENDER was not prepared to admit that amputation at the knee was less fatal than through the thigh; but he would prefer it as being at a greater distance from the trunk. In a case under his notice, matter had burrowed along the tracks of the tendons. This, however, was easily overcome.—Mr. POLLOCK believed that suppuration originated in the hollow space left when the patella was removed; but he could say nothing of its burrowing along the tendons. He had heard from Dr. W. Mac Cormac of Belfast, that he had twice performed the operation. He (Mr. Pollock) had, since the paper was written, operated successfully on a case of myeloid disease of the head of the tibia. As to the length of the flap, it was a matter of opinion; but he had seen the inconvenience of making it too short, and found five inches not too much. The long anterior flap was better than the circular, because the cicatrix could be drawn beyond the line of pressure.—A model of the stump, with its artificial limb, was exhibited by Mr. Pollock.

MEDICAL SOCIETY OF LONDON.

DECEMBER 6TH, 1869.

PETER MARSHALL, Esq., President, in the Chair.

MR. HAYNES WALTON read the outlines of a case of Sympathetic Ophthalmitis, following five weeks after injury to, and disorganisation of, the other eye. Two months later, the injured eye was extirpated. Nothing more was seen of the patient for two years. There was then no acute mischief; the pupil was closed by lymph. An artificial pupil was made, and the patient was able afterwards to gain his living as a messenger.

Mr. SAMPSON GAMGEE read a paper on Compound Fractures. He preferred to our own the French division into simple and *complicated* fractures, the latter including swelling and wound. A fracture with a penetrating wound may be, and often is, a less important injury than what is commonly called a simple fracture, though accompanied with much bruising of the soft parts and consequent swelling. In all cases, if the limb is to be saved, the author recommended adherence to the same principles of treatment—immediate reduction, immobilisation, and compression. Soft pasteboard splints are the agents chiefly relied on; but, to be efficient, they must include the joint above as well as below the seat of fracture—a principle firmly inculcated by Percival Pott, who was erroneously held to be the advocate of position against splints. On the great value of pasteboard splints, the sound practical teaching of Jean Louis Petit was contrasted with the fanciful objection

of Malgaigne. The fallacy of John Bell's objection to the use of compressing bandages in fractures was fully exposed; and a number of cases were adduced to illustrate the author's practice: amongst these, one of compound fracture of the ankle-joint, in which complete recovery followed excision of the astragalus and malleoli, and the application of a compressing pasteboard apparatus, only opened for the dressing of the wound once in nine days. Referring to Professor Lister's carbolic-acid treatment, Mr. Gamgee said: "Until the distinguished surgeon, whose intimate friendship during the whole of my studentship I shall deem one of the greatest happinesses of my life, thinks well to publish his views and experience in a collected form, it will not be possible to examine them with that completeness and impartiality which his character and position, no less than the importance and difficulty of the subject, deserve; but, having read all that the Edinburgh professor has hitherto published, and having seen his practice, with the advantage of his personal exposition, in the Glasgow Infirmary, I do not hesitate to say that, so far as I am able to judge, the practice of introducing carbolic acid into the innermost recesses of a compound fracture is a mistake."

An interesting discussion followed, in which Messrs. Hunt, Haynes Walton, De Méric, Carter, W. Adams, and Weeden Cooke, took part.

A vote of thanks having been unanimously accorded to Mr. Gamgee, the meeting adjourned.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, DECEMBER 7TH, 1869.

RICHARD QUAIN, M.D., President, in the Chair.

DR. MURCHISON read a report by Dr. Bristowe and himself on Dr. Moxon's case of Embolism of the Pulmonary Artery. They were of opinion that the man died of the embolism, but did not agree with Dr. Moxon that the clot was carried bodily from a distance.

Mr. CALLENDER read a report by Mr. Arnott and himself on Mr. Hill's case of Diaphragmatic Hernia. A part of the diaphragm had yielded, and the omentum and stomach had passed into the chest, forming the hernia.

Dr. MURCHISON presented a case in which a Gall-stone, three-quarters of an inch long by half an inch wide, had become Impacted at the Mouth of the Bile-duct. The patient was a female, who had suffered from symptoms of gall-stone for thirteen years. Jaundice supervened in April, and she died in October. She felt something give way several days before death; and at the autopsy, the mucous membrane was found to have given way in the neighbourhood of the stone. The cystic-duct was greatly dilated.

Mr. RICHARD DAVY exhibited the Finger taken from a young woman. She had received a deep cut in the finger, severing the flexors. The wound healed, but she retained no flexing power over the finger. It was thought desirable to amputate the finger, as it interfered with her employment.

Mr. DAVY also brought forward the case of a child who was run over, in which there was Rupture of the Liver in four different places; and the spleen, where the suspensory ligament is attached, was broken off. Eight ribs were also broken.

Dr. CRISP exhibited a Calculus, composed of Phosphate of Ammonia and Magnesia, from a dog. Calculi were never found in purely flesh-feeding animals.

Dr. CRISP also showed Diseased Ovaries from a fowl.

Dr. LEARED exhibited a specimen of Encephaloma of the Lung, in which during life cancer-cells were found in the sputa, and the patient exhibited symptoms of phthisis. The ribs were found fused into the mass. Referred to the Committee.

Dr. HILTON FAGGE brought forward a living specimen of Scleriosis, which showed well the link between Addison's keloid and scleriosis. The patient was a woman 65 years of age, but who, from the thickening of the skin of the face and consequent disappearance of the wrinkles, looked twenty years younger. The disease had commenced in the neck and extended over the face and downwards as far as the umbilicus. In front of each elbow was a hard band of indurated skin. The cases generally recovered of themselves.—Dr. Fagge, in answer to Dr. Crisp, said he was not aware that there was any difference between these cases and the brawny condition of the skin observed in children, except that there was œdema in children, and they died, whether because they were too weak to resist the disease until it had run its course or not, he was unable to say.

Mr. WEEDEN COOKE brought forward a young woman aged 17 with Enormous Induration of the Skin of the Thigh, which had commenced three years before. She had never menstruated, and there was a large quantity of sugar in her urine. She had been vastly benefited by iron.

—Dr. TILBURY FOX thought all these cases might be thrown into a group. They were hypertrophy of the connective tissue—probably due to lymphatic tissue-change.

Dr. PYE-SMITH showed a Heart removed from the body of a man in the anatomical room at Guy's Hospital, in the tissue of which were numerous small Abscesses. Pericarditis had been set up by their presence. In the left hypochondrium was a fibroid mass, the centre of which was filled with pus and cretaceous matter. He thought this growth was of syphilitic origin. The liver was cicatrised, and the testes were traversed by broad bands.

Dr. PYE-SMITH also showed the Spleen from a girl who died with Diarrhoea and Prostration, with Chlorosis. There was diphtheritic inflammation of the colon, and a similar condition of the fauces. The spleen weighed twelve ounces; it was dark, but covered with light-coloured and firm nodules, permeating it throughout, like a case of anæmia lymphatica. Microscopically, it consisted of small cells and slight stroma. There was, however, no glandular affection elsewhere. There was at the most only slight increase of white blood-corpuscles.

Mr. LAWSON exhibited a specimen of Cystic Disease of the Breast of two years' growth, which he had removed in June 1868, from a female aged 60. She was now perfectly well. Two of the cysts communicated with one another. He thought the tumour was primary, and not originating from another growth.

Mr. LAWSON also exhibited a Pendulous Fatty Tumour like a cricket-ball with a pedicle, which he had removed from the neighbourhood of the anus of a stout woman.

Mr. POLLOCK showed Diseased Bone from Excision of the Elbow-joint, which had been removed by Mr. Wilkes of Salisbury. Generation of new bone had taken place to the extent of four inches.

Dr. THOMPSON DICKSON showed two specimens of Thickened Dura Mater from Insane Patients. In the first, from a case of melancholia of fifteen weeks' duration, the dura mater was of great thickness. The man had been a drunkard for two years. In the second, from a woman aged 32, labouring under dementia of two months' duration, which occurred three months after delivery. The dura mater was intimately adherent, and the falx major ossified. Several nodes projected from the occipital bone.

Mr. PICK showed a Tracheotomy Tube which had been worn in the Trachea for five years. The outer part was entirely gone.—Mr. NUNN thought that the friction of the respiratory movements had produced the change. He had a patient who had worn out several.—Mr. HULKE had seen tubes used in the nasal duct, where there could be no friction, worn away to a fifth or a sixth of their original size.

Mr. PICK also exhibited a Fractured Humerus from a child in which the external condyle had become separated from the rest of the bone and carried upwards, where it had become united to the left side of the humerus.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

1. *Perineal Lithotomy: Dolbeau's Operation.*—2. *Phthisis: Professor Michel Peter on Tolerance of the Organ, and Tolerance of the Economy.*—3. *Chloroform in Midwifery.*

Paris, Monday, December 20th, 1869.

1. *Perineal Lithotomy: Professor Dolbeau's Operation.*—On November 13th, I saw Professor Dolbeau perform an operation peculiarly his own, which he calls "*lithotrité perinéale*". The subject was a young man. The stone was of considerable size. The membranous part of the urethra having been cut into, the stone was forthwith crushed and removed. The operation was performed when the patient was in a state of complete anæsthesia from chloroform, and occupied about forty minutes from first to last. I need hardly say that there is nothing very brilliant to the eye of the spectator in an operation of this kind; it does not dazzle the students like lithotomy completed in a minute by a Liston or a Fergusson. But, when I state that the case now referred to was Professor Dolbeau's twenty-first successful case of perineal lithotomy, it is evident that the operation has more substantial merits than brilliancy to recommend it. Not only have the cases been successful, but the recoveries have been rapid and without fistula. A few days after the case referred to was operated on, Professor Dolbeau performed the same operation upon an old man, who has since died—not, however, from the operation. This is the only case in which death has afforded an opportunity of making an anatomical examination of the parts operated on. The following notes of the case are, therefore,

of considerable importance. I may remark that I had an opportunity of minutely inspecting the parts, and having them demonstrated to me by the professor, who likewise showed them last week at a meeting of the Société de Chirurgie.

In the case of the deceased old man, the stone was large, but not larger than in some of the other cases. Complete anæsthesia by chloroform was induced. That being accomplished, the patient was held in the lithotomy position by two assistants. The operator began by making an incision of two *centimètres* in length, through the skin of the perinæum, in the median line. The incision was carried back as far as the mucous coat of the anus. He then divided the tissues of the perinæum, cutting back as far as the muscular fibres of the sphincter, so as to bring them into view without injuring them. In front, he pushed the bulb of the urethra quite out of the way of the knife. With the index finger of the left hand, which served him as a director during this part of the operation, the operator could now feel, through the membranous portion of the urethra, the groove of a catheter previously introduced through the penis into the bladder. Guided by his finger in the wound, he now made a slit in the membranous portion of the urethra with the bistoury. By this slit he introduced a dilator of a special construction. This instrument is formed of six branches, which branches, by means of a very simple mechanism, can be separated so as to be parallel to one another; its diameter when closed is ten *millimètres*, and twenty *millimètres* when open. By using this instrument gently, dilating and shutting it alternately, the operator reached the prostatic portion of the urethra. He then withdrew the catheter. Continuing the process of dilatation in the same manner in which he began it, he was enabled to dilate the neck of the bladder, and to get free access into the cavity. In this way there was formed a straight passage, nearly two *centimètres* in diameter, leading from the bladder to the perinæum, situated between the bulb of the urethra in front and the rectum behind. Neither the bulb nor the rectum was implicated in the incision, but both were displaced and squeezed up. Through this straight passage, powerful forceps were introduced, by which the stone was crushed. By means of smaller forceps, the fragments were laid hold of, and extracted.

Several times during the operation, Professor Dolbeau injected water into the bladder; this water was retained, which showed that the sphincter of the bladder had not lost its contractile power. There was no hæmorrhage during the operation, and no dressing of the parts was required after the operation.

After going on well for some days, the patient died, after an attempt to hang or strangle himself. From the first, he showed a desire not to recover. Death cannot, I think, in this case, be directly ascribed to the operation.

The results of a very carefully performed autopsy may be thus briefly summed up. The bladder was quite healthy. No tear and no trace of inflammation could be detected. The neck of the bladder, which was shut, was in no degree torn. The bulb was in a perfectly healthy state, and was not involved in the incisions. The thickness of the tissues remaining between the operative passage and the bulb was more than a *millimètre*.

Professor Dolbeau will, it is said, at an early date publish a memoir on perineal lithotomy, in which he will give an account of the cases in which he has performed that operation. This seems necessary, as not only do I not see any account of it in our most recent English systematic works on surgery, but I do not find it practised much in France. From the more general diffusion of diagnostic knowledge both in town and country, enormously large stones are very much less frequent than they used to be, both in hospital and in private practice; and Professor Dolbeau assures me that, from this cause, he very seldom meets with a stone too large to be removed by his system of perineal lithotomy.

2. *Phthisis*: Professor Michel Peter on *Tolerance of the Organ and Tolerance of the Economy*.—In recent clinical lectures at La Pitié, Dr. Peter has very ably and fully discussed the prognosis and treatment of pulmonary phthisis, not only in relation to the lesions and signs discoverable by auscultation, percussion, and other means of diagnosis, but also with special reference to what he calls “la tolérance de l’organe et la tolérance de l’organisme”—the tolerance of the organ and the tolerance of the economy. By *tolerance of the organ*, he means the resistance offered by the organ to the lesion therein produced by a previously existing defect in the individual. The lesion, at first hardly perceptible, may then show itself by some difficulty in taking a full breath, afterwards by a little cough. As the lesion increases, the organ becomes less tolerant; and forthwith the usual manifestations of pulmonary phthisis are apparent. By the term *tolerance of the economy*, Dr. Peter designates the power which belongs to the economy of resisting the evil consequences of the lesion of the organ. This tolerance, for example, exists when the digestive canal is in a state of integrity,

when nervous energy is unimpaired, and when the circulation is in a generally natural condition.

Dr. Peter pointed out to his students on numerous occasions (in connexion with cases in the wards), that an individual, in virtue of these tolerances, might resist tuberculisation for many years, particularly if there coexisted the two conditions known as “compensation” and “substitution”, or, to use his own exact words, “*phénomènes de compensation et phénomènes de substitution*”. The phenomena of “compensation” consist in the continuance, or it may even be in the exaltation, of the function of assimilation, in such a way that the loss which the patients sustain by the imperfection of respiration is compensated for by continued or increased activity in nutrition. The phenomena of “substitution”, which show themselves in the periphery, are tutelary eruptions and occurrences met with in any phthisical subjects, producing a certain amount of beneficial derivative action. As examples of these tutelary phenomena, Dr. Peter mentioned fistula of the anus, which he regarded as a salutary seton placed by the hand of Nature herself; moderate leucorrhœal discharges; certain moderate hæmorrhages—all of which are respected by the intelligent physician—all of which indicate the soundness of the immemorial practice of resorting to artificial derivatives in cases such as those now referred to.

Dr. Peter, upon the grounds now adverted to, and for other reasons which there is not space here to recapitulate, earnestly cautioned his pupils from hastily pronouncing an unfavourable prognosis whenever tuberculisation is detected in the lungs. He said that the significance of that fact must be estimated by looking at it in relation to the individual’s possible resistive force to the disease, particularly in connexion with the two kinds of tolerance spoken of, and the two kinds of phenomena mentioned—the phenomena of compensation and substitution. “*Eh bien! messieurs*,” exclaimed the lecturer, “*ces choses-là ne se trouvent pas dans le livre de Laennec, à qui suffit, je pense, cette grande gloire d’avoir été l’imitateur du mouvement actuel; parce que l’élan une fois donné, les hommes ne manquent jamais pour y obéir.*” Dr. Peter pointed out that Laennec had observed three stages of tuberculisation; viz.: 1, the deposit of granulations; 2, the existence of tubercles, at first crude, and then soft; and 3, the dissolution of the tubercles. He also described, as parallel therewith, three stages of phthisis. This was a great and serious error. There is nothing which clinical facts show to be more false than this view of Laennec. Hence, said Dr. Peter, though it is of the utmost importance to ascertain with exactitude, and take fully into account, *the lesions*, it is essentially necessary, also, to bear in mind *the individual* in whom the lesions exist, and whose vital powers are, as the case may be, more or less fitted to struggle against that morbid action which is tending to degrade his organism.

There can be no doubt that the true therapeutics of tubercular phthisis can only be deduced from the principles now set forth. Dr. Peter’s great rules of practice are, to render the lesions as little injurious as possible to the individual, and to arrest the progress of the lesions. The same general measures tend to the accomplishment of both objects. He dwells much on the advantage of occupation in the open air, and living in an invigorating climate—on the sea-shore, or in sheltered situations on the mountains. So far as the circumstances of the case permit, he nourishes and tonifies his patient. For night-sweats, one of his favourite—and very successful—remedies is sponging the surface night and morning with cold water. He practises what may be succinctly described as “hydropathy”, in several modified forms, in the treatment of phthisis.

To conclude these references to Dr. Peter’s recent clinical lectures on phthisis and its treatment, let me give an abstract of an impressive case which he detailed *in extenso* to his class, as corroborative of some of his leading views.

In 1856, when Dr. Peter was *interne* to Cruveilhier, an intimate and valued friend, a fine-looking young man, an architect, who led a joyous life, came one morning looking rather downcast, and stated that, as he had for a long time past been subject to cough, he wished to have his respiratory organs examined. Dr. Peter was surprised and shocked, at the very outset of his examination, to discover large cavities at the summits of both lungs. He had, fortunately, commenced by examining the lungs behind; so that the emotion excited by the distressing discovery was concealed from his friend. On examining in front, there too was heard the cavernous *râle*. Dr. Peter went home stricken with horrors, having told his friend—as, he says, must often be done in similar cases—that he had bronchitis. Already Dr. Peter saw before him his friend’s young wife a widow, and his little boy an orphan. Fortunately, he had not the courage to tell the family how matters stood. For his young friend, he prescribed revulsives and balsamic medicines, and counselled him to retire from the society of his free-living friends, “*et de se contenter du pot-au-feu conjugal dans tout ce que ce mot peut avoir d’acceptions.*” The advice was taken; and to-

day the architect is, to use the common phrase, a "bel homme", with nothing like phthisical or other disease in his appearance. The necessity of earning his living by a profession, which kept both body and mind in an active state, and obliged this architect to pass a great part of his time in the open air, was a circumstance which placed him in the very best possible conditions, both moral and physical. He still, however, has some cough. Every morning and evening he has a fit of coughing, accompanied by expectoration. During winter, he has from time to time pulmonary congestion. On these occasions, Dr. Peter is sent for, when he finds, in addition to the *râles* of bronchitis, a very limited bellows-sound, which he cannot but attribute to the agglutination of the walls of the shrunken cavities. The individual is still evidently a *tuberculous* subject; but it is equally clear that he is not *phthisical*; or, to give the statement in Dr. Peter's own words, "*c'est évidemment toujours un tuberculeux, mais tout aussi évidemment ce n'est pas un phthisique.*"

In illustrating the influence of climate and elevation above the sea-level in the cure and prevention of phthisis, Dr. Peter referred to the recovery of his friend Dr. Henry Bennet of Mentone, and to the well known book of that accomplished physician, entitled *Winter and Spring on the Shores of the Mediterranean*, as well as to other recent English works on climate and medical topography.

3. *Chloroform in Midwifery.*—I was present on the 14th (Tuesday last), in the amphitheatre of the Hôtel-Dieu, when two candidates were undergoing their *cinquième*—that is, clinical examination. In France, the oral examinations for the medical doctorate, as well as for all other university degrees, are conducted in public—an admirable rule. Upon the occasion to which I refer, Professor Pajot examined one of the candidates regarding various points of difference between the practice of midwifery in England and France. The cases in which obstetric patients ought and ought not to be chloroformed were fully gone into. Professor Pajot, while he took occasion to speak in terms of the highest admiration of the originality and practical skill of Sir James Simpson of Edinburgh, stated that he did not concur with the Scottish professor in thinking it advantageous to chloroform patients suffering from eclampsia. He also regarded the keeping of parturient women for several successive hours, or for any considerable period of time, under the influence of chloroform, as highly objectionable; but, on the other hand, he was decidedly in favour of anæsthesia by chloroform in operative midwifery. These, I may add, are the views which prevail in France, where it is only in exceptional cases that the accoucheur employs anæsthesia.

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SATURDAY, DECEMBER 25TH, 1869.

ARS LONGA, 1869.

THE year which is near its end has perhaps done but little to confute the old maxim as to the rate of progress of knowledge. Yet it may boast of having witnessed honest work, and may close with gratitude, if not with triumph. We are in no haste to gather the fruit: it is enough, if we can believe that good seed has been sown.

The brief period of a single year is, indeed, too short to admit of any great advance in such an art as ours being made and proven. If we were to attempt to chronicle what we might suppose to be the best results of the last twelve months of medical work, we should run a risk of double error. In the first place, we might mention things which are as yet doubtful, and which further experience may throw aside; or, secondly, we might claim things which really had their birth before 1869 began, and stand in the position of things confirmed rather than discovered.

A remarkable activity on the part of our Sanitarians has certainly been amongst the most noteworthy features of the year. Officers of health have been appointed in many towns which did not formerly possess them, and those already enlisted have continued their labours most zealously. Few probably, excepting editors, have any notion of the amount of printed material, statistical and otherwise, which now emanates from these sources; and, when we recollect that these reports, valuable as they are in themselves, are yet but the barest chronicle of daily work for the benefit chiefly of the homes of the poor, we may

form some idea of the amount of good which they effect. It is invidious to particularise; but, passing by the metropolis, we may mention the reports by Dr. Philipson of Newcastle, by Mr. Davies of Bristol, and by Mr. Dyke of Merthyr Tydfil, as having especially interested us. In connexion with this subject, we must especially mention the labours of Dr. William Budd and others to devise means of destroying the contagion of specific disease and thus prevent their spread.

In the domain of Therapeutics, we have certainly lost no ground to the homœopathist. Various old and doubtful remedies have fallen, it is true, into merited disrepute. Our shelves have fewer bottles; but we decant from them most liberally, and to many of them we trust with a confidence which far excels that of our fathers in spirit of Mindererus and Griffith's mixture. We are gradually substituting arms of precision for the old blunderbuss. More iodide of potassium has probably been swallowed during the last year than in any corresponding period; and, amongst the results, we may boast the disappearance of radesyge in Norway, of yaws in our West Indian colonies, and of most of the severe forms of tertiary syphilis at home. Arsenic holds its ground—probably gains more. Mercury may perhaps have a little diminished in quantity, but has been directed with better aim. Belladonna and digitalis as specifics, where needed, still enjoy the unbounded confidence of those who know when to prescribe them. Of quinine, steel, and the rest of the unharmed tonics, it is needless to speak. Amongst remedies which are nearly novel, we might mention the use of Calabar bean for tetanus, though it is perhaps too early to speak with confidence. We have left the best till last. The bromide of potassium is, we are told, now manufactured, in England alone, for medicinal use, at the rate of a ton a week. Part of this is exported to America, where the consumption is even greater than with us; but the greater portion is for home use. This marvellous salt appears to possess sterling virtues and no vices, and to be adapted to the control of precisely those forms of nervous disease which are common in high states of civilisation. Many of these are of the most distressing character, and appear to be influenced for good in the most undoubted manner by this remarkable drug. Many facts respecting it still wait investigation; but as yet it is gaining repute in all directions.

On the Continent, great attention has recently been paid to the cold-water treatment (affusion and wet-packing)—a method originally practised in this country, but now neglected. By several high authorities abroad, we are now told that it is decidedly the most effectual and safest plan of treatment.

The advocacy of mountain climates for the treatment of phthisis, in which Dr. Hermann Weber in this country takes the chief share, is also, in all probability, an important step.

Amongst the most tangible of our year's gains, we must certainly count the foundation, by our modern Willan, of a Chair of Dermatology at the College of Surgeons. Mr. Wilson's munificence in the cause of science is certain to be productive of good fruit. We may hope, in the future, that arrangements of a similar character will be made for other professorships, and that the splendid facilities which the College offers for surgical teaching will be better cultivated. Could we not have a professor of ophthalmic surgery? Annual courses in this and some kindred subjects, addressed, not to students, but to members of the profession, would certainly be of great use.

As a slight set-off against the foundation of Mr. Wilson's chair, we have to regret the demise of his journal. After a career of about three years, the *Journal of Cutaneous Medicine* has reached its last number. We hope that another of similar character will soon be started, for a good specialist journal in this department is certainly wanted. Meanwhile, Mr. Wilson deserves warm thanks for his attempt, and for his temporary success.

There is nothing very remarkable to record as to the work done by our Societies. The last session of the Royal Medical and Chirurgical was, we believe, considered more successful than usual; that of the Pathological, a good average. The Clinical has somewhat disappointed its friends, in not gaining more of practical results; but the task it pro-

posed is a very difficult one. The Obstetrical is said to have nearly worked its mine out—a result which, considering the energy of the diggers and the necessary limits of the ore, might have been anticipated.

The proposed society-amalgamation scheme has gone on prosperously, but seems now to hang fire somewhat. It is one of those which no one opposes, and which few care much about. In many minds there is, we believe, a suspicion that the plan of separate shops for grocers, drapers, and chemists, is quite as convenient as that of a general store; and that individual activity may be damped and hindered by over-organisation.

Under the head of operative surgery, we have to note the steady advance in foreign countries, and in our colonies, of ovariectomy, and its increasing ratio of success. Excision of the knee-joint also stands still more firmly in public approval; and the year has produced two excellent monographs devoted to it—one by M. Penières of Paris; the other by our countryman, Mr. W. P. Swain of Devonport. Amussat's operation, amputation at the knee-joint, operations for ankylosis, and operative schemes for reducing the supply of blood to inflamed parts (Maunder), may also be mentioned as some which have received special attention. Amongst the boldest achievements in operative surgery during the year, we may mention the ligature of the abdominal aorta by Mr. Stokes of Dublin, and the excision of the entire prostate, with the neck of the bladder and the lower part of the rectum, by Professor Nussbaum of Munich. From abroad we also hear, as a surgical novelty, of the removal of a kidney on account of an urethral fistula.

The researches zealously carried out as to the inoculability and traumatic production of tubercle have produced remarkable and unexpected results. Of their precise pathological signification it is perhaps premature to speak. We are especially indebted to Dr. Burdon Sanderson in this matter.

The year has been characterised by great energy as to the improved management of our hospitals. An increase of village hospitals and of local ones in our towns, the result in part of a feeling in favour of small or moderate-sized, instead of very large institutions, and in part of the desire to bring medical aid close to the homes of those who need it, is to be noted. The management of some of our largest ones has been subjected to severe criticism; and, although it is probable that rather too strong views have been expressed, much benefit is on the whole likely to result. An increase in special departments at our hospitals generally, and an increase in the number of those appointed to the care of out-patients, in both of which directions further action is still greatly needed, may be recorded.

The agitation against large hospitals, led by Sir James Simpson, and based upon their supposed dangers in reference to contamination of air, is likely to produce very good results, though perhaps not exactly those aimed at. Partly by the use of special local dressings to wounds, and partly by more sedulous attention to the isolation of contagious cases, it seems probable that 1869 will date a very considerable improvement in the ratio of mortality after hospital operations. In connexion with this topic we may remark that, whatever may be the future fate of "Lister's method", there is no doubt that to the enthusiasm and ability of the new Edinburgh Professor of Surgery a large share of the credit will be due.

The endeavour to increase the safety of surgical operations by the adoption of new methods of securing arteries, has been actively prosecuted for several years past. We have little that is definite to notice as the experience of 1869, excepting that acupressure has not gained adherents, and that, with some who favoured it, the use of torsion is now in greater favour. That both acupressure and torsion are very efficient when well done, no one can doubt; but there are still many who are sceptical as to whether either of them possesses any real advantages over the much traduced method by ligature.

In the labours of the year that is ending, our own Association has, we think, had its full share. Its JOURNAL has been well filled with material obtained from a very wide field, and its annual meeting at

Leeds exceeded in *bonâ fide* professional interest any preceding one. It has at the present moment a much longer list of members than it ever previously had; and all that has transpired in its last year's life has been of a character to make us hopeful that its sphere of usefulness may in the future be yet further extended.

Recruits to the ranks of the profession have been, we believe, as numerous as usual.

Amongst those whose loss we have to mourn occur the names of Mr. Griffin, the apostle of Poor-law reform, Dr. Begbie, of wide clinical repute, Mr. Ewen, Mr. Lipscomb, Dr. Archer, Dr. Edwards, Dr. Roget, Dr. Bryson, Mr. Bruce, Mr. James of Exeter, Dr. Collis of Dublin, Mr. Joseph Hodgson, Mr. Wardrop, and Mr. Orton. Several of those, whom their names recal to us, may be said to be destined "to sleep without their fame", having sunk in the prime of life, or even during the first years of promise. All those who knew the talents and industry of Bruce, foretold for him a brilliant career. Of Dr. Edwards, it may be said that his life had been an uninterrupted success. Dr. Archer's life had somewhat disappointed his early friends; but there are hundreds of St. Bartholomew's students who will recollect "little Archer", the house-surgeon, first of Mr. Stanley and then of Mr. Lawrence, a man of unwearied activity, and of unvarying kindness to all, and possessing a repute for surgical attainments far beyond that of any of his compeers. Mr. Ewen and Mr. Lipscomb with, we doubt not, several others in our list, were models of country practitioners: men who loved their calling and were honoured in it by all who knew them. Of Mr. James, Mr. Hodgson, and Mr. Wardrop, it is needless to speak; they have left us their works. We cannot recall the death of Dr. Collis of Dublin, one of the most brilliant surgeons of a city long famed for its surgery, a death which occurred in the prime of life and energy, and in direct connexion with the performance of professional duty, without a sentiment of even more than the usual sadness which attaches to such losses.

THE WELSH FASTING GIRL.

THE melancholy end of the investigation into the Welsh "marvel" has naturally excited considerable criticism. Although we cannot think that those most immediately concerned acted prudently, yet there is very much to be said in extenuation of their mistake. In the first place, the error is one in which the community at large and the public press in particular must take some share. What was done was done very openly, with the best intentions, and, we doubt not, with the approval of thousands who had no part in it. The imposture was gaining disciples; it was becoming a public scandal; and it was high time that it was set at rest. So felt the great bulk of the community; and, when means were devised for bringing the matter to a conclusive test, a general feeling of satisfaction was experienced. No one thought seriously of the possibly fatal result to the precocious deceiver. Some of our daily contemporaries of the public press, who now loudly denounce it as "a cruel scientific experiment", were, up to the day of the unexpected event, eager to secure the latest news respecting it, and uttered no single word of caution or disapproval.

In asserting that the public approved the test determined on by the local Committee, we by no means imply that the responsibility of those who undertook to conduct it did not far exceed that of the lookers-on. All we ask is fair play, and a candid appreciation of the circumstances. It is very easy to be wise after the event. To assert, as some of the newspapers have done, that a life has been sacrificed to science, and to charge the death of the miserable child to the medical profession, is most absurd. We do not believe that five medical men could have been found in the kingdom who felt the slightest tendency to belief in the "marvel", or who, as far as their own minds were concerned, cared an iota about its elucidation. Some of them were, however, laudably willing to aid in disabusing the public mind; and, as trained investigators, a large share in the task not unnaturally fell into their hands. To them it was no "scientific experi-

ment", but simply an attempt to unmask deception. The question to be determined is, Was this praiseworthy attempt conducted in a sufficiently cautious manner? Amongst those who shared in it were some who believed the girl's story, and others who half believed it, and from neither of these parties could caution be expected; and, beyond this, they were also entitled to plead partial exemption from responsibility on the ground of ignorance. It is impossible not to admit that it was from the medical members of the Committee, who were presumably both incredulous and well informed, that caution was especially to be looked for. Their exculpation consists in the fact, that they probably never for a moment doubted that either the child and her accomplices would manage to outwit the watchers, or the deception would be confessed and abandoned. These were the two alternatives. All candid minds will admit that it was the last thing to be expected that the child would allow herself to be starved to death, and that her parents would look calmly on. As a matter of fact, we believe that no suggestion of such a probability found its way into print from any quarter whatsoever. It is only fair also to remember that a previous watching had been practised without ill results, and had extended over a longer period than the fatal one.

After all has been said that can be said, it is, however, impossible not to admit that medical men, who had every reason to believe that a human being under their care was absolutely deprived of food and drink, ought to have shown faith enough in science to take alarm when the seventh day of the fast was reached. From the nurses' account, it would appear to have been sufficiently apparent that the fast was telling on the child's strength two or three days before her death. In a legal point of view, it was certainly unwise in the Committee to require from the father a formal document consigning his child for one fortnight to its care when it was intended during the whole of that time to offer her no food. A precaution not less wise than humane would have been to have daily brought suitable food to the child, in the presence of witnesses. As we have already remarked, however, it is easy enough now to say what ought to have been done. Part of the blunder may not, improbably, be attributed to a mistake as to extent of complicity on the part of the girl's parents. Could the truth be known, probably the child herself was the main deceiver, and had succeeded in duping her parents, and even, to some extent, in duping herself. In minds with a natural tendency to believe in marvels, if a little foundation be given, there is seldom any unwillingness to build upon it, and moral perceptions are sometimes twisted in the strangest way. Our conjecture would be that the girl had, in the first instance, accidentally discovered that she could, without distress, fast for unusual periods; that she had cultivated this faculty, and at length, finding that it excited her parents' wonder, and probably procured her indulgences, that she had ultimately resorted to deception in support of her character. Her parents, not improbably, knew that she did occasionally eat on the sly, but felt, notwithstanding, no doubt, that there was something very marvellous in the reality of her fasting powers. Those powers were probably extraordinarily great, and neither she nor her parents knew precisely how far they might be trusted. The feeling of moral delinquency involved in attempting to heighten the miracle was probably not very strong in either her or in them; and it would naturally fade more and more when the ingenuity of strangers was set to work to discover the truth. Hence we may no doubt acquit both the child and her parents of any deliberate resolution to allow the watching to cause death rather than admit the truth. They did not know what were the limits of Nature's endurance, and they looked forward wistfully to the reward which would follow the accomplished fortnight, and the return to London of the baffled nurses. They overshot the mark, and the main culprit—the poor child herself—has paid the penalty. It is even very possible that there was no collusion whatever on the part of the parents. It may have been one of the cases of secret night-feeding, of which, in lesser degrees, many medical men have had some experience. The behaviour of the parents in almost all particulars supports the belief that they were not in the secret, and did not apprehend fatal consequences from the watching.

The impressions formed by several medical men who visited her—and notably, we believe, by Dr. Fowler—were that the girl could get up and walk if she liked. Her parents' habits were probably very regular; and although they slept in the same room, there is nothing very improbable in the supposition that she had discovered that, during their sleep, it was quite practicable for her to steal out of bed and procure, without detection, the small quantities of food which probably sufficed her. That she had actually accustomed herself to fast absolutely for periods of a few days at a time is very possible. It is to be noted that she slept on the ground-floor of a small farm-house, and that her parents' occupation would probably often take them out of it, and that, too, at stated hours, upon the recurrence of which the child could rely.

In conclusion, we cannot but advert to the calmness which seems evinced by almost all the local actors in this sad affair. Whether it results from that sense of intense relief which must naturally be felt at being rid of a long-standing mystery, we do not know; but really the cost of the solution seems not to have caused the degree of remorse which might have been expected. We have read few documents of a more thoroughly self-possessed character than the report of the meeting at which the nurse's final statement was received. After reading her daily notes of the case, the nurse records that, at the closing scene, believing the child to be dying, she allowed the parents to come close to the bed, but still faithful to her duty, watched carefully that they did not feed her. We do not blame the nurse, but it is not a pleasant thing to read. The concluding resolutions make no mention whatever of regret at the unexpected catastrophe. They record unanimous thanks to the nurses; nor had the meeting even good manners enough to forget the customary formal vote to its chairman.

It is to be remembered that this meeting was not composed of "cold-blooded doctors", but of the lay public, with the vicar of the parish in the chair. Its conduct is certainly conclusive proof of our argument that the public shared most thoroughly with the medical men in the wish that the watching should be carried out efficiently, and in the responsibility for its results. Of dismay at what had happened, we see no trace, the minds of all having evidently been too much preoccupied with the strange mystery which had just received its solution, to think of collateral issues.

We publish in another place full details of the case and of the proceedings in respect to it. On behalf of those in London who were concerned, we must remark that their suggestions provided very definitely for the occurrence of exhaustion. It will be for the local Committee to show that due vigilance was exercised. The truth probably is, that responsibility was far too much divided.

DR. LEO ROSS gave a reading in the Store Street Concert Hall on Monday evening, in aid of the funds of University College Hospital.

It has been decided by the Metropolitan Asylums Board to erect a fever-hospital at Hampstead, overlooking the Gospel Oak Fields—to cost £5,542, and to be ready by the 20th proximo.

THE ALLIED UNIVERSITIES CLUB.

AN "Allied Universities Club" has been established in commodious rooms at 13, Grafton Street, Piccadilly, for noblemen and gentlemen who are, or have been, members of an University, or are members of a recognised learned society. The club is a proprietary one, and gives every promise of turning out a success. Its objects—to bring together members of all British Universities—are such as at once commend themselves, and will ensure a large number of members from the Universities. Advantages are offered to those joining immediately.

ACTION AGAINST A PHYSICIAN.

THE plaintiff was a solicitor who had long suffered from paraplegia, and had consulted many doctors without avail. The defendant (Dr. Fookes) was an M.D. of Giessen, an L.S.A., and a registered medical practitioner, "who had long made paralysis his special study, and

had met with great success." It appeared that the plaintiff consulted the defendant in the summer of 1868, and the latter arranged to visit him as often as necessary for two guineas a week. This was altered after a time to three guineas. In the winter the plaintiff moved to Hastings, and the defendant then received ten guineas a week. In all the defendant attended about twelve months, and received about £300. He then applied for increased remuneration, which the plaintiff declined to give, as he was no better. During these twelve months, however, various sums were lent by the plaintiff to the defendant, and also money was paid to help in bringing out a "new cholera medicine" called "camphoridine." They entered into a kind of partnership. The action was brought to recover these various sums. In defence, it was urged that an extra visit had been made to Hastings, and that the plaintiff's daughter had been attended during a serious illness. The verdict was for the plaintiff to the value of a promissory note which the defendant had signed. A deduction of five guineas was made from this for the extra visit to Hastings.

INSPECTOR OF VACCINATION.

THE vacant Inspectorship of Public Vaccination under the Privy Council has been conferred upon Dr. G. Goddard Rogers. The vacancy was caused by the resignation of Dr. Wiltshire, who gave up his practice two or three years ago to become an Inspector of Public Vaccination.

MEDICAL BENEVOLENT FUND.

THE following annuitants were elected on the 7th instant from a list of twenty-one candidates, whose ages varied from 61 to 84. 1. M.R.C.S. and L.S.A., aged 66, married, afflicted with heart and lung-disease; presented to one of the houses at Chippenham given by Mr. Bailey; recommended by Dr. G. C. Jonson, G. Curme, Esq., Dr. S. Dyer, Miss Carnegie, and Miss Druitt; annuity, £10. 2. Widow, aged 78, of a surgeon in practice before 1815; only income, £10; has been relieved several times from the Fund, and has been on list of candidates more than five years; recommended by H. Sterry, Esq.; annuity, £20. 3. M.R.C.S., aged 84, married; practised for many years in Kent; has had an annuity from sale of practice, which has ceased this year, leaving him without means; recommended by Dr. Samuel Hill; annuity, £20. 4. Widow, aged 67, of a L.S.A., who practised in Somerset; no income; living with married daughter, who is unable to do more than give her a home, without further assistance; recommended by Charles Smerdon, Esq., and William Cross, Esq.; annuity, £20. 5. Widow, aged 79; husband in practice before 1815 in London; dependent on occasional help from friends; suffers much with rheumatism and tumour; relieved from Fund several times; recommended by Dr. Felce, Honorary Secretary, Dr. Collinson, and E. P. Young, Esq.; annuity, £20. 6. M.R.C.S. and L.S.A., aged 65, London; two daughters, aged 18 and 15; only income from practice, averaging about ten shillings per week; almost blind, and very lame; assisted once from fund; recommended by Dr. John Dixon; annuity, £20. The Fund has now thirty-five annuitants, thirteen having been elected during the present year.

THE NEWCASTLE ANTIVACCINATION LEAGUE.

A PUBLIC meeting has been held in Newcastle with the view of passing a resolution to the effect that vaccination, instead of preventing small-pox, had introduced other diseases into the system, and that compulsory vaccination was tyrannical. Several speakers asserted the ill-effects of vaccination, but only one advanced any argument on that side. He stated that "in the ten districts in France in which vaccination was most performed, the number of cases of small-pox was greater than in the others in which it was not so strictly enforced. He thought that, because the general death-rate had increased during the time vaccination has been practised, necessarily the increase was due to vaccination. The best way of resisting epidemics was not by the present system, but by 'keeping up the standard of health to its proper pitch.'" Dr. Bell appealed to those present who had had small-

pox to hold up their hands. Only about twenty did so. He reminded them how much larger a proportion would have suffered from small-pox seventy years ago. He appealed to the statistics in Ireland. From 1831 to 1841, 5,800 died from small-pox; from 1841 to 1851, 3,827; from 1851 to 1861, 1,275; in 1867, there were 20; in 1868, only 19. Mr. Newton referred to the freedom of soldiers; and to the fact that in Leeds, where vaccination was very imperfectly performed, there were as many deaths from small-pox as in the whole of Ireland.

CATARACT FROM SPINAL CONCUSSION.

THE following are the brief particulars of the case to which we referred last week.—A widow brought an action against the Metropolitan Railway Company for damages received in a collision on July 29th. Mr. Britton, Mr. Haynes Walton, Mr. Erichsen, and Mr. Hancock, gave evidence to the effect that the plaintiff had received a "concussion of the spine and brain, and that there was incipient cataract in both eyes." She had suffered nearly a year, and probably would suffer from one to two years longer. Mr. Walton said his fee for operating on both eyes would be one hundred guineas. The verdict was for the plaintiff; damages, £1,250.

CASE OF SOMNAMBULISM.

AT twelve o'clock on Thursday night (the 16th instant), while pouring with rain, an almost nude figure was observed crossing the road in Newington Butts. A police-constable watched the figure make its way to the police-station yard and try to open one of the doors, but without success, as it was locked. He went to speak to it, and found a young lady enveloped in a counterpane. He led her into the office and tried to "bring her to her senses." She was about to write her name and address down, when she relapsed. After awhile, however, she finally recovered, and he conducted her home. It would seem that she got up in the middle of the night, wrapped the counterpane round her, unlocked the street-door, and wandered about in the street.

INOCULATION IN PLEUROPNEUMONIA.

AT a meeting of the Cheshire Chamber of Agriculture, last week, the report of a deputation appointed to investigate the value of inoculation in pleuropneumonia was read. Several members thought that, whilst inoculation was a valuable remedy when resorted to immediately on the outbreak of the disease, it was not a sure preventive. Further investigations, at the expense of the Chamber, are to be carried out.

PLEA OF INSANITY.

JOHN MYNOTT, indicted for shooting at his wife with intent to murder, has been acquitted on the ground of insanity. The shots had taken effect in her face, destroying her sight, but had not led to her death. Presumptive evidence of insanity appeared in a letter written in a rambling, incoherent strain, evincing rather disturbance of brain than revengeful temper. The medical man who had attended him and his wife, described him as a man suffering from mental anxiety, and symptoms which had led the witness to think he ought to be placed under restraint. The prisoner's father was said to have been insane, and had attempted suicide. The prisoner had frequently suffered from delusions, imagining that he was followed about by mysterious beings. A passage was quoted from Casper, by the barrister for the defence, to the effect that a fixed idea long brooded over, and leading a man to illegal acts, may be sufficient proof of loss of mental control. The fixed idea in this case was, that his wife was unfaithful, and that he was suffering from certain bodily ailments, for which there was no foundation.

DEATH FROM HÆMATHORAX.

A MAN named Shield has been tried at Durham for the murder of Ralph Reed, who died almost immediately after a stab in the neck. Mr. H. Watson, at a *post mortem* examination, found that the knife (a pen-knife) had penetrated the neck above the inner extremity of the clavicle on the right side, to the depth of two inches, wounding the internal jugular vein. He found five pints of blood in the chest on the same side.

ST. MARY'S HOSPITAL: CHRISTMAS ENTERTAINMENT.

A CHRISTMAS entertainment, consisting of music and reading, for the amusement of the patients, was given in the Board-room of the Hospital on Wednesday evening, and passed off with great success.

THE ACCIDENT AT PIETER MARITZBURG TO THE 20TH REGIMENT.

A SERIOUS accident occurred in the middle of last month to the 20th Regiment at Port Napier, which has led, and, we think, most properly to the severe criticisms of the Natal press. The soldiers were called out for drill in the afternoon, and were compelled to remain exposed to a very heavy thunder-storm which broke over the city. The fort is built on a hill abounding with iron-stone, and the parade-ground is in a very exposed position. We should not have been so ready to take notice of this accident, had we not heard, on good authority, that considerable dissatisfaction is felt at the conduct of the commanding officer, who, it is stated, frequently and most unnecessarily exposes the men on parade and on the butts during the hot part of the day, and by night-expeditions in inclement weather. We think that, whatever be the circumstances of the present case, the matter requires full investigation.

GUY'S HOSPITAL: THE GUY'S MINSTREL CONCERT.

THE annual entertainment given by the students of this Hospital came off with great success on Wednesday, Thursday, and Friday evenings last week. The first night's entertainment was given for the gratification of the nurses and the patients who were able to attend, and the others were set apart for the medical officers and their families, as well as for the students and their friends. A sum considerably exceeding £50 was collected by the sale of tickets, which contribution will be handed over to the Samaritan Fund of the Hospital, for the relief of patients on their discharge. The performance, which was after the style of the Christy Minstrels' entertainment, was excellent; and the exertions of the various members of the corps of minstrels was thoroughly appreciated and reciprocated by the applause of the audience. Where all performed their parts so well, it would be invidious to draw any comparison of the merits of the respective performers; but it is due to Mr. F. G. Passmore, the general manager, to notice that the success of the entertainment was mainly due to the excellence of his arrangements. The comic business mainly depended on Mr. Passmore and Mr. Dunnage; and their combined eccentricities afforded a fund of the rarest amusement.

TYPHOID FEVER IN COVENTRY.

It is stated in the *Herald and Free Press* newspaper, circulating in Coventry, that typhoid fever is prevalent at a place called Red Lane and its neighbourhood, in Coventry; and the following is a short account of the outbreak and its causes, and the measures taken to prevent its spread. The account is given by a clergyman in the district, and his statement is substantially confirmed by reports of proceedings at meetings of the Town Council and the guardians. Our contemporary's correspondent says that the fever has been of such extent that it has been found necessary to procure a nurse from the Nurses' Institution at Manchester; that, during the ten weeks preceding the 30th of November last, she had attended seventy cases, and that at the above date she had fifty or more cases under her care. As to the causes of the outbreak, it is but a repetition of what has been told in hundreds of other cases: bad drainage, existence of nuisances, and contaminated water. Many of the drains are stated to leak into the wells, partly owing to the wells being too near the drains, and partly owing to the dilapidated state of the drains and the wells themselves. Reference is also made to nuisance arising from an open stagnant drain in close contiguity to the infected locality. As to the steps which have been taken to stay the epidemic, they seem to be mainly, if not quite, due to private exertions. A fund was raised for paying the nurse and procuring necessities and comforts for the sick. But, while we read of this being done by private aid, there do not appear to be any steps taken by the local authorities under the several Acts which have been passed with the view of arresting the spread of epidemic disease. They seem to have contented themselves with squabbling as to who should

act; while the poor persons, whose bodily keeping has been to some extent committed to their charge, would have been allowed, but for the timely aid of private benevolence, to fall victims to a most insidious disease. We are again driven to ask, Of what use is it give compulsory power to Government, if a case of this kind—fever prevalent for weeks, and no interference by Government to compel the local authority to do its duty and to protect the health of the inhabitants of this truly unfortunate district—is allowed to go so long a time unnoticed and unknown?

CHRISTMAS IN THE HOSPITALS.

THROUGHOUT London, the hospital wards are decked with evergreens, illustrated texts, and all sorts of indescribable artificial flowers, with here and there a Christmas-tree; and now the patients are busied in giving a finishing touch to their labours. And really some of the hospitals are most tastefully decorated, and would well repay a visit. The preparations for Christmas have been on a more extensive and liberal scale than we remember to have seen before. For the past two years we have strongly insisted on not only the propriety and kindness, but the policy, of offering some inducement to remain in hospital to patients who would otherwise, however unfit, leave in order to join the festivities of the season out of doors. We are, therefore, glad to see that the hospitals are, one by one, coming to consider the Christmas entertainment a regular institution, and are striving to make Christmas in hospital as pleasant as they can. A Christy Minstrel entertainment has been already given at the London Hospital, and several will follow. At Guy's Hospital, the students have given their annual concert, with the usual success; the St. Mary's students have followed suit this year for the first time; and at the Middlesex Hospital a similar entertainment will be given by the students in a few days. A Christmas-tree will form a leading feature at King's College, University College, Charing Cross, the East London Children's, and other hospitals; and, of course, roast beef and plum-pudding will be everywhere rampant. Why should there not be a Christmas entertainment fund at every hospital? It would, we are sure, be liberally supported.

PETROLEUM OIL.

THE Mineral Oil Association have sent us the report of their analytical chemist (Dr. B. H. Paul) on seventy-five samples of mineral oil, purchased at various retail shops in the metropolis, with a view of ascertaining what proportion was safe for use. Out of the seventy-five, one-half were found to explode at a temperature below 100 deg. Fah., and therefore to come within the meaning of the term petroleum, and gave off an inflammable vapour below the lowest temperature allowed by law. Therefore one-half of the oil ordinarily sold under the names "crystal oil", "rock oil", etc., is quite unsafe. The Committee of the above Association consider this a matter urgently demanding attention.

A TEMPORARY TRACHEOTOMY.

IN number 47 of the *Ärtzliche Intelligenz-blatt* for the present year, Professor Nussbaum of Munich remarks, that there are three sources of danger in operations involving the cavity of the mouth, such as the extirpation of the superior maxilla, or of tumours springing from the base of the cranium; namely, 1. Suffocation from blood flowing into the larynx; 2. Pneumonia from small coagula of blood in the lungs; or 3. Injury to the throat, and subsequent deep-seated abscesses in the cervical fascia, from the assiduous mopping-up of the blood during the operation. To obviate these dangers, he proposes a preliminary tracheotomy, and narrates a case in which he removed a large tumour (sarcoma) of the upper jaw, which had pushed the eye upwards, and extended deeply backwards and downwards into the throat. The patient was a country girl, aged 20, much weakened by repeated hæmorrhages. He first opened the trachea, and introduced a silver cannula, continued the inhalation of chloroform through this, closed the glottis and pharynx with four thicknesses of oiled linen, proceeded to remove the whole upper jaw and tumour, and then applied the actual canter. Having washed out the mouth and plugged the cavity left by the operation, he took away the oiled lint and the trachea-tube, and closed

both wounds. The patient breathed freely through the normal channel, and the whole operation seems to have been a complete success. Not a drop of blood entered the throat; and the operator was free from all fear of his patient's dying of suffocation.

HOSPITAL FOR FOREIGN SEAMEN.

A HOSPITAL for foreign seamen has been established in Sunderland by Dr. Abrath, a German physician practising in that town. It will be supported partly by private subscriptions, and partly by a voluntary impost on foreign shipping entering the port. More than a hundred foreign captains have appealed on behalf of the hospital to shipowners abroad. The hospital is under the superintendence of Dr. Abrath, who has the great advantage of being acquainted with the French, German, Russian, Swedish, Italian, and Finn languages, and of being thus able to hold converse with the patients who cannot speak English.

TREATMENT OF SNAKE-BITES.

SOME time ago, says the *Australasian*, Sir Redmond Barry forwarded to the Indian Government a copy of Dr. Halford's paper on the treatment of snake-bite. An official communication from India has been lately received by Sir Redmond, informing him that the Indian Government has had the paper reprinted and circulated in the various departments, with the view of obtaining reliable facts as to the efficacy of injection of ammonia as recommended by Dr. Halford. The attention of medical men who may try the remedy in India, is specially directed to the following points: 1. The kind of snake by which the bite was inflicted; 2. The circumstances under which the patient was bitten; 3. The lapse of time between the bite and the application of the remedy; 4. If any other, what, remedies were applied; 5. The result. The circular is issued by order of the Inspector-General, Bombay Department.

POISONING BY BELLADONNA.

AN under nurse at the Hospital for Sick Children, Great Ormond Street, has been poisoned by drinking a quantity of liniment in mistake for brandy. Not feeling very well in the course of Saturday night, she went to the head nurse, who advised her to have some brandy. Instead of taking up the brandy-bottle, she took one containing liniment, which the head nurse had used for rheumatism in the shoulder. The nurse exclaimed at once, "I have drank poison", and spat some of it into the firegrate. She then had some real brandy, and went about her work. About twenty minutes later, however, she began to feel giddy, and behaved in a way to make the head nurse think she had had too much brandy. The deceased thought of going to the surgeon, but was told not to do so. In going down stairs, however, she fell. The house-surgeon (Mr. Clement Dukes) was then fetched. An emetic was administered and the stomach-pump used, but without avail. The woman died about five hours after drinking the poison. She is said to have taken half an ounce of belladonna-liniment. She was 48 years of age.

A DRUGGIST PUNISHED FOR SUBSTITUTION.

A PARIS *pharmacien* was lately called on to supply a bottle of "Seguin's cinchona wine" which had been ordered for a patient by his physician. He, instead, gave a bottle of the cinchona wine of the French *Codex*, labelled as Seguin's. For this substitution, he has been condemned by the correctional tribunal of the Seine to a fine of 100 *francs* with costs, or imprisonment for forty days, and to have the judgment placarded on his own door and those of the nine other *pharmaciens* resident in his *arrondissement*.

SCOTLAND.

DR. DUGUID of Kirkwall, who has practised for fifty years in that neighbourhood, has been presented with a claret-jug and a purse of one hundred and eighty sovereigns.

ASSOCIATION FOR THE BETTER ENDOWMENT OF THE EDINBURGH UNIVERSITY.

THE annual general meeting of the Association was held on the 18th

instant in the library of the Royal College of Physicians. It was stated by the Lord Justice Clerk, who presided, that, since the Association was first instituted, six or seven years ago, as much as £52,000 had, mainly through its influence, been accumulated for the purpose of endowing Fellowships in the University. Nearly £30,000 had also been obtained for bursaries in the University. These large sums have, however, mostly gone to classics, mathematics, philosophy, and divinity, whereas the branches with which we are more especially interested have not fared so well in securing Fellowships. In natural science, there are the Baxter, tenable for two years, and of the annual value of £60, and the Falconer Fellowship, tenable for two or three years, and of the annual value of £100. In medicine, there is only one prize, the Ettles, held for one year, and of the value of £40. Miss Garrett's Scholarship will, we should think, for some years be practically an Edinburgh University Scholarship; and the Syme Fellowship, which, under the auspices of Dr. Murchison, who was also Honorary Secretary of the Falconer Testimonial Fund, gives every promise of success, will be a most valuable addition. The efforts of the Association have been crowned with success, and its influence cannot fail, sooner or later, to secure for the Medical Faculty a larger share of Fellowships than has hitherto fallen to its lot.

IRELAND.

AMALGAMATION OF LICENSING BODIES.

THE conferences between the various licensing bodies in Ireland with regard to the formation of a conjoint board of examiners have, as yet, led to no results.

THE CASE OF MUTILATION IN THE KING'S COUNTY.

A PLASTIC operation is contemplated in the case of the gentleman whose nose and upper lip were wounded by some miscreants on the 15th inst. A portion of the right alar cartilage only remains.

MEDICAL REFORM.

WE understand that the Medical Bill of Sir J. Gray and Mr. Graves has been printed. It provides for a State Examination in Clinical Medicine and Surgery, to which all who have obtained qualifications from licensing bodies must submit before being placed on the *Register*. The examiners will meet in the three capitals, and will be partly elected by the State and partly by the licensing bodies. The Poor-law and other public offices are to be gained by competitive examination.

FELLOWSHIP OF THE IRISH COLLEGE OF SURGEONS.

UNDER the Charter, the Fellowship can be only granted after examination, but the Council can modify this test in any way. We understand that, at a recent meeting of that body, a proposal to limit the examination in the case of licentiates of ten years' standing to operative surgery, and the subjects of six reported cases sent in by the candidate, was rejected by a large majority.

ST. VINCENT'S HOSPITAL, DUBLIN.

ON Friday last, Dr. Mapother removed the eyeball of an elderly woman for encephaloid disease. The mode adopted was that often named "Bonnet's operation", but the steps were previously described by O'Ferrall. The strabismus-hook was found very convenient for fixing each of the muscles. He afterwards tapped a single hydrocele, which was remarkable for the large amount of fluid; namely, forty-five ounces. The penis was completely buried under the distended skin, and in micturition the urine flowed over the scrotum. The patient was a married man, aged 38.

THE SURGEON IN ORDINARY TO THE QUEEN.

HIS friends, and few have more, have warmly congratulated Mr. Porter on his recent very great distinction. Many of the public papers have testified to the justice of the selection; and one of them (the *Saunders*) describes him as a "bold operator, an able writer, a successful practitioner." It cannot be regarded as a Government appointment, for no one was more energetic in opposition to the Liberal candidate at the last election for Dublin, although he was a member of his own profession. It is rather a mark of royal than ministerial favour.

THE WELSH FASTING GIRL.

[THE following particulars respecting this remarkable case have been compiled for us by a gentleman personally familiar with the facts. As the case presents many points of great interest, some of which will call for future comment, we have thought it well to give it in detail. It is needless to say that we do not necessarily adopt all our correspondent's opinions in the matter. Those who wish to see an excellent statement of the early history of the girl's case, will find it in a paper by Dr. Lewis of Carmarthen, in this JOURNAL for April 24th of the present year. Dr. Lewis's report was, we believe, the first medical reference to it.]

Evan Jacob, the father of the girl, is a tenant farmer, living at a small farm situate in the parish of Llanfihangel-ar-arth, Carmarthenshire, about a mile and a half from the Pencader Station on the Cardigan Railway. Considering the station of life in which the girl's parents live, they are said to have no particular pecuniary need, and to have the local repute of sound respectability. At all events, it is upon record that this supposed long fasting of their daughter had been going on for about sixteen months before it was published to the world. It is alleged that, during the whole of this time, no strangers visited the farm, and no money flowed into the pockets of the parents of the girl. It is a pity that this indifference to money did not continue to the end, but that the parents subsequently made their daughter a public show, receiving both money and presents from the hundreds of visitors to the farm.

The girl herself was about 11 years old when the first symptoms of the abnormality presented themselves. She is said to have never had any previous serious illness. Twenty-six months ago she was causelessly seized with vomiting of blood, which necessitated her taking to her bed, in which, saving when lifted out, she is said to have ever since been. At the very onset of her attack, the incapability of swallowing presented itself; and the sight of, or even attempt to take food, is said to have thenceforth brought on "very strong fits." The very suddenness of the hæmatemesis and the aphagia is sufficiently characteristic of their nature.

In appearance, the girl was decidedly pretty, having a plump, ruddy face, bright eyes, and rosy lips. The catamenia had never shown themselves. There appears to have been no hereditary tendency to any form of insanity, epilepsy, or pulmonary disease in the Jacob family. Sarah had passed through dentition without any convulsive attack. The fits which she had lately had were evidently, from description, hysterical epilepsy. The occasional occurrence of globus hystericus has been ascertained.

There is no evidence whatever of any aberration of the special senses, with the exception of an alleged universal tactile hyperæsthesia. As regards the purely cerebral faculties, the statements of the parents point to augmented emotional and religious tendencies. Before her illness, she was very much devoted to religious reading; after her illness commenced, this devotion considerably increased. She was a member of the Church of England, and had been confirmed. From special inquiries respecting the child's moral qualities, we unhesitatingly chronicle that she invariably bore the character of a very good girl, never particularly seeking the society or play of the rougher sex.

The vicar of the parish in which the Jacobs reside was the first to communicate to the world this marvel of the nineteenth century. The allegation of the Rev. Evan Jones, B.D., that Sarah Jacob had, for sixteen or seventeen months, lived a life analogous to that of hibernating animals, was, of course, too absurd to be received. Despite the reverend gentleman's asseveration "that there was strong evidence in favour of the truthfulness of the parents' statement", the medical world could not be then induced to send down a commission two hundred miles for the investigation of the mystery. A local committee was therefore instituted to watch over this fasting girl. No public confidence was, however, placed in the watchers, and no satisfactory result ensued therefrom. Considering that these watchers were actually debarred from touching the child's bed, it is obvious that the whole process was reduced to an absurdity, the very first element of success being denied it. We must not, notwithstanding, be too hard upon these Welsh watchers. Upwards of fifty-four years ago, at Tutbury, near Roleston, in Staffordshire, certain respectable inhabitants of the place volunteered to discover whether or not Ann Moore, a woman about middle age, subsisted, as was declared, without the ordinary nutriment of her kind. This watch was continued for about three weeks, when it was publicly proclaimed that the Tutbury woman "lived entirely without food." In this case, also, the Bible was always open before the patient upon the bed. Her emaciation was said to be so

extreme that the spinal column could be easily felt through the abdominal walls. Her distaste to aliment, it was alleged, resulted from a nausea and disrelish produced by her washing the linen of a person afflicted with ulcers. In consequence of the *clat* derived from the unsuccess of the watchers, numerous visitors, some from long distances, visited Ann Moore during the next two years, leaving of course their donations in the house.

Reverting to the history of our present subject, it appears also tolerably certain that, owing to the failure of the "four (some say seven) watchmen, who were constantly with her fourteen days and nights", Sarah Jacob thenceforth became not only an object of curiosity and sympathy, but of material profit to the tenant of Llethernoyadd-ucha. As far back as last May, we have it recorded in a contemporary that £50 had already been drawn from the pockets of the visitors. All days and all things had, however, not gone uninterruptedly smooth at this out-of-the-way farmhouse. On the 11th of last March, a sceptical doctor—Dr. Pearson Hughes, of Llandovery—was charged at the Llandyssil Petty Sessions with an assault on the fasting girl. The mother swore "that the defendant and two others came to her house and went into the parlour where the girl slept. Dr. Hughes stripped the girl, and held a stethoscope to her breast and 'stopped her breath.' Defendant then asked when the girl was on her legs last, and also if she had any bed-sores. Witness replied that she had not seen the child's back for two years, upon which the defendant pushed his hand behind the girl's shoulders and passed it down her back, causing her to groan and rise up in her bed." It appeared the mother had accepted money from Dr. Hughes, thus necessarily implying her consent to, and condonation of, the examination. "The Bench dismissed the charge, the Chairman remarking that his own opinion on the subject of the alleged fasting was very decided, and he would express it if the parents wished him to do so." The parents, however, do not appear to have so desired. After this verdict, very little was for four months thought or said of the fasting girl of Wales beyond the immediate locality.

Public recognition of the "marvel" for a time subsided. During this last autumn, one of the district medical officers of the City of London Union, taking his annual outing in the picturesque neighbourhood of the famed salmon river, the Livy, had an opportunity of visiting the girl. Dr. Robert Fowler communicated his observations to our contemporary the *Times*; and his letter proved a perfect god-send to newspaper editors and reporters at that slack period of the news-season. In many of the evening impressions of the same day's London papers, Dr. Fowler's letter was again inserted and commented on. The next day, four or five of the morning papers followed suit; and, before the week was out, the letter had been reproduced and noticed in almost every provincial paper of England and Wales.

The details given by this gentleman are just such as might have been expected by any one at all cognisant of the history of similar cases. He found the girl lying in her bed, evidently ready for the reception of visitors. Every outward thing connected with her was smart, clean, tidy, and in apple-pie order. An open Welsh book was admirably posed on her bed; and conspicuously arranged opposite to her were all the English and Welsh books which she had received as presents from her multiplicity of observers. After a protracted examination of almost every organ of the body, it became tolerably clear that at that time the girl was in very fair physical health. Considering her long reclination in bed and consequent inactivity, it was, indeed, pretty certain that she was "as well as could be expected". It was, in fact, stated that she looked even better than she did about a twelvemonth previously. It was visibly and palpably apparent that there was no suppression of certain of the natural secretions. The action of the perspiratory system of the whole surface of the body, and also of the lachrymal glands, was still present. It was, however, most positively asserted by the father that, for a period of about eighteen months, there had been no evacuation whatever from either the bladder or the bowels. We are aware that this statement has lately received the following contradiction in a local paper. "It may be beside the question to affirm that on one occasion during the watching (and one only), her linen bore a stain of excrementation; and that she has passed some urine. While this is freely admitted in respect to the latter, it must be said that it is not impossible that the slight stain in question will turn out to be, not the result of excrementation, but of a slight internal flux, which would be nothing extraordinary. As to the urine passed so far back as Friday night last, it is due to the parents to state that they never denied that, at certain intervals, nature in this way sought relief." We have unimpeachable authority for repeating that the father did make the assertion alluded to (most certainly respecting the urine), in the presence of more than one hearer, on the occasion referred to. Moreover, the eyes and nose of an acute examiner were not likely to be deceived. Dr. Fowler, on turning down the bedclothes to percuss the girl's abdomen, received a dis-

tinct whiff of urinous smell; and he also perceived a very suspicious dry patch on the under blanket, apparently of a faecal character. The father, on being apprised of this, attempted a very frivolous excuse. Knowing, of course, that a poor ignorant Welsh farmer could not be expected to be thoroughly conversant with all the tactics of an hysterical retainer of urine, we should not have alluded to this question of veracity, did it not lead us to remark on the utility of exaggerated symptoms and statements. By this, we mean that it is from the very exaggeration of its supposed results, malingering disease so frequently gives the clue to its own detection. The more or less agony resultant from a prolonged non-evacuation of the bowels—the sure poisoning following total suppression of the urine—are ascertained facts, not to be disturbed by any such assertion as that made by Evan Jacobs. So with other allegations made to, but carefully scrutinised by, Dr. Fowler, when visiting this torpid girl. It was, of course, most solemnly repeated to him, that Sarah Jacob had, “saving a fortnightly moistening of her lips with cold water,” “neither eaten nor drunk anything for the last twenty-three months.” On percussing the region of the stomach, the sound of gurgling was distinctly produced.

So, again, with the assurance that the child’s “nails had never been cut for nearly two years.” The physiology of ungual growth is totally opposed to “straight edges with angles,” and to the “picked and torn” appearance of some of the digits’ nails. Taking advantage of a recent investigation respecting the connexion of certain transverse grooves on the nails with the duration of illness, Dr. Fowler was further enabled to produce, by the total absence of such signs, almost positive proofs that this girl could not have lately suffered “any lengthened physical disease.”

As with the exaggeration, so with the negation, of symptoms, was Dr. Fowler’s examination very fruitful in results. On necessarily disarranging the child’s dress for making a stethoscopic examination, she went off into what was called “a fainting fit”. No single symptom of syncope was, however, recognised. Even loss of consciousness was proved to be only apparent. The attack was “nothing but a little and momentary hysterical crying and sobbing”. Great efforts were made to examine the girl’s back, with a view to detect any visible evidence of prolonged reclusion in bed. No persuasion, however, could induce the consent of the parents, who alleged “that this could be only permitted to any one actually present when the child was being moved, which was occasionally done for the purpose of changing the bed. This operation invariably brought on a fit, so that the parents (themselves) had actually neither seen nor washed the child’s back for nearly two years.” Although the feather bed on which the girl was lying “was thin and poor, with nothing between it and the sacking,” neither the ankles nor the heels showed the least marks whatever of more or less continued pressure.

The positive symptoms were also no less valuable aids to diagnosis. Those who have had any experience at all in the physiognomy of a certain class of patients will know how to appreciate the statement, “There was that restless movement and frequent looking out of the corners of the eyes so characteristic of simulative disease.”

Although she refused to squeeze the doctor’s hand, and the mother asserted that this was an impossibility, it was noticed that the girl did close the fingers, and, pointing the index of the right hand, occasionally raised it to the side of her cheek and “head, with a rather studied effect.” She appeared to have more power of motion in the right than in the left arm and hand. In the absence of thermometric observation, the asserted difference of temperature between the right and left sides of the body is of little value.

“The whole region of the belly was tympanitic; and the muscular walls of this cavity” gave palpable evidence of that “tense and drum-like” condition so frequently concomitant of hysteria. There was no dulness over the region of the bladder.

As much as could be seen of the tongue appeared clean and moist. The girl would not protrude this organ, nor open her mouth. She, however, conversed in Welsh with her parents, and spoke a few English words.

We have made thus free with Dr. Fowler’s letter to our contemporary, because it has, in addition to Dr. Lewis’s report, afforded us the most complete clinical account of this poor girl’s case prior to the commencement of what we may unreservedly call her death-watch.

We now come to the last stage of our narrative.

A gentleman (John Griffith, Esq., Swansea) well known in the Principality under the designation of “Gohebydd”, determined to have the matter investigated. After some perseverance, a public meeting was convened at the Eagle Inn, Cross Inn, Llanfihangel-ar-arth, on November 30th. The vicar of the parish occupied the chair, and was supported by about ninety of the more influential inhabitants. Dr. Fowler had recommended that the girl should be sent to some London hospital, or to the

Carmarthenshire Infirmary. Gohebydd was opposed to this, however, as he considered the girl too ill to be moved. He wrote to Dr. Phillips, assistant physician-accoucheur to Guy’s Hospital, asking whether nurses could be sent down to watch the girl at her own home. Dr. Phillips having consulted Dr. Fowler, they together drew up a code of regulations for the guidance of those concerned in the watching of the girl, and arranged for four nurses to be sent down if required.

The parents consented to the watching, and even expressed a desire that the matter should be investigated. Under these circumstances, the meeting above mentioned determined to send for the nurses, and a committee, called the “Watching Committee”, was appointed.

The following were the suggestions drawn up in London, and sent to the local committee for its guidance. These suggestions were adopted by the local committee.

1. It would be advisable before taking any steps in the matter to obtain a written legal guarantee from the father of Sarah Jacob, sanctioning the necessary proceedings.—2. That the duty of the nurses shall be to watch Sarah Jacob, with a view to ascertain whether she partakes of any kind of food, and, at the end of a fortnight, to report upon the case before the local committee in Carmarthenshire, and, if required, at Guy’s Hospital.—3. That two nurses shall be constantly awake, and on the watch in the girl’s room night and day.—4. It would be advisable for the nearest medical practitioner to watch the progress of the case, and it will be absolutely necessary for him to be prepared against any serious symptoms of exhaustion supervening on the strict enforcement of the watching, and to act according to his judgment.—5. That the room in which the girl sleeps shall be bared of all unnecessary furniture, and all possible places in the room for the concealment of food shall be closed and kept under the continued scrutiny of the watchers.—6. That, if considered desirable by the local medical practitioner or by the nurses, the bedstead on which the girl now lies shall be replaced by a simple iron one.—7. That the bed on which the parents now sleep in Sarah Jacob’s room shall be given up absolutely to the nurses.—8. That the parents be not allowed to sleep in the same room as the girl; that if they cannot at all times be prevented from approaching her, they should be previously searched (their pockets and other recesses of clothing, and also the interior of their mouths), and that no wetted towels or any such articles be allowed to be used about the girl by the parents or any other person save the nurses; that the children of the family, and in fact every other person whatever (except the nurses) have similar restraints put upon them.—9. That the nurses have the sole management of preparing the room, bed, and patient, prior to the commencement of the watching.—10. That, as it is asserted the action of the bowels and of the bladder is entirely suspended, special attention must be directed to these organs.

The first suggestion was met, after the meeting had terminated, by the following agreement being drawn out, and signed by Evan Jacob, as a guarantee that the expense about to be incurred would not be rendered useless through the interference of the parents or friends of Sarah Jacob:

“This agreement, made the 30th day of November, 1869, between Evan Jacob, of Llethernoyadd, in the parish of Llanfihangel-ar-arth, in the county of Carmarthen, on the one part, and the committee of management this day appointed for the purpose of investigating the alleged long fasting of Sarah, the daughter of the said Evan Jacob, on the other part, witnesseth that, in consideration of the said committee undertaking the investigation aforesaid, he, the said Evan Jacob, agrees to afford every facility in his power for the said committee, and all persons employed by them to prosecute their said investigations without hindrance, molestation, or interruption whatever for the period of fourteen days, and will during such period permit the said committee and all persons employed by them the free and uninterrupted use of the room occupied by the said Sarah Jacob. As witness the hand of the said Evan Jacob, the day and year above mentioned.”

This agreement was properly stamped.

As medical jurists, our especial concern is of course with the fourth and tenth suggestions. As regards the remaining propositions, we would simply observe that they were admirably framed for the prevention, and even detection, of any possible imposition or deception in the case. We can indeed, in the interest of science, only comment on the omission of one important witness. All obstacles to the introduction of the balance ought to have been surmounted. Half a century back, in the case of the Tutbury woman, Mr. Francis Fox “suggested the propriety of having the bedstead, bedding, and the woman in it placed on a machine, by which it could be ascertained whether she lost weight daily. This was adopted, and it resulted in discovering that day by day she regularly lost weight.” We are deprived of this evidence in Sarah Jacob’s history.

At the beginning of the watching the following was the statement of her condition :—

“Cheerful; face flushed; eyes brilliant; pulse regular, averaging 86 per minute; temperature in the mouth, 98 deg., after two minutes’ rest. She has a warm-water bottle at her feet. She seems quite well, and says she has no pain anywhere if not touched.”

(Signed) HENRY H. DAVIES, M.R.C.S.
THOMAS LEWIS, M.D.”

During the first week of the watching, not only the local but the London papers teemed with quasi-official comments on the progress of the case. The excitement in the principality day by day increased; in the large towns, the daily papers giving the latest particulars were bought up to the very last copy; false rumours were of course freely circulated; and when, at the end of the sixth day, the medical report was a degree more favourable, it was confidently predicted that the doctors, as a body, would be outwitted. The real official reports were, however, provokingly silent. At length, on the evening of Friday the 17th instant, a brief telegram was received at Carmarthen announcing “The Welsh Fasting Girl is dead”; and the next morning every London paper contained the news.

A meeting of the Committee who had undertaken the watching of the girl was at once summoned. They met, as the chairman most truly observed, “sadder, but not much wiser men.” The sister-nurse’s report was then for the first time given to the public. It details minutely the observations of each day’s watching from December 9th.

The following report was read at a meeting of the local committee on the day following the child’s death.

“Dec. 9, Thursday.—Attrick and Palmer (two nurses) on duty at night.

“Dec. 10th, Friday.—No change. At half-past seven she began to read in a loud voice until eight o’clock. Still read at intervals during the morning. Two p.m.: Nurses tell me she was very cheerful.

“Dec. 11th, Saturday.—Six o’clock: Assisted nurse to remove girl from her bed. She did not faint, but allowed me to assist in dressing her. She thanked me, and said I did not hurt her. Left her at seven p.m. reading, looking very cheerful and happy. Two p.m.: Nurses tell me she has been cheerful, reading and talking to them. I do not think she is looking so well. Went to sleep at half-past seven. [The nurse explained that on this day she found three spots as of stains of excrementation on the girl’s night-dress. The largest spot was of the size of a crown-piece.]

“Dec. 12, Sunday.—Six o’clock in the morning: Nurses tell me she has had a quiet night. Slept until five o’clock, then went to sleep again until a quarter-past six. Found her looking very cheerful. She asked for her book to read, and then read aloud for some time. Her face was flushed, and her eyes bright during the morning. Went to sleep at a quarter-past seven p.m.

“Dec. 13, Monday.—Girl awoke at half-past five in the morning. Quiet night. Assisted nurse to get her out of bed; she did not faint. We changed her night dress, and I was for some time combing her hair. She appeared pleased and cheerful, and I left her reading aloud. She has passed a large quantity of urine during the night. Two p.m.: Nurses tell me she has been cheerful, and that she amused herself by reading. She looks the same. Eight p.m.: Was obliged to change her bed. She was not so much fatigued as may have been expected. She tells me she is very comfortable. She has passed a large quantity of urine during the day. Nine o’clock: She is now sleeping soundly.

“Dec. 14th, Tuesday.—Six o’clock: Nurse tells me the girl slept until four o’clock, and then was only awake a short time. Slept until half-past five. I found her reading. Shortly after I came in, the water bottle she had for her feet fell to the floor (cord of sacking having given way) and startled her. She then had a slight fainting fit, but soon recovered. I do not think she is so well—her voice in reading is not so strong, and she has been much flushed; her lips are dry. She has not passed any more urine. Ten o’clock p.m.: Nurses tell me she has been much the same as when I left her. She went to sleep at a quarter-past six, awoke at nine, and did not remain awake long. She has passed a small quantity of urine.

“Dec. 15th, Wednesday.—Six o’clock, morning: She has had a wakeful night, not restless. She has passed some urine during the night. She does not complain of having any pains; face flushed. Nurse assisted me to remove her from her bed; she did not faint. Two o’clock p.m.: I found her much the same as when I left her. Seven o’clock p.m.: She went to sleep, but I found her restless. Her feet were cold. I had to warm flannels to put to them. Eight o’clock: She is now sleeping quietly.

“Dec. 16th, Thursday morning.—Nurses tell me she has had a bad night—no sleep until after three o’clock: she wished the bed made, and they made it. Then she slept for about ten minutes at a time, not more,

and still threw her arms about. Six o’clock: I found her looking very pale and anxious; I think it is for want of sleep. She suffered much during the night from cold; they gave her warm flannels. She is now much warmer. Dr. Davies came at a quarter-past twelve o’clock, and he thinks there is no danger. Ten o’clock: Found Sarah Jacob much worse. Has been restless, and throwing the things off all the night. Was very cold; hot water bottle in bed, and hot flannels, but could not get warm. The father then wished the little girl—a younger sister—to be put in the bed, and I consented, because I thought Sarah was dying. I told the father and mother to get near to the bed to her, but I still watched to see they gave her nothing. She has not asked for food from the first day we began to watch her, and I am certain she has not had anything given her. Had she asked for food I would have given her some.

“Dec. 17, Friday.—Sarah Jacob was very restless, but quieter than she had been during the night. She died at three p.m. I was present at her death.”

The Nurses replied to several questions put to them. They had no suspicion of any one attempting to give the child food. The parents, especially the father, was apparently very fond of the child. They gave the nurses every facility, and manifested great concern for the welfare of the child. It was untrue that crumbs of bread had been found in the bed, and untrue that one of them had seen a female disappear from the room in the night.

Mr. John Daniel, one of the committee; and uncle of the girl, deposed to offering her food on Friday morning. She made no reply, but appeared to go off into a fit.

Mr. Davies, surgeon, deposed to informing the father of the condition of the child on Friday morning, and offering to take away the watchers. The father refused to allow the girl to be given food, but he afterwards said that if he (Mr. Davies) wished to convince himself whether the girl could swallow or not he might offer her something. He did not do so, as it was too late.

From the above we find that, on Wednesday the 15th, “her feet were cold”; shivering had set in; and there was great restlessness. After a bad previous night, she, on Thursday morning the 16th, looked “very pale and anxious”; was very cold and restless; and transient delirium had now supervened. The nurses, being really alarmed, summoned the nearest medical man. On his arrival, he endeavoured to re-assure the nurses, but very properly adopted the precautionary means of calling, by telegraph, an immediate consultation of the medical sub-committee. Although the medical men were apparently not unanimous respecting the gravity of the case, an offer was now made to the father “to withdraw the watchers”. He said that “he would not have it done for the world, and that he wished the watching to go on”. An uncle of the girl (a Mr. Daniel), who had on this day unavailingly offered to get her to take food, likewise “informed the parents that the child was in danger, and that they had better offer her some food: they became very indignant”. At a similar proposition on the part of one of the nurses, the parents became quite angry.

It was subsequently alleged that, two years ago, when the parents had last offered the girl food, she became exceedingly excited and distressed, and that they consequently bound themselves by a solemn oath never to offer her food again.

Practically, the watching was at an end on Thursday. “During the whole of Thursday night the parents and brothers and sisters were backwards and forwards in the room, and were allowed to go close to the bed”. The sister-nurse considered the girl to be dying. During the night, as she could not get warm, a younger child, who had been in the habit of sleeping with her, was put into bed with her. On Friday morning, Mr. Davies, surgeon, of Llandyssil, at his visit, found her “sinking fast”. His offer to give her something was again refused by the parents. At the last moment, however, the father said: “If you are very anxious to satisfy yourself that the child can swallow, you may do so”. Mr. Davies then prudently declined. By the wish of the parents, the nurses remained in the room until the child’s death at 3 p.m.

Many more interesting reflections arise out of this report of the nurses. It appears tolerably certain that no solid or liquid food entered the fasting girl’s lips from about 3 p.m. December 9th to 3 p.m. December 17th, when she died—a period of exactly eight days. Guy (*Forensic Medicine*, 3rd edit., 1868) copies from the *Times*, February 7th, 1866, the account of some shipwrecked men, the captain of whom is said to have lived twenty-eight days without food of any kind. Casper (*New Sydenham Society*, vol. xvi) relates, from personal observation, an authentic case of a powerful, healthy man, who voluntarily underwent a total abstinence of every article of nourishment for ten days, without any alarming symptoms. He subsequently assured Casper “that he only experienced hunger during the first three days. Afterwards, the ‘finest and best’ of food would not have tempted him.”

Age and antecedent vigour have, of course, an important bearing on any case. On the other hand, of the other elements—cold, physical exertion, and mental depression (recognised as materially adjuvant to death by starvation)—Sarah Jacob had literally none. She from the onset was supplied with hot bottles and blankets; she of course had not the least physical exertion, and doubtless had very little, if any, mental depression. In the Irish famine, many cases were reported of persons living in their beds for a much longer period than fourteen days before death. Whether or not the sufferer gets access to water, makes also a great difference in the power of sustaining prolonged fasting. Guy relates two or three instances from personal experience where, with free access to water, abstinence from other food was persevered in for ten days, and was followed by no bad symptoms at all. He gives, also, details of the case of Guillaume Grant, a prisoner at Toulouse, who resorted to starvation to avoid punishment. For the first seven days, the symptoms were not very remarkable; after this period, excessive thirst compelled him to drink water, which he did, in some form or other, occasionally during the fifty-eight days of his existence. In Casper's case, the man, at the end of ten days, irresistibly took "a little sugar and water." Sarah Jacob appears never once to have asked for food or water; and to the last, when offered any, "threw her head back and appeared to go into a fit."

Setting aside for the moment any question of parental collusion, this determined resistance to the death becomes of psychological interest. Had this delicate and emotional child so brooded over this peculiar perverted fancy, that at length she had actually come to realise in herself a competency to live without food? or had she imagined that she would be able to outwit the nurses from Guy's, as she had previously outwitted the four or seven respectable witnesses to her previous fortnight's total abstaining? Had she too sanguinely clung to one or other of these ideas, forgetting, or rather not knowing, that outraged Nature would, in a few days, render her incapable of thinking or fancying anything at all? It became too late to hie back. Many points in this last history of the case tend, certainly, to corroborate Dr. Fowler's estimation of the state of the girl's mind as far back as last September. The circumstance of the cork having twice got out of the foot-warmer, apparently through the agency of the girl's toes; the fact of her secreting under her arm the sister-nurse's eau de Cologne scent-bottle, although trivial, are, in conjunction with the antecedent history, and with the ascertained fact, after death, "that there was a large hollow under the girl's left arm capable of secreting a half-pint-bottle", circumstances of some value in indicating the peculiar aberration of morality, which, in such a case of simulative disease in a young girl, brings it to the very border-land of insanity.

At the end of ten days of the second strict watch on Ann Moore, the Tutbury woman, Dr. Fox found her evidently sinking, and told her she would soon die if she would not take food. After a little prevarication, the woman confessed she was an impostor; and that, at the first unsuccessful watch of three weeks, her daughter had contrived to feed her every morning and evening by using towels, which were made very wet with a strong solution of arrowroot; and that also, with every kiss, her daughter had managed to convey certain portions of sugar from mouth to mouth. Dr. Fox adopted the proper course.

We can scarcely conceive it possible that a father and mother would have so persistently colluded to the end, as, on the assumption of their guilt, Mr. and Mrs. Jacob must have done. At the commencement of our memoir we alluded to this. We are credibly informed that both parents most willingly yielded to every suggestion of the Committee. From the evidence of the nurses, we also learn that the parents have throughout acted in the most fair manner, have given every assistance in their power, and have never, during the whole of the watching, made cause for any suspicion whatever.

Despite the absence of liquid food, Sarah Jacob continued to excrete urine—on some days, in large quantities—up to (according to the report) the 15th instant. Fæcal matter, in very small quantities, appears also to have escaped. We have previously commented on the absurd assertion of the parents respecting the evacuations. In death from starvation, the non-voidance of fæces appears to be a constant symptom; but we imagine that there is usually an earlier suppression of urine than there was in the fasting girl. The room in which she was was exceedingly damp.

On the sixth day of the watching, a telegram announced: "She is not in the least reduced in weight, and is as heavy as when the watching commenced." We put no value whatever on this assertion. In the case of the Tutbury woman, one of Dr. Fox's sons, at the second watching, "suggested the propriety of having the bedstead, bedding, and the woman in it, placed on a machine, by which it could be ascertained whether she lost weight daily. This was adopted, and it resulted in discovering that she regularly lost weight every day." If so

important and truthful a contrivance was adopted half a century ago, it is very surprising that, in 1869, the great value of such a mechanism appears to have been completely ignored. We, however, know it as a fact, that the adoption of the weighing-machine was perseveringly pressed upon the committee from the first. Having respect to what was due to science, all obstacles to the introduction of the balance ought, in Sarah Jacob's case, to have been surmounted. Apart, also, from its scientific interest, what an impartial witness—what a powerful support—it would have proved to the medical examiners of the girl! Pointing to the evidence of daily diminishing weight, they would have been fortified in sooner remonstrating with the scepticism and stupidity of the parents, and in showing an irresistible proof that Nature urgently demanded more fuel for her work. The girl's life would have been saved!

As might have been expected, the nurses witnessed that the girl had the power of motion in both legs and arms; thus corroborating Dr. Fowler's statement that he could detect no physical cause whatever to prevent the girl from walking. To cure such a case (apart from a detection of the imposture) necessitates some sudden impression on the nervous system. A few years ago, near Woodbridge, Suffolk, a woman, named Elizabeth Squirrel, but nicknamed the "Shottisham Angel", pretended that, besides living without food, she was favoured with the presence of angels in her room, and received messages from God. These messages were signalled by a little tinkling bell at the head of her bed. Her father made a rare harvest from the credulous. At length somebody suggested the idea that the house should be fired, to see if the angels could prevent their special charge therein from being consumed. So convinced were Elizabeth Squirrel and her friends that this would be carried into effect, that one night they all decamped in a very hasty flight. The "Shottisham Angel" was subsequently married.

We anticipate to be able to favour our readers with a full account of the medical history of the last week, from the pen of our member, Dr. T. Lewis, of Carmarthen, in completion of his very able letter in this JOURNAL on the 24th of last April.

THE INQUEST.

The following telegram appeared in the morning London papers of Wednesday, the 22nd inst.

"Carmarthen, Tuesday Night.

"The inquest on the body of Sarah Jacobs, the 'Welsh Fasting Girl,' was opened to-day. The Coroner said he intended to call the nurses and the medical gentlemen, and perhaps the father; but the inquiry would not be further extended unless it should be found desirable. The object of the inquest was to ascertain the cause of death; but, if any part of the evidence criminated any one, showing him to have been guilty of a breach of the criminal law, it would be the duty of the jury to return a verdict to that effect, and his duty would be to send the person for trial. The main features in the day's proceedings was the evidence of Mr. Thomas and Mr. Phillips, the surgeons who made the *post mortem* examination. They stated that the body of the girl was plump and well formed, showing indications of puberty. No indications of paralysis in the brain. No obstruction to the alimentary canal. The stomach contained three teaspoonfuls of semi-gelatinous substance. The small intestines were empty; but in the colon and rectum half a pound of hard excrement was found. No malformation anywhere. Body free from disease. The incision displayed fine layers of fat from half an inch to an inch in thickness. It was believed that the deceased had been afflicted with hysteria.

"Mr. Phillips said that there was a large hollow under the girl's left arm capable of secreting a half pint bottle.

"Mr. Davis, surgeon, deposed to Sarah Jacob having been in a fit for the period of one month in 1867; it was then difficult to tell whether she was dead or alive."

The inquest was adjourned to Thursday, too late, of course, for our present impression.

The following additional facts were elicited from the nurse at the inquest. "On Sunday the 12th, I observed a change in her voice; it was weaker when she was reading aloud. On Monday the 13th, in consequence of the continued wetting of the bed, I asked her to tell me when she wanted to relieve the wants of nature, and she replied in Welsh, through the nurse Jones, that she did not know when she passed it. During this time, I observed that her lips were dry." The medical men were never allowed to examine the covered portion of the girl's person—not even her bare arms. On Thursday 16th, the nurse "noticed that her nose looked pinched, and the eyes sunk. During the whole time I was there, no one suggested that food, nourishment, or water should be given her, and she did not ask for it."

ASSOCIATION INTELLIGENCE.

THERAPEUTICAL INVESTIGATION COMMITTEE.

THE following is a correct copy of the resolution passed at the last meeting of the Committee of Council for the appointment of the Therapeutical Investigation Committee.

"That Professor Hughes Bennett, M.D., Dr. Rogers, Dr. McAdam, and Mr. Smith, of Edinburgh, be appointed a committee to investigate the antagonistic effects of various remedies, and that one hundred pounds be granted towards the expenses of the Committee and the remuneration of the assistants."

CORRESPONDENCE.

THE SYME TESTIMONIAL.

SIR,—In reference to a paragraph which appeared in the last number of the BRITISH MEDICAL JOURNAL, I beg to remark that the Executive Committee have decided that competitors for the Fellowship must be graduates in Medicine or Surgery of the Edinburgh University.

I am, etc., CHARLES MURCHISON, M.D., Hon. Sec.
December 21st, 1869.

MORTALITY AFTER LABOUR.

SIR,—I have been very much surprised for several weeks past with the statistics of Dr. Duncan, in reference to the mortality of lying-in women attended at their own homes, and have hoped that some medical practitioner, with more time at his disposal, would have corrected the mistake he has evidently fallen into. And a retired practitioner in this week's JOURNAL, has reported but one death in eight hundred cases. The numbers, however, are comparatively small; I have thought it, therefore, but justice to record my experience, which has been very much larger, and to inform your readers that the mortality among mothers in home-practice is very much less than Dr. Duncan represents. During the last thirty-two years it has fallen to my lot to attend upon 3972 midwifery cases, each of which has been accurately recorded, together with the result to the mother and child at the time, and during a month afterwards. Of these only eight mothers have died, or about one in five hundred.

I should inform you that we have no lying-in hospital in this city or neighbourhood; the cases, therefore, have been among all grades of society, and were, of course, all attended at their own homes. I might also inform you that there is no reason to attribute this result to accident or chance, for I have reason to believe that a similar proportion of mortality, and no more, has occurred to my medical brethren in this city. I should not, however, have troubled you with this letter but that I believe Dr. Duncan's statistics are calculated not only to mislead, but, if credit be given to them, cause very increased anxiety to us while in attendance upon these cases.

I am, etc., GEORGE RIGDEN,
Surgeon to the Canterbury Dispensary.
Burgate Street, Canterbury, November 27th, 1869.

MEDICAL NEWS.

APOTHECARIES' HALL.—Names of gentlemen who passed their examination in the science and practice of medicine, and received certificates to practise, on Thursday, December 16th, 1869.

Barnes, Edgar George, Hammersmith
Drew, George Frederick Augustus, Plymouth
Ling, John Milford, Saxmündham
Napper, Albert Arthur, Cranleigh, Guildford
Palmer, Frederick Stephen, Brixton
Pearse, Francis James, St. George's Square, S.W.
Sheard, William, Alford, Lincolnshire

The following gentlemen also on the same day passed their first professional examination.

Clark, Frederick, St. Thomas's Hospital
Willcocks, Isaac, St. Bartholomew's Hospital

MEDICAL VACANCIES.

THE following vacancies are declared:—

ALCESTER UNION, Warwickshire—Medical Officer for Studley District: 28th.
BALLYMONEY UNION, co. Antrim—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Dirraw Dispensary District: 28th.
NDON UNION, co. Cork—Medical Officer to the Workhouse.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN—Resident Medical Officer: applications, 3rd January.
BRIGHTON AND HOVE DISPENSARY—Physician-in-Ordinary: applications, 4th Jan.; election, 20th Jan.
BURTON-UPON-TRENT UNION—Medical Officer for the Etwell District: applications, 27th; election, 30th.
CASTLEREA UNION, co. Roscommon—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Castleplunket Dispensary District: 30th Dec.
Medical Officer for the Workhouse: 1st Jan.
CAVERS, Roxburghshire—Parochial Medical Officer.
CHESTERFIELD AND NORTH DERBYSHIRE HOSPITAL AND DISPENSARY—House-Surgeon and Dispenser: applications, 4th Jan.; duties, 1st Feb.
DORKING UNION, Surrey—Medical Officer for the Upper District: applications, 5th Jan.; election, 6th Jan.
DOWN DISTRICT LUNATIC ASYLUM, Downpatrick—applications, 30th Dec.; election, 1st Jan.
GERMAN HOSPITAL, Dalston—Physician; Assistant-Surgeon: applications, 3rd Jan.; election, 24th Jan.
GLASGOW—Medical Officer for City Parish of.
GLENELG and KNOYDART, Inverness-shire—Medical Officer: applications, 28th; election, 29th.
GLOUCESTERSHIRE LUNATIC ASYLUM—Junior Medical Assistant: duties, middle of January.
HOSPITAL FOR WOMEN, Soho Square—House-Physician: applications, 31st.
IPSWICH, Borough of, LUNATIC ASYLUM—Resident Medical Superintendent: applications, 15th Jan.; duties, April.
ISLE OF MAN GENERAL HOSPITAL AND DISPENSARY, Douglas—Resident Medical Officer.
JEDBURGH DISPENSARY—Surgeon.
LEEDS PUBLIC DISPENSARY—Surgeon.
LONGTOWN UNION, Cumberland—Medical Officer for the High District.
LUTTERWORTH UNION, Leicestershire—Medical Officer and Public Vaccinator for District No. 1, and the Workhouse: 6th Jan.
MIDDLESEX HOSPITAL—Surgical Registrar, and Superintendent of *post mortem* Examinations: applications, 8th Jan.
MINTO, Roxburghshire—Parochial Medical Officer.
NORTHAMPTONSHIRE LUNATIC ASYLUM—Assistant Medical Officer.
NORTH DUBLIN UNION—Medical Officer, Public Vaccinator, and Registrar of Births, etc., for the Howth and Clontarf District: 4th Jan.
OXNAM, CRAILING, JEDBURGH, ECKFORD, SOUTHDEAN, and JEDBURGH UNION POORHOUSE, Roxburghshire—Medical Officers.
PRESTON—Medical Officer to various Lodges of Odd Fellows: applications, 27th; election, 28th.
ROYAL COLLEGE OF SCIENCE, Dublin—Professor of Botany.
ST. MARY'S HOSPITAL AND DISPENSARY FOR WOMEN AND CHILDREN, Manchester—Resident Medical and Surgical Officer: applications, 31st.
SOUTH DEVON AND EAST CORNWALL HOSPITAL, Plymouth—Surgeon.
SOUTH SALOP & BRIDGNORTH INFIRMARY—Resident House-Surgeon.
SUNDERLAND INFIRMARY and DISPENSARY and EAST DURHAM COUNTY HOSPITAL—Junior House-Surgeon: applications, 26th Jan.; election, 3rd Feb.
UNIVERSITY OF LONDON—Assistant-Registrar: applications, 1st March.
WESTMINSTER HOSPITAL—Resident House-Physician: applications, 25th Dec.; appointment, 4th Jan. Assistant Obstetric Physician: applications, 28th Dec.; election, 11th Jan.
WHITEHAVEN and WEST CUMBERLAND INFIRMARY—House-Surgeon.

MEDICAL APPOINTMENTS.

Names marked with an asterisk are those of Members of the Association.

ALLEN, J., Esq., of Ripley, Derbyshire, appointed Certifying Surgeon of Factories, *vice* J. H. Casson, Esq., resigned.
NAISMITH, W. J., M.B., C.M., appointed Consulting-Surgeon to the Ayr Fever Hospital and Dispensary, in the room of Dr. Mason.

BIRTHS.

JONES.—On December 10th, at Watford, the wife of George T. Jones, M.D., of a daughter.
KNOTT.—On December 8th, at Bugbrooke, Northamptonshire, the wife of *W. P. Knott, Esq., Surgeon, of a daughter.
MONRO.—On December 10th, at Gloucester Street, Pimlico, the wife of James Monro, M.D., of Craiglockhart, Midlothian, of a daughter.

MARRIAGES.

CLARKE, Alfred F. S., M.D., Royal Artillery, to Annie, youngest daughter of the late Rev. Canon PARR, Vicar of Preston, at Preston, on December 9th.
GAUSSEN, James Robert, M.B., Assistant-Surgeon Royal Artillery, to Alicia Fenton, youngest daughter of W. H. BAYLEY, Esq., of Cambridge Square, Hyde Park, at St. John's, Paddington, on December 9th.
JOLLIFFE, John, Esq., Surgeon R.N., to Catherine Owen, youngest daughter of the late Rev. W. SHERWOOD, of St. James's, Bradford, at Rusthall, Tunbridge Wells, on December 8th.
TREVOR, Arthur T. H., Esq., Surgeon, to Enriqueta, eldest daughter of the late Dr. BOKENHAM, of Iquique and Tarapacá, at Tarapacá, Peru, on Sept. 22nd.

DEATHS.

BERRELL, C., M.B., Medical Superintendent of the Northampton General Lunatic Asylum, at Cambridge Terrace, Clapham Road, on December 13th.
*BRYSON, Alexander, M.D., C.B., Physician-Extraordinary to the Queen, and late Director-General of the Medical Department of the Navy, at Barnes, aged 67, on December 12th.
COOPER.—On December 12th, at Hull, Isabella, wife of *Sir Henry Cooper, M.D.
LANDER, Eaton, M.D., at Bromfield, Salop, aged 47, on November 20th.

DR. S. HOLDSWORTH of Wakefield has been appointed a magistrate for the West Riding of the County of York.

OPERATION DAYS AT THE HOSPITALS.

MONDAY.....Metropolitan Free, 2 P.M.—St. Mark's, 9 A.M. and 1.30 P.M.—Royal London Ophthalmic, 11 A.M.

TUESDAY.....Guy's, 1.30 P.M.—Westminster, 2 P.M.—National Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.

WEDNESDAY...St. Bartholomew's, 1.30 P.M.—St. Mary's, 1.15 P.M.—Middlesex, 1 P.M.—University College, 2 P.M.—St. Thomas's, 1.30 P.M.—London, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Great Northern, 2 P.M.—Samaritan Free Hospital for Women and Children, 2.30 P.M.

THURSDAY....St. George's, 1 P.M.—Central London Ophthalmic, 1 P.M.—Royal Orthopædic, 2 P.M.—Royal London Ophthalmic, 11 A.M.—Hospital for Diseases of the Throat, 2 P.M.

FRIDAY.....Westminster Ophthalmic, 1.30 P.M.—Royal London Ophthalmic, 11 A.M.—Central London Ophthalmic, 2 P.M.

SATURDAY....St. Thomas's, 9.30 A.M.—St. Bartholomew's, 1.30 P.M.—King's College, 1.30 P.M.—Charing Cross, 2 P.M.—Lock (Clinical Demonstrations and Operations), 1 P.M.—Royal London Ophthalmic, 11 A.M.—Royal Free, 2 P.M.—East London Hospital for Children, 2 P.M.

NOTICES TO CORRESPONDENTS.

All Letters and Communications for the JOURNAL, to be addressed to the EDITOR, 37, Great Queen Street, Lincoln's Inn Fields, W.C.

CORRESPONDENTS not answered, are requested to look to the Notices to Correspondents of the following week.

TO PURCHASERS.—To insure attention, it is requested that all orders sent to the Office for extra copies of the JOURNAL, be accompanied with stamps for the amount.

WE CANNOT UNDERTAKE TO RETURN MANUSCRIPTS NOT USED.

CORRESPONDENTS, who wish notice to be taken of their communications, should authenticate them with their names—of course, not necessarily for publication.

QUÆRENS.—Mr. Paget's Lecture on Surgery at Oxford was not published in the JOURNAL. No award of the Hastings Medal was made this year.

LETTS'S DIARIES.—We have received specimens of the well-known Diary, Pocket book, and Prescription-book, which Mr. Letts prepares for the use of the profession. They appear to supply every purpose that could possibly be wished, and are exceedingly well got up.

ADMINISTRATION OF MORPHIA BEFORE GIVING CHLOROFORM.—Mr. Wheelhouse, of Leeds, writes us that, "besides giving our patients about to receive chloroform a dose of brandy before coming into the operating-room, we often, especially if they are very nervous about it, and sometimes even when taking it if they get very excited, administer a sixth of a grain of morphia by hypodermic injection, and with most marked advantage."

* * We believe that the use of brandy given some little time before the proposed operation, is invaluable in preventing collapse during the exhibition of chloroform and facilitating recovery.

NEW TREATMENT OF PHIMOSIS.

SIR,—Under the above heading, I observe in your Notices to Correspondents for Dec. 18th, mention made of Dr. F. R. Cruise's method of "sudden dilatation" for the cure of phimosis. At a meeting of the Obstetrical Society (held Nov. 3rd), I related a case in which I employed that plan of treatment. I have adopted it for a considerable time, and have recommended it to others. Some forms of the affection, however, are unsuited for it.

Fitzroy Square, Dec. 1869.

I am, etc.,

HENRY M. MADGE, M.D.

ANTICHLORÆIC EFFECTS OF COPPER.—At the last meeting of the Royal Medical and Chirurgical Society, the presentation of a copy of M. Burq's Memoir on the Antichloræic Effect of Copper was announced. The author sent with the book a letter to the Secretaries of the Society, asking for information on the question from members of the profession in Birmingham, Swansea, or other places where copper-works *exclusively* are carried on—without admixture of other metals. Any of our readers who can afford M. Burq the information which he desires, will perhaps kindly send it to the Medical Secretary of the Royal Medical and Chirurgical Society.

AN APPARENTLY EXCESSIVE CHARGE.

SIR,—A statement appeared in the JOURNAL of November 20th, that a Dorsetshire labourer had been charged £7:1:0 for a fortnight's attendance; and I believe that the same statement has been duly published to the daily press. This statement appears to me so extraordinary, as to be quite unintelligible; and I fully expected to see either a denial or an explanation of it in your columns. If any of our members can give any information on this point, I for one should be very glad to see it; and, if not, I hope the Branch Council in that neighbourhood would not mind the trouble of doing so. I do not know if the statement appeared in any other of the medical journals, or if it has been explained in them.

December 1869.

I am, etc.,

A MEMBER.

CORONER'S INQUESTS.

SIR,—Will you answer the following in your Notices to Correspondents. On Sunday last, at midnight, I was summoned to a person a mile and a half from home, who, the messenger thought, was dead. I hastily dressed, and, meeting a returning cab, was soon on the spot, and found life extinct. I had, two months previously, seen this same patient; at which time, she vomited blood, and nearly lost her life. Information was forwarded to the coroner; and he has not deemed it necessary to hold an inquest; and has given the friends an order to get the death registered. Ought there to have been one, as the woman had not been seen by a medical man for about six weeks before death? The coroner resides about seventeen miles from the spot, and that might be some consideration.

I am, etc.,

SAMUEL WESTWOOD, L.R.C.P. Edin.

454, Coventry Road, Birmingham, December 16th, 1869.

* * There ought to have been an inquest in this case.

NEW MEMBERS.

GENTLEMEN desirous of proposing candidates for admission into the Association, should without delay send in the names to the General Secretary or the Secretaries of the respective Branches, in order that the JOURNAL may be supplied to the new members from the commencement of the year. Forms of application and nomination may be had at the office of the BRITISH MEDICAL JOURNAL, 37, Great Queen Street, W.C.

THE GLOUCESTERSHIRE BRANCH.

SIR,—Having been a subscriber to the Provincial Medical Association almost from its formation (although not constantly so), I still take an interest in it under its present designation. About a quarter of a century ago, I, with others, tried to establish a Branch to that Association at Gloucester and Cheltenham; but the fact of there being then, as now, a local Medical Association, our efforts proved a failure. Happily, a Gloucestershire Branch of the British Medical Association is now in existence; yet its full development is still retarded by the local Association above alluded to, although several gentlemen are members of both societies. Allow me, then, through the medium of your JOURNAL, to urge once more upon my Gloucester friends the imperative necessity of dissolving the local society of medical men, and joining hand and heart in supporting the Branch of that national society now designated "The British Medical Association".

I take the liberty of offering these suggestions, as, at the close of this year, having changed my residence, I cease to belong to the Gloucester Branch.

Bournemouth, December 1869.

I am, etc., WM. DALTON, M.R.C.P.

AN ETHICAL CASE.—Dr. William Webb of Wirksworth has sent us a letter in reference to the matter of dispute between himself on the one hand, and Dr. Cantrell and Mr. Harvey on the other, to which we made reference a fortnight ago. He states that it was not until his partner (Dr. Milligan) and himself had detected a subcoracoid dislocation of the shoulder in the man referred to, that he became aware that the patient had been under Dr. Cantrell's care; and he says: "I had not a suspicion that he had ever investigated the special case (the dislocation) now presented to me; and accordingly finding the man in a state of poverty and distress, I paid for his admission for one week to our Cottage Hospital, after obtaining from him a repeated assurance that he was not at the time under other surgical treatment; and knowing how easily misunderstandings arise amongst medical men, I took the additional precaution of saying, that I was sure this displacement (had it been present) must have been detected when he was examined by another surgeon. After two trials under the influence of chloroform, Dr. Milligan, in my presence, succeeded in restoring the bone to its normal position." Dr. Webb writes further: "I never for one moment suspected them or any other surgeon of such palpable ignorance; and therefore could not proclaim a fact, of the existence of which I had not the least suspicion; moreover, for ten years I was in partnership with Dr. Cantrell, and he knows as well as I do, that during my connection with him, I was always as jealous of the reputation of a brother-surgeon as of my own; and it would be strange indeed, if I now, (after a career of nearly twenty-five years as a student and practitioner) without any motive whatever, commenced a career of baseness by endeavouring, in the first place, to blast the reputation of one with whom I was so long in such intimate relationship."

We have considered this case carefully; and can see nothing in it to prevent a renewal of *entente cordiale* between the parties concerned. It would certainly have been better if Dr. Webb had complied with Mr. Harvey's request to allow him and Dr. Cantrell to examine the case after the detection of the dislocation. There is, however, nothing in the history before us to show that distinct signs of dislocation were present when Dr. Cantrell and Mr. Harvey examined the man; and there is equally no reason to doubt that dislocation was present when Dr. Webb and Dr. Milligan first examined the patient. Subcoracoid dislocation is an injury which is not always easily recognised, even by well informed surgeons (see some remarks on the frequency of unreduced subcoracoid dislocation at p. 490 of the JOURNAL for November 6th). We think Dr. Cantrell and Mr. Harvey should accept Dr. Webb's distinct denial of any attempt to injure their professional reputation. With this, and with a mutual withdrawal of any irritating expression which may have been used in haste, the affair may be simply and honourably terminated.

BABY'S CORAL AND BELLS.—A lady who is "very much married", and has many encumbrances, says the use of baby's coral originated, not in its beautiful colour, but as a charm against witchcraft. Brand, the antiquary, says: "Wytches tell that coralle withstandeth lyghtenynne, and putteth it from houses that it is in." Bells were originally used to scare away evil spirits. But scarcely a remnant of the pleasant medieval superstitious fancy now clings to the beautiful baby's coral and silver bells.—*New York Medical Gazette*.

DISINFECTANTS.

SIR,—Will you please give an opinion on the enclosed notice? It is very different to that of the Medical Officer of the Privy Council; I have one hundred for distribution, and find that the nuisance authorities here are giving gratuitously carbolates and sulphurous acid.

I am, etc., PREVENTION.

* * There is at present a great deal of interested activity in behalf of disinfection. The papers which you send us have a suspicious aspect, and read much like a puff for Condy's Fluid. We prefer those of the Privy Council.

SIR,—May I ask for an answer to the following query? What would be a fair annual subscription to a purely medical club, excluding surgery and midwifery; the benefited to include father, mother, and all children under twelve years of age, in a locality where the wages of the breadwinner are from 16s. to 25s. weekly, according to skill? Should vaccination be included in the annual attendance? Of course, I am assuming that the doctor sees at his own house all but those who are too ill to go thither.

I am, etc., A. R. G.

* * Vaccination should not, we think, be included in the annual attendance. Perhaps some of our readers, experienced in club-practice, will kindly furnish us with data for answering the question as to the annual payment.

SULPHATE OF SEPSINE.—According to the *Escholiaste Medico* of Lisbon, as quoted in the *Repertoire de Pharmacie*, Drs. Bergmann and Schmiedeber have discovered a crystalline organic poison which they call sulphate of sepsine. It can be obtained from substances in a state of putrefaction. A centigramme, ingested into the veins of a dog, soon produced vomiting and diarrhoea—the stools rapidly becoming bloody. At the autopsy, acute inflammation of the whole digestive canal was found.

NOTICE TO ADVERTISERS.—Advertisements should be forwarded direct to the Printing-Office, 37, Great Queen Street, W.C., addressed to Mr. RICHARDS, not later than *Thursday*, twelve o'clock.

We are indebted to correspondents for the following periodicals, containing news reports and other matters of medical interest:—The Wiltshire County Mirror, Dec. 15th; The New York Medical Gazette, Dec. 4th; The Parochial Critic, Dec. 15th; The New York Medical Record, Dec. 6th; The Boston Medical and Surgical Journal, Dec. 2nd; The Madras Mail, Oct. 13th; The Indian Medical Gazette, Nov. 8th; The Northern Daily Express, Dec. 16th; The Liverpool Daily Courier, Dec. 13th; The Norwich Mercury, Dec. 15th; The Shepton Mallet Journal, Dec. 17th; The Northern Reporter, Dec. 18th; The Liverpool Weekly Mercury, Dec. 18th; The Lincolnshire Chronicle, Dec. 17th; The Liverpool Mercury, Dec. 13th; The North British Daily News, Dec. 20th; etc.

COMMUNICATIONS, LETTERS, ETC., have been received from:—

Dr. James Russell, Birmingham; Mr. R. Ellis, London; Mr. R. S. Stone, Mauritius; Dr. Williams, Liverpool; Dr. Goodlake, Cheltenham; Mr. J. Hessegrave, Marsden; Mr. B. H. Paul, London; Dr. Cholmeley, London; Mr. T. Smith, London; Mr. T. Nunneley, Leeds; Dr. S. Holdsworth, Wakefield; Mr. H. C. Lawrence, London; Messrs. Whitfield and Son, Birmingham; Sartorius, Mr. G. W. Callender, London; Dr. T. Clifford Allbutt, Leeds; Dr. Jukes Styrap, Shrewsbury; Dr. W. Rickards, London; Mr. R. Cremer, Norwich; Dr. W. Fox, London; Mr. W. S. Savory, London; Dr. J. B. Hicks, London; Mr. Balmanno Squire, London; Mr. S. Knaggs, Huddersfield; Dr. D. Little, Manchester; Quærens; Mr. P. Squire, London; Mr. T. Pope, Cleobury Mortimer; Mr. R. Smith, Sandown, Isle of Wight; Dr. Maudsley, London; Dr. Sammut, Naples; Dr. Wolfe, Glasgow; Dr. Paterson, Bahia; Dr. Waring Curran, Downpatrick; Dr. Parratt, London; Mr. S. Wells, London; Dr. J. Shannon, London; Dr. McDermott, Kells; Mr. W. R. Lane, London; Dr. Basham, London; G. K.; Mr. E. J. Cooke, Worksop; Mr. Goodlake, Cheltenham; Dr. Tilbury Fox; etc.

LETTERS, ETC. (with enclosures) from:—

Dr. Brittan, Clifton; Mr. Victor De Méric, London; Mr. A. Jukes, London; Mr. T. Watkin Williams, Birmingham; Dr. P. C. Russell, Belfast; Dr. L. Ross, London; Mr. T. W. Tobin, London; Dr. W. Dalton, Bournemouth; Dr. S. Ringer, London; Dr. J. Hill, Belfast; Dr. P. Leonard, London; Mr. Hodgson, Brighton; Dr. F. P. Weaver, Frodsham; Dr. W. Whitelaw, Kirkintilloch; Dr. J. R. Wolfe, Glasgow; Dr. Smyth, Great Yarmouth; M.D.; Dr. W. Paley, Peterborough; The Secretary of Apothecaries' Hall; The Registrar-General of Ireland; The Registrar-General of England; Mr. T. M. Stone, London; Dr. Treutler, Kew; The Registrar of the Medical Society of London; Dr. H. M. Madge, London; Dr. J. Rogers, London; Mr. W. Reeves, Carlisle; Mr. W. Bush, Bath; Dr. T. R. Adams, Croydon; Dr. Braithwaite, Leeds; Dr. W. Anderson, Richmond; Mr. Furneaux Jordan, Birmingham; Mr. T. H. Bartleet, Birmingham; Mr. J. Vose Solomon, Birmingham; Mr. Alexander, London; Dr. Murchison, London; Mr. W. Tallack, London; Dr. Mapother, Dublin; Mr. Donnelly, Dublin; Dr. Thos. Laycock, Edinburgh; Mr. A. Fleischmann, Cheltenham; Dr. Taylor, Nottingham; Mr. W. Spencer Watson, London; Dr. Guy, London; Dr. Cameron Dublin; etc.

BOOKS, ETC., RECEIVED.

The Life and Letters of Faraday. By Bence Jones, M.D. London: 1869.
The Fifth Annual Report of the Sanitary Commissioner with the Government of India for 1868. Calcutta: 1869.
The Temperature of Children in Phthisis and Tuberculosis. By J. Finlayson, M.D. Glasgow: 1869.
The First, Third, and Fourth Report of the Forest Hill Dispensary. Address delivered to the Members of the Shropshire Scientific Branch of the British Medical Association. By Samuel Wood, Esq., President. Shrewsbury: 1869.
An Essay on Vaccination: its Actual Value and Attendant Dangers. London: 1869.

Results of Meteorological Observations, for the week ending Saturday, December 18th, 1869.

NAMES OF STATIONS AND OBSERVERS.	BAROMETER. Reduced to 32 deg. F. & mean sea lev.		MEAN TEMPERA- TURE.			Mean degree of Humidity (sat. -100)	SELF-REGISTERING THERMOMETERS.								WIND.								RAIN.				
	Mean.	Range.	Of Air in Shade.	Of Evaporation.	Of Dew-point.		Maximum.	Minimum.	Range.	Mean of all Maxima.	Mean of all Minima.	Black bulb Maxm. in Sun.	Minimum ex- posed on grass.	Mean amount of Clouds (0-10).	Mean amount of Ozone (0-10).	Number of days it blew in certain directions.								Mean Force 0-12.	Number of days it fell.	Amount in inches	
																N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.				Calm, etc.
BATH..... Dr. Barter, F.M.S.	29.484	0.783	45.4	43.9	42.1	89	58.0	30.7	27.3	51.1	38.4	85.0	..	6.5	4	..	..	..	..	0.3	2.7	3.4	0.3	0.3	17.*	7	2.39
BOURNEMOUTH..... Dr. Compton, F.M.S.	29.593	0.830	46.0	44.4	42.6	89	53.5	34.3	19.2	51.5	40.2	67.0	32.2	5.2	5	..	..	..	..	..	3.3	3.7	..	..	4.6	6	2.12
DOVER..... Dr. Parsons.	29.550	0.703	45.5	43.9	42.0	88	52.4	29.0	23.4	48.9	31.6	..	..	5.2	..	..	..	..	..	2	4.3	0.7	..	4.9	7	1.48	
DUBLIN..... Dr. J. W. Moore.	29.297	1.038	43.7	41.8	39.6	85	57.6	36.1	21.5	48.2	38.9	..	30.0	5.6	..	..	..	..	0.5	0.5	1.9	3.8	0.3	..	5.0	7	1.05
KEW..... Dr. Treutler, F.L.S., etc.	29.540	0.991	45.2	43.7	41.9	87	56.5	34.2	22.3	51.5	39.1	78.3	28.2	5.6	4.7	..	..	..	0.3	..	3.7	2.3	0.7	..	4.3	5	1.29
LLANDUDNO..... Drs. Nicol and Dalton.	29.350	0.914	44.8	42.6	40.0	84	56.6	34.5	22.1	51.7	39.8	..	..	7.9	..	..	..	..	0.7	..	1.3	5	..	..	4	7	2.13
MALVERN..... Messrs. W. and J. Burrow.	29.457	0.797	43.6	42.1	40.3	88	54.5	32.1	22.4	50.5	36.7	76.0	24.5	6.5	?	..	..	..	..	..	2.7	3	1.3	..	8.8*	7	2.42
NORWICH (BETHEL STREET) C. M. Gibson, Esq.	29.460	1.016	42.8	41.8	40.6	92	54.8	33.0	21.8	48.4	36.2	..	33.0	..	..	..	..	..	0.5	1.5	4	1	..	..	12.5	6	1.99
SCARBOROUGH..... Dr. Fox, M.R.C.P.	29.321	1.082	41.0	39.5	37.6	88	54.3	32.2	22.1	45.5	35.6	73.5	29.7	6	8.6	..	..	..	..	..	2.7	1.3	2.3	0.7	5.8	6	1.09
SIDMOUTH..... Dr. Mackenzie, F.M.S.	29.589	0.664	46.8	45.3	43.7	90	57.0	30.0	27.0	52.8	38.8	..	..	5.4	8	..	..	..	..	..	4	3	..	..	2.5	7	1.46
VENTNOR, I. OF WIGHT..... J. B. Martin, Esq., M.R.C.S.E.	29.588	0.434?	49.4	46.3	43.0	79	52.5	39.4	13.1	50.5	43.3	..	..	6	7	..	..	..	..	..	2.3	1.7	3	..	5.8	6	1.51
WORTHING..... W. J. Harris, Esq., M.R.C.S.E.	29.538	0.823	45.7	44.6	43.3	92	52.3	33.3	19.0	49.9	39.1	73.1	28.0	6.2	5	0.3	..	..	..	0.7	1.7	3.3	0.3	0.7	3.9	6	1.67

* Mean hourly velocity in miles.

REMARKS.—There has been a very marked decrease in the mean pressure of the atmosphere during the week, which is on an average half an inch below that of the previous week. Nevertheless, the range, though considerable, has been rather more limited. Mean temperature has been greatly in excess of that of the week before, and the range has also been more extended. The maximum temperature of the week was registered at Bath and reached 58 degs., while the lowest, 29 degs., was observed at Dover. The degree of humidity has been lower during the week. Winds have ranged almost entirely between S.W. and N.W., and their force has on the whole been considerable at all stations, excepting those which are sheltered by their position. The modifying effect of exposure and situation is well exemplified in the case of Ventnor and Sidmouth, for during a week of almost uninterrupted S.W. gale, the mean force of the wind at the former station is 5.8, and at the latter only 2.5. The amount of clouds has been less than during the previous week, though the sky has been generally more than half covered. Rain has fallen at all stations, and in large quantities, the largest amount being collected at Malvern. Ozone has been abundant. The weather of the week has been remarkable for its extremely disturbed character, for its unusual mildness, and for its heavy rainfall. It appears that gales of considerable force, but varying in extent, traversed the country almost daily. On the 13th a heavy S.W. gale commenced at the more Northern stations, Dublin, Llandudno, and Scarborough, attaining its maximum force =10 at the former station early in the morning, and at 10 p.m. at Scarborough, where also the lowest reading of the barometer for the week (28.829) was observed at the same time. The influence of this gale was hardly felt at the Southern stations until towards evening, when it had spread over the whole country, still, however, blowing with greater intensity at the more Northerly stations. Another heavy gale, with a maximum force of 10, passed over most stations on the morning of the 15th, accompanied by hail and snow; thunder and lightning also were observed at Sidmouth at 5 a.m., at Scarborough between 6 and 7 a.m., at Bournemouth at 1.30 p.m., also at Bath; by the evening the wind had subsided again. However, on the 16th, in the afternoon, a rapid and considerable decrease of pressure set in, commencing in the Irish Channel and travelling rapidly Eastward. It was accompanied at the same time by a gale of great force, but of apparently limited extent. The lowest reading of the barometer was registered at Bath at 5 p.m. (29.100), at Bournemouth at 8 p.m., and at Kew at 9 p.m. (28.937); temperature at the same time rose and attained the maximum reading of the week at those stations over which the gale passed at the hour of greatest barometric depression. This gale subsided almost as rapidly as it rose, and by the morning of the 17th pressure had recovered its former height; so that in the short space of 12 hours the barometer oscillated through 7-10ths of an inch or more. During the night of the 17th, however, pressure again diminished, and a fresh gale from the S.W. was felt chiefly at the Southern and Western stations. It appears, therefore, that a series of three cyclonic movements of the air passed over these islands at distinct intervals of from 24 to 36 hours; these were accompanied by heavy rains and thunder and lightning. A fine lunar rainbow was observed at Dublin at 6 p.m. on the 18th, which at one time was double. On the 16th the country surrounding Bath and Bristol was flooded to a great extent by the heavy rains; but the water subsided again on the 18th. The public health is generally reported as fairly good.

Kew, December 22nd, 1869.

W. J. TREUTLER.

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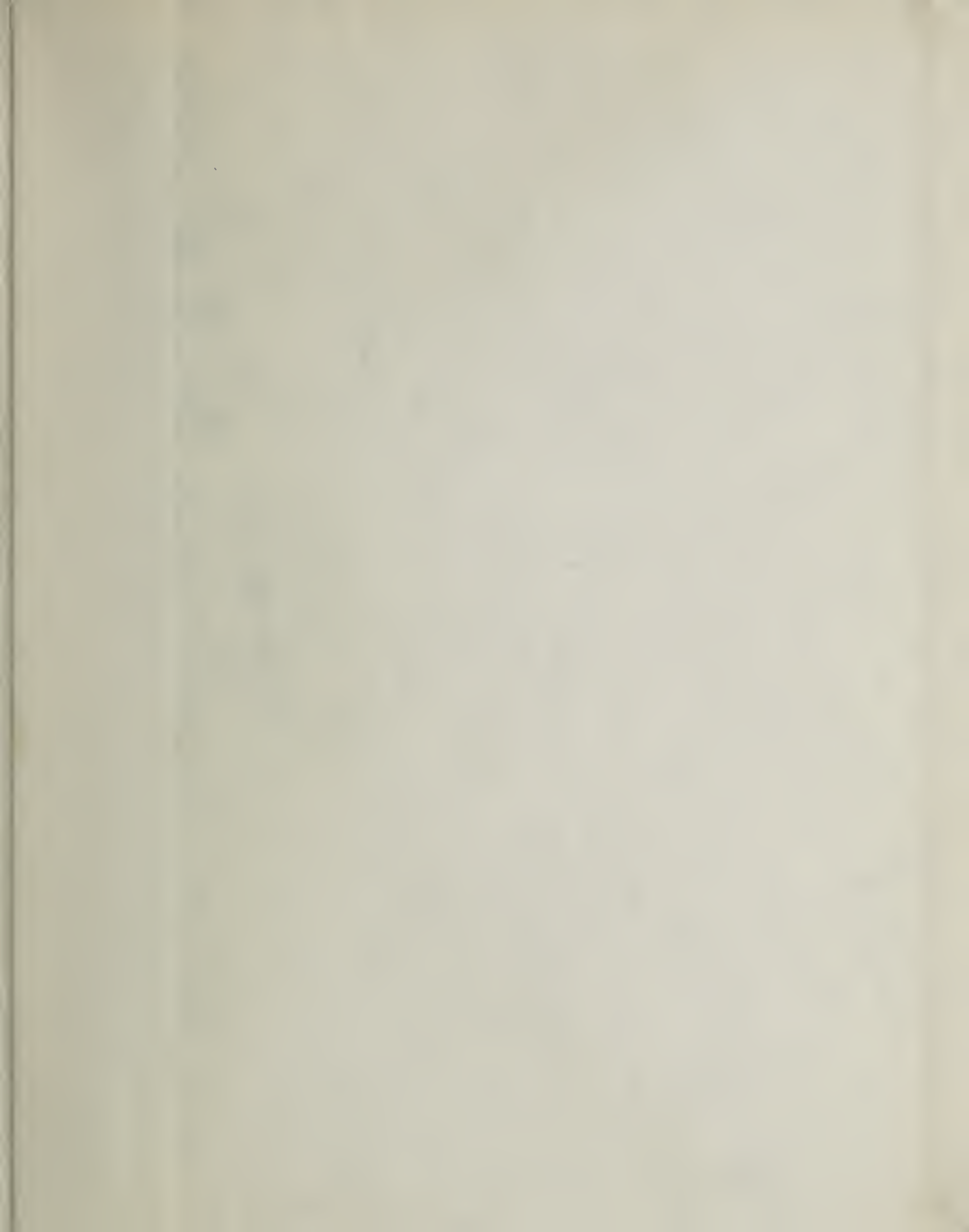
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